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It not, kindly make use of a boitie at our expense and we will send you one free to make it good with your next order (if order is received before Oct. 15th prox.), as we know you cannot fail to speak highly of it if once you try it.

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The Druggists allitell us that the Ladles will have it both for themselves and for their itite c nes.
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THis PREPARATION will mend anything that is broken, and will hold like grim death. and is pronounced by experts to be the greatest article ever invented fir the purpose.
It will cement Leather, Wocd Crockery, Glassware, Iron, and everything else. Crockery or Glassware mended with it will never break in the Same place but will be found stronger than ever before. It is also of great value for mending Furniture and cementing tips on Billiard Cues as well as for a thousand other purposes

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## SWAYNE'S OINTMENT

Gives better satisfaction, has the largest sale of any Ointment in the United States.

It is warranted to cure the worst case of PILES or the most obstinate SKIN DISEASE.

Its merits are being steadily brought before the public by liberal and persistent advertising, and under no circumstances wil its proprietors allow legitimate competition to capture its we merite d laurels.

Chemists and Druggists will find SWAYNE'S OINTMENT a valuable addition to their Stock, and our
wholesale agents for canada,

## LYTIAN, SONS \& CO. MONTREAL,

Are prepared to furnish the trade either in Dozen, One Gross or Five Gross lots, on the most favorable terms.

DR. SWAYNE \& SON, 36 South Seventh Street, PHILADELPHIA, U. S. A.


We would recommend these Batteries for their compactness and portability, cleanliness, convenience and rapidity of action, constant and uniform current, extreme durability, cheapness in use.

LYTIAN, SONS \& CO., MONTREAI.

## BiriSeerelibirfow

McAllister's Mocking Bird Food,-
N. Y. PRICES

Ilb jars, per doz. $\$ 2.50$ (In $1 / 4$ gross case) per gross, $\$ 27.00$
Mc.Allister's Parrot Food,

I lb boxes, per doz. \$1.20 (In $1 / 7$ gross case) per gross, 12.00 MćAllister's Bird Gravel,1/4 gross cases. $\qquad$ . . per case, 1.25
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36 one lb boxes ............................. 2.16
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5 case lots. . . . . . . . . . . . . . . . . . . . . . . . . . ، 2.00
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10 case lots................................. 1 . 1.80
McAllister's Bird Lice Destroyer, In bellows box, per doz. boxes, $\$ 1.50$ Per gross, 16.00 Sheppard's Canary Bird Food,-

Per doz. boxes................ 1.50 " 15.00
Sheppard's Song Restorer, -
Per dozen boxes............... 1.80 " 18.00
Sheppard's Gold Fish Food,Per doz boxes ............... . 60 " 6.00

The above artioles can be obtained from all
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A. E. McALLISTER, Seed Meht. \& Imporiter, 22 Dey Street, NEW YORK.

# WATSON'S <br> Cough + Drops 

Are warranted to give IMMEDIATE RELIEF to those suffering from COLD, HOARSENESS, SORE THROAT, Etc.

They allay irritation and produce a soothing effect upon the vocal organs. Public Speakers and Singers find them of great value in clearing and strengthening their voices.

None Genvine unless the letters"R. \& T. W." are Stamped on each Drop.

## R. \& T. WATSON, Wholesale Confectioners, 75 FRONT ST. E., - TORONTO.

## What the Wholesale Drug Houses in Canada say about GIBBONS' TOOTHACHE GUM.

St. John, N.B., Dec. 3rd, 1892. Messrs. J. A. Gibbons \& Co.
Gentlemen,-In reply to your letter of 29th inst., I must say that your Toothache Gum has been a good seller with me, and I have had many speak of its merits, and few indeed complain. From my experience in handling this article, I have no hesitation in recommending it.

Yours very truly, S. McDIARMID.
Montreal, Dec. 8th, 1892.
Messrs. J. A. Gibbon is Co., Toronto.
Gentlement,-Yours of $29 t$ h ult. came duly to hand, and we are pleased to say that your Toothache Gum has had a good and increasing sale.

Yours truly, LYMAN, KNOX \& CO.
London, Ont., December 2nd, 1892.
Messrs. Gibbons \& Co., Toronto.
Dear Sirs,-Replying to yours of the 29th inst., the sales of your Gum appear to be on the increase, and, so far as ve know, gives satisfaction wherever used.

Yours truly, THE LONDON DRUG CO.
J. Mattinson.

Winnipeg, Manitoba, Dec. 12th, 1892.
Messrs. J. A. Gibbons \& Co., Toronto.
Dear Sirs, -We have very much pleasure in stating that the sales of Gibbons' Toothache Gum continue to increase. We look upon it as one of the best selling patents we have in stock:

Yours truly: MARTIN ROSSER \& CO.

Montreal, Dec. Ist, 1892.
Messrs. J. A. Gibbe ns \& Co., Toronto, Ont.
Gentlemen,-We have to acknowledge your favor of the 29th inst., and in cor. lection with same, we have pleasure in stating that we have $t$ ir some years handled the preparation known as Gibbons' Touthache Gum ; since the introduction of this preparation, the sale has been very satisfactory, and it is in great favor with the retail drug trade.

Yours truly, LYMAN, SONS \& CO.
Montreal, Dec. Ist, 1892.
Messrs. J. A. Gibbons \& Co.,
17 Jordan Street, Toronto.
Dear Sirs,-Replying to your favor of the 29th ulto., we can safely say that Gibbons' Toothache Gum has proved a very good seller with us. The demand from the time we first handled it has steadily increased, and the article seems to give great satisfaction to those who use it. Wherever the article has been sold we get repeat orders.

Yours truly, EVANS \& SONS, (Limited).
Per A. B. Evans.
Winnipeg, Dec. 16th, 1892.
Messrs. J. A. Gibbons \& Co.
Gcntlemen,--Replying to your favor, we beg to say you are at liberty to state that Gibbons' Toothache Gum is having a good sale with us, and giving general satisfaction to the trade.

Yours truly, BOLE, WYNNE \& CO.

SPECIAL OFFER.
To Druggists outside of the Cities of MONTREAL and QUEBEC.
Send your Jobber an order for 3 loz. NERRVOL at 1.75 per dozen, and he will send you a MANDSOME SILK EIGHT STEEL RIB UMBRELLA, one that you will be proud to carry.

Now is the season for Toothache and Neuralgia, and "NERVOL," is the best seller on the market to day". Unlike other preparations, it nevcr fails to cure by simply applying a little on the cleeck outside. fou need have no hesitation in recommending it, as it will surely give satisfaction. It is at present extensively advertised in the Province of Quehec and will shortly be well advertised in the other provinces. It is nently put up and can be had from all Wholesale Druggists, or from
jOEN T. LYONS, Cor. Craig \& Blemry Streets, MONTREAL.
SPECIAL QFFER. Pumn
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in 6 hours.
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## No 2-TOILET.

WTE claim for our Syringes, superiority over all others. They are connected by Elastic Packing instead of Screw Threads, and the connecting pipe can be quickly and easily inserted in socket, where it is firmly held in place, the joints being perfectly tight and remainjog so. The valves are secured and cannot be lost. We use the best quality of rubber. Physicians recommend our Syringes as ferfect in cleanliness efficiency and durability.

The advantages of our ATOMILEER over all others is 2ts Continuous Spray, Firving but one Atomizing Point, it is less liable 'to get out of order, and being made of the best material, combined with its simplicity, neatness and durability, make it one of the most PERFECT ATOMIZERS in use

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## ROBERT GIBSON \& SONS <br> Medicated Lozenge Manufacturers, GARLETON WORKS, EaskIINE STREET, Hulme, - - MANCHESTER, EMGLAND. And I Glasshouse Yard, Aldersgate Street, - - LONDON,

## SUPERIOR BOILED SUGARS

Have gained a high reputation everywhere They are put up in $1 \mathrm{lb} ., 2 \mathrm{lh}$. and 5 ll . bottles. Packed in casks or in I doz. cases as required. These sweets are absolutely pure, and we specially recommend

Limo friat Tabiets.
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Lamon Tublets,
Minit Tablots. Butter Seatek 1)rops. Strawborry Drops.

## HIGH-CLASS LOZENGES of trvary descelifromen.

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

DIGESTIVE TABLETS.
Voice and Throat Lozenges,
For Singors nad Publle Speaters.

## ORIGINAL SUGAR.WORM CAKES

Have an immense sale, both at home and abroad ; will keep in any climate, and give entire satisfaction. Put up in tins containing 3 doz., 6 doz., and 12 doz. cakes.

## THROAT HOSPITAL LOZENGES

(Aeper T. H. Pharmacopoeia.)
All Lozenges are sent out in I $\mathrm{lb} ., 2 \mathrm{lb}$ and 4 lb . bottles. (Bottles free.) Proprietary Lozenges carefully prepared, stamped, and cut to any size or shape. SOLD BY adle the best whoresale houses in canada. <br> \title{
THOMAS BIGG＇S <br> \title{
THOMAS BIGG＇S Sheep－Dipping <br>  Composition，
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For the DESTRUCTION of TICK，LICE，etc．，and for the PREVENTION of FLY，SCAB，etc．，also his
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－in which the well－kuown soothing and healing properties of pine－tar are skiffully combined with Vegetable Oils and Glycerine．＂－1Icdical Times，New 「ork．
＂Is exceedingly smooth and agresable to the sion，and a valuable remedy． in skin diseases．＂－Prof．I）．（；．Brismon，M．D．，Mid．and Surs．Riop．，Phila．
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 best Rums of Martinique．It possesses an unrivalled aroma and is highly appreciated．

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IN GANDSOME ENGLISH, " BURNT-IN" POTS.


THIS elegiant Toilet Article has been before the public for many years, meeting with great favor wherever known, and retaining its hold wherever introduced. The best value in this line as a 25 cent. article.

Price, $\$ 1.75$ per dozen.

## Notice.

IF you have not received a copy of our handsome hanger "CHERRYRIPE," please mention it in next order.

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## C. \& I. E. Cologne and Lavender,

Highest Quality and Double Strength. .Exhibited and sold at the Colonial and Indian Exhibitions, Lond n, Eng., 1886.

## No. 24 Cologne,

So'd for many sears as LYMAN'S Nn. ı.

## English Lavender,

Fas that Softness and Purity peculiar to Mitcham Lavender.

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Have the distinguishing characteristics of the favorite French Brands.

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Very popular at the London Exhibition

## Toilet Cologne,

A grod, light, Toilet Water.

# Every Mother Should have Johnson's Anodyne Liniment in the house for Croup, Colds, Sore Throat, Tonsilitis, Colic, Cuts, Bruises, Cramps and Pains, liable to occur in any family without notice. Delays may cost a life. 

 etc., should keep it near at hand; for it acts promplly, is Soothing, Healing and Penetrating. When once used always used.

Every Traveller shoud hare a botut in thate satchel. It can be used Inter. nally or Externally in more cases than any other medicine. Cures head-aches if inhaled.
Every Sufferer From Rheumatism, Sciatica, Neuralgin, Nervous Headache, Diphtheria, Coughs, Catarrh, Bronchitis, Asthma, CholeraMorbus, Diarrhcea, Lameness or Soreness in Body or Limbs, Stiff Joints or Strains will find in this old Anodyne relief and speedy cure.

THE REASON WHY-Generation after Generation have Ubed and Blessed Johnson's Anodyne Liniment, is because it cures when all other remedies fail. It was devised and used for years in the private practice of old Dr. Johnson, to treat inflammation liable to afflict any person on earth ; and which cause the danger in all the above troubles. The medical adrice around each bottle is worth ten times the price.

How to Use Economically. Advice sent free. All who buy dlrect from us, and request it, shall receive a certificate that the money will be refunded if not rbundantly satisfied. Price, 35 cts . by mail ; 6 bottles, $\$ 2.00$. Express prepaid to any part of the United States or Canada. Duty also paid. 1. S. JOHNSON \& CO., Boston, Mass.

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All Orders Payagle in Four Months at the Prices Invoiced.
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## Johnson's Anodyne liniment.

One Dozen or more. . . . . . . . . Four Months, $\$ 2.00$ per dozen. . . . . . . . If Cash, 3 per cent. off.

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One Dozen or more . . . . . . . . . Four Months, $\$ \mathrm{~m} .60$ per dozen. . . . . . . . If Cash, 3 per cent. off.


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## Sheridan's Condition Powder.


NOTE.-We shall allow the larger quantity Time or Cash prices, on assorted orders made up of any or all of the ahove arcicles, when ordered at one time, if the order amounts to $\$ 125.00$ or more at the Four Months prices.

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MONTKL: II FHARMACEUTICAL JOURNAI. P. O. Box zr4. MOntreal.
F. 1- benedict. Sccres.ary

The Royal Victoria Hospital is about to be opened for the fulfilment of its mission in the city. A grand institution, and with all its appointments of the latest and most approved, everything in keeping with the most advanced opinions current in the medical and surgical world and the establishment will doubtless prove a great boon to thousands of our population in the future. There is a good deal of feeling current amongst our French-Canadian fellow-citizens in regard to the arrangement for the management of the institution. A French contemporary claims that:
rst. The gift is one from Lord Mount Stephen and Sir Donald A. Smith to the City of Montreal

2nd. The land was given by the City of Montreal.

3rd. The City of Montreal has, say, two-thirds French and one-third of an English-speaking population.
4th. The donors of the land, morey, building and endowment have never publiciy stated that it was to be a sectarian institution, and such was not the intention presumably.

The question is further discussed and the statement made that the hospital management and staff; from the highest to the lowest, is and will be sectarion in every sense of the word-English, McGill, Protestant, and exclusive.

The donors of this grand gift to the city ought certainly to have som thing to say. It would seem reasonable to anticipete that they will in the end see that all sections of our popnlation are equitab!y and satisfactorily treated.

A race and religion cry over Royal Victoria will surely greatly affect uts usefulness to the community at large.

We reproduce a letter which appeared some time ago in the local (Prince Edward Island) papers. This letter is written for one purpose, i. e., to discredit Wired brandy, and further, its intention is to assist a Montreal liquor house towards selling more of their wares. In regard to Wired brandy, we understand that this same house, when they found that a certain brand was playing sad havoc with their bottied brandy trade, they started the story that the celebrated brand (Faustin) in question was spurious, and that the agents-one of the most favorably known wholesale druggists in Canada-would be prosecuted for selling the article by the Inland Revenue Department- The Wired brandy in question, the celebrated "Faustin" brand, was by the selling agents submitted to the department and to their analysts, and was pronounced genuine and a fully satisfactory article. The "crying down" of Wired brandy has done harm, but not sufficient to satisfy those in competition and who, after failing to fully succeed in their object, have, strange to say, taken up another brand of Wired brandy. Business men unusually resort to such methods to enable them to do or to hold business This letter attacks the character of druggists in the wild effort to get their business away from its legitimate channels. Some liquids in bottles are good and some are bad. Some Wired brandy is good and some is inferior. Every
dealer can rely upon "Faustin's" brand as good. The Government analysts say so. The department says so, and so do the Canadian agents-Lyman Sons \& Co., of Montreal. Instead of swallowing these absurd falsehoods and misrepresentations the retail druggists should manfully resent the insults offered to the profession in this letter :

## THE DRUGGISIS AGAIN.

Sir,-The Examiner takes exception to my reference to "certain druggists who have been fraudulently palming off as genuine, alcoholic mixtures deficient in strength and purity." As a class, drug. gists are no doubt honest men. No one demes this. But the question, to which in the interests of suffering humanity I have directed attention, is not one concerning the respectability of individuals, it is a question resting upon fact. If there has been no "reprehensible practice" by druggists in connection witl. the sale of alcoholic stimulants, will the Examiner kindly explain why the authorities at Ottawa have found it necessary to investigate the matter, and why, as a result of this investigation, they have decided to invoke the aid of the law, in order to put down this most serious form of adulteration? Our druggists may be more respectable than others doing business in the cities from which the samples examined by the department were obtained. Nevertheless I unhesitatingly repeat every statement in my letter in regard to the impurity of much of the drug store liquors sold in this city. It cannot be denied that there is brandy sold here for medicinal purposes by druggists of a very inferior quality. It cannot be denied that there is wine sold here by the same parties of so pure (?) a quality that the unsuspecting purchaser has been told as an evidence of its purity that it had just been strained. It cannot be denied that there have been cases of illness here, in which the liquor obtained at a drug store, was found to be of $s 0$ inferior a grade as seriously to endanger the lives of patients, fatal results only being prevented by a timely change in the stimulants used, These may seem rather hard statements to make, yet if they are true, as I am prepared to prove, then it would be almost criminal on my patt to keep silence.

The fact that " our druggists are honorable members of an honorable calling " in no wise affects the question at issue, nor does it in the slightest degree weaken the force of a ingle statement I have made. Viewing the whole matter logically, the question whether the inexperience and innocency of certain druggists may not have been taken advantage of by unprincipled liquor dealers, has yet to be con sidered. There is so much deception in connection with the manufacture and sale of spirituous liquors, that the selection of liquors, fit for use as a medicine, requires considerable care and skill on the part of the retailer. There are some honest manufacturers whose liquors, however, command a somewhat higher price than the adulterated brands.

But if druggists, who so often stand, as it were, between the sick and death, have, regardless of gain, dealt exclusively with such respectable manufacturers, how are the facts to which we have referred, or the action of the Department at Ottawa to be accounted for? Perhaps the Examiner will explain.

The liquors kept at drug stores, being for medicinal use only, ought to be exceptionally pure, and I would, therefore, earnestly advise druggists who have been guilty in this matter to lose no time in destroying all liquors of a doubtful character on hand. For humanity's sake make a little sacrifice, and let the wired brandy, the unclarified wine, and other vile abominations go.

## Citizen.

The Cauadian Druggist published in its last issue what purports to be a table for the conversion of English weights and measures into those of the metric system and vice versa, and which is rather astonishing in so far, at any rate, as its inaccuracy is concerned.

The table of "measure equivalents" for converting cubic centimeters into grains would be approximately correct if the fluid were water, but is entirely incorrect for any other liquid ; for instance, "to convert cubic centimeters into grains multiply by 15.5 ," 3 c. c. water at $60^{\circ}$ will weigh 46.5 grains, but 3 c. c. glycerine will weigh not 46.5 grains as found by this rule, but approximately 58.1 grains taking its specific gravity as 1.250 . The same objec. tion holds with regard to the otherterms of this portion of the table. One rule which is incorrect even in the case of water, is "to convert pints inte cubic centimeters multiply by 473 ." which means that there are 473 c. c. in a pint. Now, if the portion of the rules which says to convert c. c's. into drachms multiply by 0.26 be approximately correct for water at $60^{\circ} ; 473 \mathrm{c}$. c. multiplied by 0.26 will give 122.98 drachms, which divided by 8 will give 15.3725 ounces to the pint, whereas the pint should contain 20 ounces. Another error is "to convert gallons into litres multiply by 3.8 ," because if the rule "to convert litres into ounces multiply by 353 ' be correct, there are 35.3 ounces in the litre, and as there are 160 ounces in a gallor; divide 160 by 35.5 and the quotient is 4.53 and not 3.S. The whoie table is incorrect and is apparently based on a confusion of the terms gramme and cubic centimeter, which shows a deplorable ignorance of the metric system, as every pharmacist knows, or ought to know, that although these terms are synonymous as regards water at $4^{6} \mathrm{C}$., that it does not hold for liquids, the specific grav-
ity of which is greater or less than that of water. We are surprised that errors of such an elementary character shouid be published in journals supposed to be for the instruction of pharmaci ts. We are inclined to think that the table has been taken from some American source, as it is approximately correct for the American weights and measures, in which the fluid ounce of water weighs 455.69 grains and the pint contains 16 fluid ounces, but is entirely incorrect when employed in connection with the weights and measures in use in this country, in which the fluid ounce of water at $60^{\circ}$ weighs 437.5 grains and the pint contains 20 fluid ounces. Even if the table were correctly calculated for our measures it is impossible, as we have already pointed out, to convert cubic centimeters into grains, as the the weight of a cubic centimeter of any fluid will be in proportion to its specific gravity. The existence of the table might be explained by supposing grains to be the same as minims, but here would be another error into which many fall.

The periodical appearance of tables such as this, which are at best only approximately correct and mere makeshifts, the use of which should not be tolerated in any well-regulated pharmacy, do great
injury to the progress of our profession. The universal adoption of the metric system is absolutely certain. The U. S. P. has adopted it and the British will follow. Even now many physicians use it, and it is impossible to follow the advance of scientific knowledge without an acquaintace withthis systern Then why waste time and energy calculating by the aid of incorrect tables metric terms into the English, when for the expenditure of a few dollars one can purchase a complete set of metric weights and mexsures, which are as easy to handle as the old ones and much simpler to calculate percentages, etc? We think that it is the duty of every progressive pharmaceutical journal and pharmacist to decry the use of these tables which can lead only to careless habits in dispensing, where absolute accuracy is imperatively required, but impossible of attainment if this practice be persisted in Many object to the use of the metric system in prescribing, because, they say, it is so confusing, but it is confusing only when the attempt is made to use these tables, whereas, with a set of weights and measures, it is simplicity itself, as simple as our decimal coinage is to the complex English coinage of 12 pence to the shilling and 20 shillings to the pound.

## PRESEINTATION.

Upon the occasion of the eightieth birthday anniversary of Mr. Henry Lyman, the employees of Messrs. Lyman, Sons \& Co. determined to mark the occasion by presenting him with a congratulatory address. Mr. Lyman, not being very strong since his serious illness last spring, the presentation took place at his residence, 74 McTavish street, a deputation numbering some fifteen, and representing every department of the business, waiting upon him about 6 o'clock in the evening. The address, which was beautifully illuminated by Messrs. Edwin Cox \& Co, was read by Mr. Thos. Boyd, chief book-keeper, and the senior member of the staff, as follows:

Mr. Henry Lyman, Messis. Lyman, Sons \& Co.:
Dear Sir, -On this, the eightieth anniversary of your birthday, we, the undersigned, desire to convey to you our hearty congratulations that you have attzined to this mature and venerable age in the full possession of all your faculties and in the enjoyment of good health.

As the head of the respected firm of Lyman Sons \& Co., with which you have been prominently connccted for the past sixty-five years, your cmployees feel a pride in acknowleding that in all matters connected with the firm your action has been on the side of rightenusness and justice, and it gives us inuch pleasure to give prominence to this feature of your busincss career.

Asking you to accept our best wishes for the future, with the hope that in the full enjoymert of health and happiness you may be spared to see many more pleasant anniversaries such as the present one, believe us your obedient servants.

October 4th, 1893.

| Geo. P. Watt, | Thos. Boyd, | Arthur Lyman, | S. J. Martin, |
| :--- | :--- | :--- | :--- |
| A. F. Salter, | N. P. Wheeler, | J. E. Morrison, | C. Robertson, |
| J. C. Brims, | E. Ramsay, | B. L. Beard, | Thos. Gibbard, |
| C. L. Walters, | R. Edwards, | J. A. Wright, | R. Bindon, |
| W. E. Cunningham, | C. S. Smith, | A. W. I. Herbert, | W. McK. Barlow, |
| O. W. G. Dettmers, | Frank L. Benedict, | Adam Binning, | J. C. Paterson, |
| F. C. Johnston, | W. l.. Laslett, | W. R. Carmichael, | F. W. Crispo, |
| W. T. Moffat, | W. Spriggings, | Henry Irwin, | Geo. Winter, |
| Joseph Hamel, | E. Taylor, | E. Kilgallen, | J. Atkinson, |
| E. Dugan, | Geo. Bader, | W. R. O. Bowie, | J. Barton, |
| Geo. Cross, | H. Tuggey, | C. E. Chapman, | John Dohaghy, |
| W. Marshall, | J. Sonne, | A. Anderson, | F. Patterson, |
| S. Dugan, | C. Waldron, | F. Marshall, | E. Wilson, |
| J. Edwards, | D. Roy. | E. Edwards, | A. Johnston, |
| Florence R. Paterson, | P. Larin, | H. McMartin, | J. Miller, |
| Ann Leahy, | Beatrice Byrne, | Ada Massey, | Elizabeth Murphy, |
| Margaret Duncan, | Catherine Fury, | Ada Burns, | Julia Joliffe, |
| Cecelia Carroll, | Elizabeth Coburn, | Agn.. O'Hagan, | Rose McGarvey, |
| J. Rolston, | Annie Carroll, | Elicabeth Mackenzie, | Sophie Mackenzie, |
| Alice Massey, | J. Zingham, | Bessie.McNulty, | F. Dugan, |
| Thomas Lilley, | Arthur Poirer, | H. Cecile, | H. Lyons, |

Mr. Lyman replied, thanking them very warmly for the address and the feeling which prompted it, and giving some reminiscences of his early years when a junior clerk in the house, after which an adjournment was made to the dining-room, where refreshments were served and a pleasant half hour spent in social intercourse.

The following letter was sent to the staff and read at the warehouse, acknowledging further the address received through the delegation who went to the residence :

Thornhill, ifth October, 1893.
To the Staff Lyman Sons \&o Co., 384. St. Paul Street:
As you are doubthiss aware, I was not well enough to meet you at my office on the 4 th instant, my birthday, and there to receive your kind and considerate address. I write this letter, however, to thank you and each one for your polite attention, and the good feeling manifested by it.

With such pleasant and agreeable relations subsisting between proprietors and staff, there shouid be no doubt of the success of the business, or any business. I sincerely hope that "our house" will always continue to be, as it has been, the house of friends, and that all its members will achieve for themselves the success in life their efforts merit.

I am, your assured friend,

## Henry Lyman.

Mr. Lyman also received a congratulatory telegram from the directors and staff of Lyman Bros. \& Co., Ltd., Toronto.

## MR. ROBERT GIBSON.

Manchester is a city of pure civic government, and its latest selection for aldermanic honors will do credit to its best principles. Mr. Gibson is well known throughout the Dominion through his celebrated confectionery. The quality of the products of his manufactory stand the test as he will, himself, the test of time with the opinion of the
public in the community he serves, We clip the following from a Manchester paper :
"A special meeting of the Manchester City Council was held at the town hall recently to elect an alderman to supply the vacancy created by the death of Alderman Heywood, and to assign an alderman to Collegiate Ward. The Lord Mayor (Alderman Marshall) presided. The voting papers having been handed in, Mr. Robert Gibson was
found to have been elected unanimously. Fiftyfive votes were recorded.
"Alderman Gibson signed the necessary declaration, and said he was one of those who thought that to be elected an alderman for the second city of the empire-(hear, hear)-which, if not second in the number of heads, was at least second in commercial importance-was a position of which any man might be at leasi reasonably and justifiably proud. When that position had been conferred by the unanimous vote of his colleagues he need hardly say that so far as it pertained to himself the position was very much enhanced, and he begged to tender them his most sincere thanks. His connectio: with the Council had been a happy one. He followed tro gentlemen who had held distinguished positions in the Council. In 1882, when the late Mr. Schofield was elected an alderman, he (Mr. Gibson) stepped into his shoes as a councillor. Alderman Schofield was a man of whom it might be said he had a host of friends and not a single enemy. (Hear, hear.) Time rolled on, and it had now fallen to his lot to put on the mantle of a most distinguished alderman, the late A'derman Heywood, upon whom every honor which the Council had the power to bestow had been conferred. Alderman Heywood had worn that mantle unsullied and unspotted for 40 years. (Applause) While he could not hope to occupy so distinguished a position as his predecessor, he would endeavor to fulfil his duties to the best of his ability, and with no aim but that of the welfare of his fellow-citizens. (Hear, hear.)

The Montreal contributor to the Canadian Druggist appears thoroughly opposed to the action of the Ottawa Government in their effort to protect the physician and the public against drnggists who wilfully or through ignorance have been selling tinctures, etc, of other than of the well-known standard of strength and purity. He says:
" It seems absurd for the Government to be fussing about the strength of tinctures when people are swallowing daily tinned fruits, vegetables, etc., containing lead, etc., etc., etc."

The following gives the idea that a noted authority does not agree with the basis of his argument, which is altogether weak and unsatisfactory, as against the sale and supply of pure drugs and medicines:
PROFESSOR ATTFIELD, f.R.S., ON CANNED GOODS.
During the last fifteen years I have frequently examined canned foods, not only with respect to the food itself as food, and to the process of canning, but with regard to the relation of the food to, or the influence if any of the metal of, the can itself. So lately as within the past two or three
months I have examined sixteen varieties of canned food for metals, with the following results:

| Name of Articles Examined. |  |
| :---: | :---: |
| Salmon | None |
| Lobsters. | None |
| Oysters.. | 0.004 |
| Sardines. | None |
| Lobster Paste | None |
| Salmon Paste. | None |
| Bloater Paste. | 0.002 |
| Potted Beef. | None |
| Potted Tongue. | None |
| Potted "Strasbourg". | None |
| Potted Ham. . . . . . . . | 0.002 |
| Luncheon Tongue | 0.003 |
| Apricots . . . . . . | 0.007 |
| Pears.. . | 0.003 |
| Tomatoes | . 0.007 |
| Peaches.. | 0.004 |

These proportions of metal are, I say, undeserving of serious notice. I question whether they represent more than the amounts of tin we periodically wear off tin saucepans in preparing food-a month ago I found a trace of tin in water which had been boiled in a tin kettle-or the silver we wear off our forks and spoons. There can be little doubt that we annually pass through our systems a sensible amount of such metals, metallic compounds, and other substances that do not come under the denomination of food; but there is no evidence that they ever did or are ever likely to do harm or occasion us the slightest inconvenience. Harm is far more likely to come to us from noxious gases in the air we breathe than from foreign substances in the food we eat.

Hance, Bp hers \& White say: "It is a question whether profic of high prices or the goodwill of low pric ; is worth more to you. We think the good-will is worth more than the money to us, but you must judge for yourself. We want your good-will ; we show that we want it by giving you a double money's writh. And then we go out of our way to help you get double for it. No, it is not out of our way. It is our way to make our preparations as profitable to you as possible. Here we are paying the printer to tell you how to make five times as much as re do on our own merchandise. This is one of our 'Helps,' 'Frog in Your Throat, roc,' is another, the 'Sugar Blocks' are another, another sort. If these work well for both of us, we shall not be strangers."

## PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

WRITTEN PRELIMINARY EXAMINATION.
Montreal, October 5th, 1893.
N. B. -You are requested to -
r. Write on one side of the paper only.
2. Number your answers so as to correspond with the printed questions.
3. Number the sheets of paper in their proper order and attach them together, then fold them up and place your name on the outside.
4. Candidates will be careful not to commence a new subject on the same sheet with another, and fold each subject separately, putting on the back of the sheet your name and the name of the subject treated.

FRENCH FOR ENGLISH CANDIDATES.
Translate into French-
Virtue is an effort made by ourselves for the good of others, with the intention of pleasing God alone. Translate into French-

Ils (les Suédois) vivent longtemps, quand ils ne s'affaiblissent pas par l'usage immodéré des liquers fortes et des vins, que les nations septentrionales semblent aimer d'autant pius que la nature les leur a refusés.

## ENGLISH GRAMMAR.

1. Define the following : Collective noun, transitive verb, indefinite pronoun, conjunctive adverb, and give one example of each.
2. What are the degrees of comparison of adjectives? How are they formed?
3. Parse: "Give me what you have in your hand."
4. Correct errors in the following sentences: (a) Let pou and I go too. (b) The success of his plans are uncertain. (c) He don't appear fitted for the situation. (d) Henry is the tallest of the two brothers.

## HISTORY

x. What was the cause of the war of 1812.
2. Give, with dates, the names of two great battles won by Nelson.
3. By what treaties and in what years did France gain the provinces of Alsace and Lorraine, and by what treaty and in what year did she loose them?
4. Give the principal points of the Constitution of 1791 .
5. How and in what year was Scotland united with England ?

## GEOGRAPHY.

r. Through what seas and straits would a traveller go by the most direct water route from London to the island of Ceylon ?
2. What are the expor's of the Province of Quebec?
3. Name five important seaports of England.
4. On which river, sea or lake are the following
cities situated : Chicago, San Francisco, Toronto, Berlin, Winnipeg, Rome, St. Petersburg, Vienna, Constantinople, Dublin.
5. What is the location of the Chambly canal?

## LATIN.

x. Decline in full the noun Republica.
2. Name the adjectives which have the genitive in ius.
3. How is the imperfect subjunctive of verbs in the active voice formed ?
4. Deponent verbs have certain tenses not found in passive verbs. What are these tenses?
5. Translate into good English, yet as nearly as possible in the Latin idiom, the following:

Commodissimum visum est, C. Valerium Procillium, C. Valerii Caburi filium, summâ virtuti et humanitate adolescentern (cujus pater a C. Valerio Flacco civitate donatus erat) et propter fidem et propter linguæ gallicac scientam, qua multa jam Ariovistus linginqua consuetudine utebatur, et quod in eo peccandi Germanis causa non esset, ad eum mitteri, et M. Mettium, qui hospitio Ariovisti usus erat. His mandavit ut quæ diceret Ariovistus cog. noscerent et ad se referrent, quos cum apud se in castris Ariovistus conspexisset, exercitu suo praesente condamavit: quid ad se venirent? An speculandi causa? Conantes dicere prohibnit, et in catenas conjecit.

## ARITHMETIC.

r. A young man smokes three cigars daily, each worth $\$ 0.03$. What is the annual expense? If he should save this amount, how many days would he be able to live on it, his daily cexpense being $\$ 0.35$ ?
2. A man has deposited in a savings bank at 5 per cent. interest the following sums: January 4 th, $\$ 900$; May IIth, $\$ 700$; October 2 Ist, $\$ 500$. What is the amount due him at the end of the year?
3. In casting 10 lbs . of bismuth with 6 lbs . of pewter and 4 lbs . of lead, an alloy is made which melts at the temperature of boiling water, how much of each metal must be taken to make $\mathrm{I} 1 / 2 \mathrm{lbs}$. of alloy?
4. What is the value of $3 / 3$, of a boat if $7 / 76$ of it be worth $£_{51}$ ?
5. If there be added $1 / 2$ of $2 \% / 5$ of 2.04 to the following quantity, $2^{88} / 8+0.371 / 2 \times 1 / 2$ of $1 / 6$ of 4 1.05, what is the total?

## L'ASSOCIATION PHARMACEUTIQUE DE LA PROVINCE DE QUEBEC.

## Examen Ecrit Préliminaire.

Montreal, le 5 Octobre, 1893
N.B.-Il faut:
I. Ecrirc sur un cote du papier, seulement.
2. Numérotez et lettrez vos réponses de sorte qu'elles correspondent aux questions imprimées.
3. Comptez les feuilles de papier dans leur ordre naturel.
4. Ayez soin de ne pas commencer à traiter un
sujet sur la même feuille que vous avez employée pour un autre sujet, et pliez chaque sujet séparément en mettant votre nom et le nom du sujet traite à l'endos.

## ENGLISH FOR FRENCH CANDIDATFS.

I. Translate into French :

Virtue is an effort made by ourselves for the good of others, with the intention of pleasing God alone.
2. Translate into English :

Ils (les Suédois) vivent longtemps, quand ils ne s'affaiblissent pas par l'usage immodéré des liqueurs fortes et des vins que les nations septentrionales semblent aimer, et d'autant plus que la nature les leur a refusés.

## GRAMMAIRE FRANÇAISE.

1. Analysez grammaticalement: De toutes les vertus, la pureté est celle qui plait le plus à Dieu.
2. Donnez les temps primitifs de traitre, mourir, mettre, lire, écrire.
3. Enoncez la règle du participe passé placé entre deux que.
4. Donnez tout le passé défini et l'imparfait du subjonctif du verbe être.
5. Corrigez les phrases suivantes: Je vous prirez de regrettez la requette qu'ont vous présentera, si j'avais sur vous la moindre influance et la moindre authorité. Vous achettiez ce chant pour deux cents dix piastres et demi l'arpent.

## géographie.

1. Par quelles mers et quels déroits passe un royageur qui se rend par eau et le plus directement, de Londres à Pile de Ceylon?
2. Quels sont les articles d'exportation de la province de Québec ?
3. Nommez cinq ports de mer importants de PAngleterre?
4. Sur quel fleuve, quelle mer ou quelle lac se trouvent les villes suivantes: Chicago, San Francisco, Toronto, Berlin, Winnipeg, Rome, St. Petersburg, Vienne, Constantinople, Dublin?
5. Oì se trouve le canal Chambly ?

## histoire.

I. Quelle fut la cause de la guerre de 1812 ?
2. Donnez, avec les dates, les noms des deux batailles gagnées par Nelson?
3. Par quels traités et en quelles années la France gagna-t-elle les provinces de l'Alsace et de la Lorraine, et par quel traité et en quelle année les reperdit-elle?
4. Citez les principaux points de la constitution de 179 I .
5. Comment et en quelle année l'Ecosse futelle réume à l'Angleterre?

## LATIN.

1. Déclinez tout au long le nom Respublica.
2. Enumérez les adjectifs qui ont le génitif singulier en ius ?
3. Comment se forme l'imparfait du subjonctif?
4. Les varbes déponents ont quelques temps que ne possèdent pas les verbes passifs; quels sont ces temps ?
5. Donnez les temps primintifs, des verbes suivants: cogere, mittere, vivere, posu, ire, mori, sequi, trahere, videre, tunncre. Traduisez en bon français, mais en suivant le latin d'aussi près que possible :

Commodissimum visum est, C. Valerium Procillum, C. Valerii Caburi filium, summâ virtuti et humanitate adolescentum (cujus pater a C. Valerio Flacco civitate donatus erat), et propter fidem et propter linquae gallicae scientiar qua multa jam ariovistuslonginqua consuletudine utebatur,et quod in eo peccandi Germanis causa non esset, ad eum mittere, et ill Mettium, qui hospitio Ariovisti usus erat. His mandavit ut quae diceret Ariovistus cognoscerent et ad se referrent, quos cum apud se in castris Ariovistus conspexisset, exercitu suo prassente condamarit: quid ad se venirent? an speculandi causa? conantes dicere prohibuit, et in catenas conjecit.

## arithmétique.

I. Un jeune homme fume par jour 3 cigares de 0.03 , quelle est sa dépense annuelle? et s'i! économisait cette somme, combien pourrait-elle le faire vivre de jours s'il ne dépensait que 0.35 ?
2. Quelqu'un a déposé dans une caisse d'épargne, à 5 p.c. d'intérêt les sommes suivantes: le 4 janvier $\$ 9 c 0.00$, le 1 mai $\$ 700.00$, le 21 octobre $\$ 500.00$, qu'a-t-il à réclamer à la fin de l'année en capital et intérêt?
3. En fondant 10 livres de bismuth avec 6 livres d'étain, et 4 livres de plomb, on fait un alliage qui fond à la température de l'eau bouillante. On demande ce quill entre de chacun de ces metaux dans $\mathrm{x} 1 / 2 \mathrm{lbs}$ ?
4. Quelle est la valeur des ${ }_{3}=$ d'un bateau. si les ${ }_{56}^{7}$ coutent $\not £_{51}$ ?
5. Si on ajoutait la $1 / 2$ des $z_{5}^{1 / 2}$ de 2.04 à la quantité suivante: : ${ }_{8}^{8 /} \times 0.371 / 2 \times \mathrm{la} 1 / 2$ des ${ }_{5}^{4}$ de 4 r. 05 quel serait le total?

## free $\mathfrak{W a n t}$ Department.

Druggists in need of apprentices and help generally, are invited to make free use of this department, and all persons seeking situations in the drug trade are cordially invited to do likewise. Advertisements of business for sale will also be inserted free of charge.

WANTED-Situation by a competent druggist, holding diploma from the Vienna University, and registered in the Province of Quebec. Address, S. Popper, 45 Crescent st., Montreal.
CITUATION WANTED-By drug clerk and one year in city store; nine months manager. Strictly temperate. A I references. Address, "Druggist," P. O. box 121, Hanover, Ont.

# PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC. 

WRITTEN MAlOR IKNA.MNATION.

> Queliec, Oetoler rith. wigh
N. B.-- You are requested to -

1. Write on one side of the paper only.
2. Number and letter your answers so as to correspond with the printed questions.
3. Keep the answers in each subject on separate sheets.
4. Number the sheets of paper in their proper order and attach them together, then foid them up and place your number on the outside.
mathria medica and tonicology.
I. Name source, preparation, properties and doses of the following resins: Podophyllin; jalap and scammony. How would you distinguish between them?
5. (a) How may we distinguish betwen menthol and thymol? (i) How may we decide that the ouls of thym and mint have not been deprived of their crystalline constituents ?

3 . What are the therapentical effects of the following drugs : Hyd. c. cretit: bromide of ethyl; acontine : liq. potass ; acid. sulph dil. ; iodoform : iodides: bromides; and gamboge?

4 Give sources, habitat and natural order of the following: Gum. acacie; rad. serpent: rad. sarza; pix burgund; pepsinum; nux vomiça: lign. guaiaci and ol. encalypti.

## nOTAN:

I. (a) How many elements do the permanent tissues of plants contain? Do these differ from those of animal tissuc? (b) How many chemical elements are necessary to vegetation? Name them and state in what parts of planis does each one particularly abound. (c) Name the principal earthy elements that are found in vegetables, and state whether they are actual components of any vegetable tissue.
2. (a) Do ronts grow throughout their whole length? If so, why? 'If not, how? State what are the advantages of such a growth. (b) State all you know of roots in general.
3. State the different modes by which plants can be propagated, and explain the difference between organs of vegetation and organs of reproduction.
4. What is meant by the terms : (a) hypogeous leaves, ( $\delta$ ) a aulescent plant, (c) polycarpic tree, (d) verticillate leaf, (c) the anterior part of a flower, $(f)$ connate leaves.

## CHEMISTRY.

I. Iodine. (a) How is it obtained? (b) Give its atomic weight and tests. (c) Name the official preparations containing it. (d) Write out an equation explaining the manufacture of iodide of potassium. (c) How can you separate the iodide from the iodate and transform the latter into the former? ( $n$ ) Write out the formula of iodide of potassium and iodate of potassium.
2. (ia) What is amylic alcohol? (b) Whenec does it come? (c) Why is it called potato oil and flusel oil? (d) Is it soluble is: wnter?
3. (a) How is lig. potess. made? (位 Explain the 13. I'. test which excludes alumina. (c) How would you dilute a sample of the liguor, one ounce fluid of which requires 535.6 (grain mensure) of volumetric solution of oxalic acid, for complete saturation to make it B. P. strength ?
4. Nitrous acid (a) (iive its formula, (b) and test. (c) Which nitrite is most used in medncine and name its official 13. P. preparation, stating the percentage of nitrite contained in it.

## DHARMACY.

1. Describe ful'y the 13. P. processes for the manufacture of vin. ipecac. and tr. nux. von. What should be the alkaloidal strength of the latter?
2. What are the menstruns used in the preparation of the following B. 1'. cxtracis: Ext cinch. liq. ; ext. aloes soc ; ext. can. ind. ; and give their doses.
3. What is meant by the terms over procif and under proof? How much $95^{\circ \prime}$ alcohol will be required to make two gallons imperial measure of 13. P. proof spirit?
4. Write out the following formula, as a prescription, indicating the proper quantity of each ingredient to make two fluid ounces of a $10 \%$ emulsion of turpentine and $1 \%$ of wintergreen. Direc tions to be in Latin.

Ol. terebinth.
Ol. pyrola.
Pulv. acacie.
Aq. flor aurant.
A teaspoonful every four hours. Shake the bottle. Keep the bottle in a cool place.
(b) How would you prepare it?

## Pharmaceutioal Examinations.

The semi-annual major and minor examinations of the Pharmaceutical Association of the Province of Quebec were held in the Laval University, Quebec, on Tuesday and Wednesda; last, when eight major and eight minor candidates prosented themselves. Of these, four major and five minor candidates were accepted. Their names are in order of merit, as follows: As "licentiates of pharmacy;" James Douglas Webb, Montreal ; Joseph Edmond Dube, Quebec ; Treffle Delisle, Quebec ; and Heury J. Pilon, Montreal. As "certified clerks," William Arthur Hendrie, P. H. Gendron, J. B. Turcotte, J. A. Picotte, and Phillipe Lupien, all of Mentreal. The board of examiners were S . Lachance, Montreal ; R. W. Williams, Three Rivers; A. E. DuBerger, Waterloo ; W. H. Chapman and J. R. Parkin, Montreal, with E. Muir, secre tary of the board. Mr. Edmond Giroux, jr., Montreal, represented the association in his capacity of second vice-president.

## THE INTERNATIONAL PHARMACEUTICAL CONGRESS.

The seventh International Pharmaceutical Congress opencd in the hall of Columbus, Art Institute, Chicago, Monday, August 21st, and at the same time the other Congresses of Science which were to be held during the same week were also cpened by an address from Prof. Bonney, of the World's Auxiliary Congresses. The representativas of the different sciences occupied positions on the stage, and after the opening address, speeches were made by Prof. Wiley, the eminent chemist, Profs. Elliott Coues, Eligha Gray, Oldberg, N. H. Martin, Prince Walgowski, of St. Petersburg, Prof. Gana$k i$, of the University of Tokio, and others, on the various sciences with which they are identified.
The first session of the Pharmacy Congress was called to order by Prof. Oldberg, chairman of the committee on arrangements, who then called upon Prof. Remington to address the delegates, welcoming them to the congress and wishing them success in their labors, to which Mr. Carteighe responded.
Prof. Oldberg then announced that Prof. Patch had been chosen to act as chairman till a permanent organization had been formed.
Prof. Patch, after taking the chair, announced the committee on credentials, and that he had chosen Wm. Martindale, Wm. Danielson of Stockholm, Carl Fischer, Steinmark, Austria, A. E. Ebert, Chicago, and Wm. Simpson, of Raleigh, N. C.

Mr. Ncygaard, of Stockholm, was requested to act as secretary.
The chairman then appointed a committee on communications to examine communications to the congress and to present such as might ta of interest, this committee to be composed of Prof. Remington and Messrs. Cartcighe and Martindale.
The delegates present were Messrs. Ramlot, Brussells; Carteighe, Martin and Martindale, England; Carl Fischer, Austria; Thomas Ingham, Queensland ; Dr. Egger, Austria; Danielson and Neygaard, Sweden; L. W. Yeomans and J. J. Hall, Ontario ; E. Muir, S. Lachance and J. E. Morrison, (Quebec.
At the second session the nominating committee presented their repori as follows: For president, Jos. P. Remington ; vice-presidents, Carl Fischer, E. Ramlot, L. W. Yeomans, Martin, Neygaard, N. H. Martin. Michael Carteighe, Wim. Martindale, E. Muir, T. Ingham, A. E. Ebert, Dr. Rice, L. E. Sayre, S. A. D. Sheppard, W. S. Thompson and E. L. Patch ; for secretary, Oscar Oldberg. of Chicago ; for vice-secretaries, S. Lachance, of Montreal, Prof. Fennel, Cincinnati, and M. T. Breslin, New Orleans.

On motion of Mr. Rogers, the chairman was instructed to cast an affirmative ballot for the nomi nees, who were then declared elected.

Prof. Remington, on taking the chair, thanked
the delegates for the honor which they had conferred upon him, and then announced that the first business was the presentation of the Hanbury tnedal, wnich has been awarded to Prof. John M. Maisch.
Mr. Carteighe, in presenting the medal, stated the purpose for which the medal was conferred and enumerated the eminent men to whom it had a!:-ady been awarded, and lastly to Prof. Maisch for his great services to materia medica and botany.
Prof. Remington accepted the medal for Prof. Maisch, very feelingly referred to the sad circumstances nuder which it was received, and stated that he had telegraphed the information to Mrs. Maisch and had received a reply that the news had been joyfully reccived by the recipient of the medal.
On motion of S. A. 1). Sheppard, the following subject, as set forth in the programme, was taken up for discussion: "What progress has been made toward the preparation of an international pharmacopocia for potent remedies? What action, if any, should be taken in reference ic the subject?"

The president called upon Mr. Carteighe who, as he had attended the former international congresses, was in a position to know the views of foreign pharmacists on this subject.

Mr. Carteighe said that Dr. Anton Von Waldheim, of Vienna, had been appointed to draft an international pharmacopceia, but that no action had been taken upon it. In his opinion an international pharmacopcria was impracticable, as it would have to be encyclopoedic in character and impossible of compilation, and in his opinion it would be more practicable to publish a pharmacopeia of potent remedies only.

Dr. Whelpley called attention to the resolution passed at the second session of the A. P A., voting the sum of $\$ 1,000$ for the purpose of compiling and publishing an international pharmacopceia.

Mr . Sheppard then presented the following resolutions:

Resolved,-That a commission be employed by this congress to compile and publish an interna. tional pharmacoporia; that this :ommittee shall consist of one representative from each of the varinus countries represented in this congress, and from such other countries as may be hereatter determined.

Resolved,-That a committee of five, of whom the president of the congress shall be chairman, be now chosen and that said committee shall decide what other countries, besides those here represented, shall be invited to join in the work, The committee shall also determine how the members of the committee shall beappointed.

Resolved,-That this congress accept the proffer of the American Pharmaceutical Association of the sum of one thousand dollars to help defray the expense of compiling, publishing and distributing an international pharmacopœia.

Mr. Martindale stated that such a pharmacopœia was very desirable, and that the commission should endeavor to have each new national pharmacopœeia to adopt the standards which would be proposed by the commission.
Mr. Sheppard's resolutions were adopted unanimously, and the chair appointed Dr. Whelpley, N. H. Martin, E. Muir, Dr. Ramlot, and S. A. D. Sheppard on the committee.
The first paper read was one by Dr. Vulpius, of Heidelberg, "On the Scope of the Pharmacopoeia" and "Supplementary Remarks on Section III." One paragraph of this paper, which apparently advocated the admission of specialties into the pharmacopcia, was vigorously opposed by Mons. Ramlot, who asked that the discussion on this paper be postponed till he had more time to prepare an answer to it, which was granted.

The next paper, "Pharmaceutical Nomenclature," by Dr. E. Blitz, of Erfurt, was discussed by Messers. Carteighe, Hallberg, Slack, Martin, Neygaard, and Oldberg.

The session then adjourned till $10 \mathrm{a} . \mathrm{m}$. Thursday, August 22.

The third session opened at in p. m. Tuesday, and after the reading and adoption of the minutes of the previous session, the discussion on the International Pharmacopœia was resumed.

Prof. Oldberg then offered the following, which was adopted:
"The Seventh International Pharmaceutical Congress hereby reaffirms the opinion expressed by preceding International Pharmaceutical Congresses that the decimal system of measures, based upon the meter, should be the only system used in the pharmacopœias; and, further, this congress believes that fluid measures should be employed in the measurement of liquid. This congress also believes that the scale of the centigrade thermometer should be the only one employed in stating temperatures:"

The question of education and legislation was then introduced, and at the same time the president referred to a copy of the pharmacy law of Victoria, Australia, which he had just received.

Mr. Carteighe pointed out the defects in existing laws as regards the practical training, length of service and lecture terms, and stated that the Australian law filled exactly what he considered the exact requirements, namely, preliminary examination, four years practical work in a drug store and a course of lectures.

Mr. Muir, of Montreal, stated that this Australian law had been forestalled by the law in force in the Province of Quebec for nearly twenty years and on which the Victoria Board had evidently based their law. Mr. Muir briefly stated the different changes which the law had undergone and its beneficial effects on pharmacy in the province.

Mr. Yeomans gave a resume of the principal points of the pharmacy law of Ontario.

After considerable discussion, which was partici-
pated in by Dr. Eccles, Mr. Martindale, Prof. Fennel, Dr. Ramlot and Mr. Breslin, the president appointed the following delegates a committee to consider the question of pharmaceutical education and to report at the next session : Messrs. Muir, Hinrichs and Hallberg.

Dr. Whelpley reported that the committee appointed to consider the resolv:ions presented by Mr. Sheppard offered the following substitute:

Resolved,-That this congress appoint a committee of three, of which the president shall be chairman, the duty of this committee to be to take the necessary steps for the appointment of an International Pharmacopœeial Commission to compile, publish and distribute an International Pharmacopœia of Potent Remedies. The Internatioual Pharmacopœial Commission shall consist of one member from each country represented at this congress and from other countries as the committee of three may decide, the members of the commission to be selected by the pharmacopœial committees of the various countries, or to be otherwise chosen, if necessary. The committee of three shall be a permanent committee, and it shall be its duty to urge and expedite the work in every proper way, and in the event of the death or resignation of any member of this committee of three the vacancy shall be filled by the other members.

Resolved,-That this congress accepts with thanks the proffer by the American Phazmaceutical Association of the sum of $\$ 1$, coo to help defray the expense of compiling, publishing and distributing an Interuational Pharmacopœia of Potent Remedies

On motion of Dr. Rogers, these resolutions were adopted.

Mr. Martin nominated Mr. Carteighe as the second member of the committee, and Mr. Carteighe nominated Dr. Waldheim of Vienna as the third member. Both nominations were unanimously accepted.

After the presentation of communications from various distinguished foreign pharmacists received by the committee on arrangements, the session adjourned.

The fourth session was opened Monday at 10.30. After the reading of the minntes, the president announced that the next subject for discussion was The Relation of the Pharmacist to Public Sanitation, and Food Adulteration.

Prof. Prescott, after expressing his opinion on this subject, was followed by Frof. Fennell, who thought that a committee should be appointed to define what should constitute an adulteration.

Prof. Sayre moved as a:1 amendment that a com mittee be appointed to take up this subject and to confer with other bodies for the purpose of bringing about practical laws for the prevention of adulteration.

Dr. Rogers said that an expression of opinion by this congress would be of great benefit in securing the necessary legislation.
Mr. Martindale related:some of the experiences


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## Anodyne Pine Expectorant,

In Pint and Half-Gallon Botrles.
In the formula are embodied sedatives and expectorants happily conjoined with astringents, thus rendering the preparation of value in hardening mucous exudation, thereby loosening it from the ..embrane to which it is adherent.

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## Supplied in Pint and Half-Gallon Containers,

 is especially indicated in chronic bronchitis and chronic derangement of the kidneys. it is furthermore an admirable vehicle for quinine, masking its bitterness most successfully.
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Supplied in Pint and Half-Gallon Bottles, is a sedative expectorant of much value in chronic irritation of the bronchial tract.

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Suppiled in Pints and Half.Gallons.
Widely used in the hospitals of this country and Europe in the treatnent of simple uncomplicated bronchitis. It is exceptionally palatable, and therefore more readily taken by children than the nauseous expectorant mixtures so often given.

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For two years we have been unable to obtain any stock of cocillana. We can now, however, supply this Bolivian remedy, which experience has proved to be of marked therapeutic value in the inflammations of the respiratory organs, in bronchitis, hay asthma, influenza, and pneumona; it may in many cases be employed in the place of ipecac as an expectorant and sudorific.

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Literature affording information in extenso, issued in attractive form, will be forwarded upon request. Drıggists desiring these monographs for distribution amongst their physician friends will please address us, mentioning the Montreal Pharmaceutical Journal.
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## PARİS EXPOSITION 1889 .. HORS-CONCOURS $\rightarrow$ MEMBRE DU UURY\& GELLE FRERES

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of English pharmacists under the law in force in England, such as the prosecution of druggists for selling soda water containing less than 15 grains of sodium bicarbonate to the half pint.

Mr. Ramlot said the Adulteration Act in force in Belgium had not given satisfaction on account of the manner in which it was enforced.

Prof. Sayre's motion was passed with an amendment by Dr. Whelpley that the committee shall consist of one member from each country represented at the congress.

The committee on education reported, and presented the following resolutions which, after some discussion, were adopted:

Resolved,- That no person should be admitted as an apprentice in pharmacy unless he shall have given evidence, by satisfac:orily passing a preliminary examination, that he possesses a general education sufflcient for the purpose and as advanced as the conditions of the practice of pharmacy in each country may permit, and his term of apprenticeship in pharmacy should in no case be counted so far as it may ante-date such evidence of sufficient preliminary education.

The compulsory period of apprenticeship should not be less thau four years, including the time devoted by the apprentice to regular attendance upon the courses of instruction in a college or shool of pharmacy.

Recognizing the inadequacy of examinations as a means of determining the quaiifications of persons seeking the important privilege of dispensing and compounding medicines, this congress approves of the establishment of a compulsory curriculum of pharmaceutical education, and holds that no person should be regarded as a qualified pharmacist who has not pursued to completion a systematic course of instruction in the various branches of pharmaceutical science, and delegates in this congress are requested to lend their aid toward securing the recognition of a principle of such fundamental importance to pharmacy.

On motion of Prof Oldbelg, a committee on sanitation composed of Messrs. Prescott, Oldberg. Baston, Martindale and Ramlot, was appointed, which, after the reading of papers reterred to the Congress by the A. P. A., reported: "That, in the jndgment of this Congress, the educated pharmacist is a naturai and proper expert for measures of public health, not only in the prevention of adulterations, but in the inspection of water supplies, the enforcement of good sewage, etc. The pharmacist is, by virtue of his profession, the common chemist of the common people." which was adopted.

Mr. Alpers moved a vote of thanks to the A. P. A., the committee on arrangements and the pharmacists of Chicago. After the usual votes of thanks had been passed, Messrs. Ramlot, Muir and Nefgaard, on behalf of the foreign delegates, expressed their gratitude for the hospitable way in which they had been ieceived, after which the congress adjourned.

## ENGLISH PHARMACEUTICAL NOTES.

(From Our Own Correspondent.)
The advent of cholera, which has been expected all the summer, has not caused so much alarm as might have been anticipated. In the first piace the number of cases have been very limited, and secondly, elaborate precautions had been taken which were more than enough to meet the few isolated attacks which have occurred. The Local Government Board have been most energetic in following up each fresh case and in ensuring complete disinfection wherever necessary. A curious featire of the present visitation of choleraic diarrhœa, is that in several instances Koch's comma bacilli. which have hitherto been considered to only occur in the Asiatic form of the disease, have been found in the discharges. This was all the more remarkable as the post-mortem examination of the intestines showed no signs of the virulent type. It is evident, therefore, that further investigation is required so as to differentiate these British cholera cases from the Asiatic.

In several of the districts of London arrangements have been made with the local chemists to dispense the prescriptions of the medical officers free of charge to the public presenting them. A fixed rate of about ten cents per bottle of mixture was agreed upon to be paid by the district out of the rates on each prescription, with extra allowances if expensive drugs were ordered. So far there has beer no requirement of this special service, but the system would undoubtedly prove advantageous to the poor of the community had a serious outbreak of cholera occurred. Most of the chemists here have been placing their diarrhœa mixtures, etc., prominently before the public and also displaying all the more popular disinfectants. The usual diarthcea mixture is made from aromatic chalk powder with a small addition of opium or catechu. A very useful but not particularly elegant preparation contains a large proportion of decoction of logwood with aromatic sulphuric acid. The old-fashioned and unsightly chalk mixture is in some request, whilst one firm are pushing cholera pills, stated to be similar to those supplied to the Indian Government: containing opium, camphor and acetate of lead.

The repoits of the International Congress at Chicago are rather meagre and disappointing. England is well represented by Mr. Carteighe, President of the Pharmaceutical Society, Mr. Martindale, ex-President of the British Pharmaceutical Conference, and Mr. Martin, the newly elected President of the latter body. Mr. Carteighe has been for ten years at the head of the English society, and is still very popular. He is principal of the firm of Dinneford \& Co., of New Bond streei, London, and propnetor of the celebrated Fluid Magnesia and various other specialties. Mr. Martindale, as the author of the "Extra Pharmacopocia," and Chairman of the B. P. C. Formulary

Committee, is widely known and universally respected. He has a first-rate dispensing business in the centre of the West-end medical habitat and has established a small wholesale connection for his nitro-glycerine preparatious, etc. Mr. Martin was iormerly a member of the council of the Pharmaceutical Society. He is senior partner in the oldestablished firm of Brady \& Martin, of Newcastle-on-Tyne, and has a good wholesale and retail trade in drugs and medical instruments. The Congress, with good intentions, revives the International Pharmacopœia question. But it is quite hopeless to expect that any country will adopt an international pharmacopœia-no matter how excellent its methods and arrangements may be-as their national authority. The utmost that could occur would be a faint tendency to adopt new preparations from the international work, where considered advisable. The more important question as to uniformity of compound poisonous preparations in different countries, under the same name, will hardly be touched, although it may be the avowed object. It is also self-evident that Germany, Kussia and other European couutries should join in the movement. Unfortunately, from some unexplained reason, these countries are unrepresented at the Congress.

The recent introduction of an absolutely pure ether made from methylated spirit, but subsequently purified from all methyl compounds is of importance in pharmacy. It has been known for a long time that ether of a specific gravity of .730 or .735 contains considerable traces of methyl derivations, when prepared from methylated spirit; indeed, it often contains unaltered methylated spinit. This is an offence against the laws of adulteration where, as in the B. P., the various preparations of ether are suppesed to be made with an article prepared only from pure spirit. Now the whole matter is in the same position as chloroform. Chloroform can be prepared from acetone, methylated spirit, chloral or any other body, provided that it is obtained chemically pure, and when so cbtained there is no possible objection to its use in pharmacy and the various pharmacopœial preparations. The product is absolutely identical with that made from pure alcohol. Similarly the new ether .720 which is now being made is absolutely pure and is chemically undistinguishable from that made from the purest rectified spirit, whilst it is less than half the price. There are some sentimental pharmacists who always employ chloroform guaranteed made from pure spirit for making chloroform water! This is magnificent ; but it is nct business

The efforts of Blondeau et Cie , the proprietors of "Vinolia" preparations, and Elliman $\&$ Co., of Embrocation fame, to oppose the "cutting" of prices of these goods have met with some success. In each case an agreement is required to be signed by the retailer before he obtains his supplies from the wholesalers. It is zather a crude way of effecting the object, and as it entails extra clerical woik
and trouble on the wholesale houses it will never be regarded with great favor. Still it appears to work favorably on the whole, and only requires cooperation on the part of the manufacturers to ensure universal success. But this is precisely what will never take placa. For druggists, who can rarely depend upon quick returns for their small profits, the general plan of leaving severely alone these articles which have no living profit attached them, would appear the wisest policy in the end. The most fatal policy which unfortunately has been adopted in this crisis by many druggists of the old school here, is the get-what-you-can. This is demoralizing to both parties and unworthy of business men. It has proved particularly disastrous to many an old-fashioned business in this country, which, previously to the "cutting" of proprietaries, had the unsettled confidence of their customers. The position of declining to sell unless there is some advantage in the transaction is clear and comprehensible and ensures respect. It is also conceivable that to sell some articles at cost price, if it attracts other and compensating business, may answer. But to do one thing to-day and the other to-morrow can only destroy confidence and lead to exasperation.

The excitement in the otto of rose market due to the adverse reports from Bulgaria has given a marked increase in its value. It is seldom that two such rapid rises, as have recently taken place in opium and otto, should have been practically unforeseen. But with each article a moderate reduction in the usual average yield is quite sufficient to set speculators at work. The prolonged drought which has been experienced this year has been very unfavorable to many herbs and drugs. The Mitcham crops suffered severely from want of rain, and the yield of oil has been considerably less in consequence. Only a moderate demand exists in the drug market, and shemicals are firm at previous rates. The auctions lately have had very bare attendances, but with improvement in export business there will be more alierations during the next month.

## PHARMACY IN MEXICO.

REPORT ON THE GENERAL CONDITION OF PHARAJACF IN MENICO, PRESENTED MY PROFESSOK A. VELASCO QUIROS.
Gentlemen,-Pharmacy in the Mexican Republic is at present undergoing a crisis which prevents me from foreseeing exactly its future results. The political disturbances that agitated thir country, and the exaggerated principles proclaimed, brought on not only the weakening but also the relaxation of social links and ties; following, naturally, that on peace being secured the consequences of the disasters had to be felt, and that on the return to order and normal circumstances time was required, combined with special measures which could not be suddenly put in practice.

In the first half of the present century, if pharmacy was not in a flourishing condition, it at least revealed a vitality which presented a remarkable contrast to its actual state Professional teaching was then free; the primary and secondary schools were in the hands of the clergy, as aiso the courses of and titles conferred on theologians and lawyers; the rest any one could teach. Medicine and pharmacy, consulting the combined interests of the two professions, mutually sustained each other; the classes were given in the apothecary shops, in hospitals, and in private houses.

The masters in that epoch exacted no remuneration for the instruction they imparsed; the classes and lectures of chemistry, botany aud pharmacy were even onerous to them; nevertheless, that epoch, which can rightly be called the beginning of our social life, brought forth men such as La Llave, Cal Vargas, Rio de la Loza, and many others, too numerous to mention.

The colonial legislation which had remained in force exacted the personal practice of professions. A physicinn could not be a pharmacist, or vice versa: the person who had a title for both professions was obliged to choose one of either, and could not practice the two at the same time. At the end of the course of study, an application had to be made to the government, accompanied by the corresponding certificates; at other times the party interested might solicit an examiner on the ground of fitness and aptitude, and, with the sanction of the jury, the diploma would be granted

Only three schools existed then, viz., in Mexico, Puebla, and Guadalajara.

The sanitary corps was composed then of physicians and pharmacists.

The drug stores and dispensaries were entirely in the hands of the pharmacists, to such an extent as to rouse envy in the hearts of many who considered snch establishments as so many mines of silver. Such a calm and profitable state of affairs naturally resulted in facilitating the study of the sciences and furthering their progress.

The apothecary would teach the theory, thepractice would follow in the laboratory, and the master would take his remuneration into very small account, as the lessons were given by him to his own pupils and to those of his friends and companions. As a rule, an assistant or pupil in those lines might easily consider himself as a postulant apotnecary. The chief of a laboratory, who was always a professor, was generally the master or teacher.
Shortly before the middle of the present century, the drug stores, wholesale and retail, and the special agents and travellers selling patent specifics and medicines, appeared on the scene.
The change in politics that followed the Reform Laws in 1857 , the subsequent disturbances, the interpretation that mas given to those principles, and the disorgenization of public instruction caused by the separation of the state from the church, occasioned a general revolution in established customs.

The state monopolized the schools and teaching, reduced the colleges, dictated rules regarding courses of studies, and declared them gratuitous. Medicine and pharmacy were included in the monopoly, the latter as a part of the former, and both professions were then considered as one branch,Puebla and Guadalajara assenting to this determinatiou. On this same system the greater of the United States of Mexico issued laws regarding public instruction, and, as suitable edifices were scarce. and the conditions required were difficult to fill, in order to spread and foment professional teachings they followed the old regime, and accepted the mere presentation of certificates that mignt testify to the aptitude of the solicitant and his knowledge of the subject in question, instead of exacting from him a regular course of study for which no facilities existed.

Under this system numbers of diplomas began to be granted, opening thereby a large field to all kinds of abuses and disorders, which passed unperceived and degenerated into a babit and custom. The state then gave attention preferably to the disturbances occasioned by the internal civil wars and the foreign invasion, and postponed the arrangement of other affairs.

Once the disorder was introduced, pharmacy was greatly injured. Physicians and medical students began to procure clients by means of the apothecaries' shops; subsequently medical dispensaries were established; and further, the profession of the pharmacist was almost nullified, to such a degree that to-day in the one thousand pharmaceutical establishments that exist in the whole republic, we can only number, say, three hundred real pharmacists disseminated throughout the country, the rest being under the direction of physicians, and in some cases the apothecaries' shops are in charge of merely conımon servants.
Whether a pharmacist knows little or much, he is always entitled to some regard from the medical laculty, owing to the natural conflict between the two professions, the consequence of all of which is the aversion to study and to progress in the profession: nevertheless, there exist a number of selfdenying missionaries of science, among which number may be counted Lazaro Perez, Joaquin Ybanez, Manuel Mena, Lazo de la Vega, Alfenso Herrera, Isidoro Palacios, Urbina, Almaraz, Morales, Begnerissi, and others.

Commercially speaking, pharmacy may be looked upon as a simple secondary branch, whose object is the sale of foreign manufactures, the first place being held by large drug stores. Notwithstanding this, a reaction begins to make itself apparent in some parts, and pharmacists begin to take up again the wholesale business; this will greatly influence the direct and original production of chemical substances.

Industry as regards chemical products hardly exists at all. We have two establishments in the capital, one in Guadalajara, and another in Puebla,
with !aboratories on a small scale, without taking into account small industrics which are scarcely sutficie:t to supply the local wants. On this ground it seems that less difficulties will be met with in fiture, and progress is certainly expected

The consumption of patent medicines (specilics) has increased to an extraordinary extent, owing to the marked preference to prescribe them, as can be proved by the certificates published in our newspapers, and this seriously injures the advancement of the scientific element.

In the sanitary corps pharmacists represent only a small proportion, -so small that it is equivalent to the want of participation in all discussions; as the inequality of numbers drowns the voices of cur members. So far, only in Mexico and San luis Potost have phar:macists chemical laboratories. In Mexico we may mention Lucio, Uribe y Luna, and Drusina; in Sais Luis, Professor Isidora Palacios, who is, at the same time, Sanitary Food Inspector; elsewhere the inspectors are invariably physicians.

It is only in the military hospital in Guadalajara and in one or two other places that pharmacists have attributes proper to their scientific character. As may be inferred from what has been previously stated, the number of pharmaceutical establishments is notoriously out of propertion to the number of inhabitants ; but the immense majority of the lower classes, the natives of our country, do not abandon their old and primitive curative system, and keep aloof from physicians and apothecaries; so, when we calculate that only three or four millions of inhabitants have adopted the modern system, and taking the thousand apothecary establishments that exist, each corresponds to three or four thousand inhabitants.

Mexico has 110 of these establishments and 350,000 inhabitants; Puebla has 22 establishments and So,000 inhabizants; Merida (Yucatan) has 15 establishments and 40,000 inhabitants.

The amual sales in Mexico amount to $\$ 450$,000, and this proportion varies in the other towns owing to the diversity of prices, but the gross amount of sales of medicines in the whole republic may be estimated to be about $\$ 4,000,000$, more or less.

The consumption of specifics may be calculated at a still larger sum, on account of the exagseration in the prices, so that the total amount of medicines and specifics can be considered to reach annually the sum of $\$ \$, 000,000$ to $\$ 10,000,000$ in the whole country.

The influence of the sales of these specifics tends to convert the apothecaries' establishment into mere stores for the sale of such manufactures, more or less: genuine, and to cause the progressive decline of the production of chemical substances. The public authorities have begun to fix their attention on this state of things, and to dictate certain measures tending to moderate the evils complained of.

They have lately imposed henvier duties on the importation of pharmaceutical specifics ; but this step will give no result so long as the consumption is based on medical prescriptions.

Regarding the conditions under which the profession is practised, the new legislation has but litle advanced. Our laws derived from the colonial system are but little in harmouy with the constitutional recime in force, and as a result of this conflict, difficulties have arisen which have frustrated the first attempts towards reorganization.

The monopoly of instruction established after the last foreign invasion reduced the pharmaceutical professional course to three years, which had to be gone through after the preparatory studies.

## preliaratorl studies.

First year.-Arithmetic, Algebra, first year of French.

Second year.-Geometry, Spanish, Grammar, second year of French and first o? English.

Third year.-Natural Philosophy, Notions of Mechanics, Cosmography, second year of English and first of Latin.

Fourth year.-Chemistry; Geography, second year of Latin, Greek Roots.

Fifth year.-Natural History, Logic. Ideology, General Grammar, Morals, Literature, General History and History of Mexico

The professional studies for the pharmaceutical profession are distributed over three years.

First year,-Theoretical and Practical Pharmacy, Pharmaceutical Economy and Legislation.

Second year.-History of Commen Drugs.
Third year.-Chemical Analysis.
This legislation has been followed by the schoois in Puebla, San Luis, Michoacan, and other states, which have added other subjects over and above. In Guadalajara (Sta'e of Jalisco), where some eminent professors take a deep interest in the progress of science, they have obtained the adoption of a course which embraces the following subjects :

Firtt year.-Inorganic Chemistry and its application to Pharmacy and Toxicology, the industry of Botany, Bacteriology, Pharmacy, and Pharmaceutical handlings and manipulations.

Second year.-General Organic and Analytical Chemistry, Mineralogy, Industrial Chemistry, Zoology and Animal Drugs, History of Vegeable Drugs, Pharmacy.

Third year.-General Organic Chemistry, History of Vegetable Drugs, Pharmacy and I'harmaceutical Legis'ation.

The utility of this reform brought about within a short time the reorganization of pharmaceutical establishments with all the requirements of modern science, and it is only to be regretted that these teachings were not seconded.

At this moment the question of teaching is discussed in all the states of the confederation, without anybody being able to foretell the ultimate results. In some cases professional teaching has
been totally suppressed, and recently Puebla has reformed a plan of studies, granting the professor a salary for his tuition. We can calculate the number of students who attend the classes of pharmacy as one to every 250,000 inhabitants among the total population of the republic, this small number showing the period of decay to which the profession is passive.

The sanitary code lately put into force indicated certain improvements, which lost their strength by allowing the practice of the profession through delegates. In spite of this objection, this law may be considered as the starting point of a reorganization to be carried out little by little. This as well as other defects is now being studied, and we hope that the new modification will improve the present circumstances.

These conditions being an element of uncertainty into all that concerns our brance of the profession. Our pharmaceutical sucieties are lifeless, depressed, and impotent in every sense.

The Council of Hygene has not yet named the members who are to form the lharmacoperia Commission. The actual An- גican I'harmacoperia owes its being to the almost caclusive efforts of Professor Lazo de la Vega and to several of his friends, as is shown in the expla ceutical element afforded him no help or assistance.

From the foregoing it can be gathered that our labor lacks security and precision, and that we are very far from the clements of progress. We find ourselves at present beginning a period of reorganization, the results of which, in whatever way they may present themselves, will arrest the decay into which we have falien.

Neither is it possible, after the social upheavals which occasioned the political convulsions, to tune all the chords of our administration at a given roment. It is absolutely necessary to be acquainted with all the real needs of each branch, sting aside all prejudice : this is an arduous and difficult question to solve, in which the calmest judgment may easily be misled, and it ought to cause 110 surprise if the first attempts fail to give the desired results. We have the best reasons for believing that our branch of the profession in Mexico will soon assume a character in consonance with our political life and conditions, and we base this belie? on the fact that many pharmacists, impressed with the present condition of affairs, are begimning is draw attention to the requirements of the profession, and to discuss the means by whi h they may he attended to, as well as providung data which will enable the legislature to give us laws appropriate to our means.

The public authoritics are scriously considering the arrangement of the different $\mathrm{s}^{-}$cial interests involved. The country progresses, and perhaps at no distant date we may be able to present our leg. islation, our metheds of instruction, and the standing of our profession from a superior point of view to that which forms the ground work of this sketch,
and to this end we will be greatly stimulated by the encouragement we receive from our colleagues of the entire world, who are so indefatigable in their efforts for the progress and advaicement of their profession and science.

## UNITED STATES TRADE-MARKS.

The following list of United States trade-marks, pertaining to the drug trade, is expressly reported for The Montreal. Pharmaceutical. Jouinal. by James Sangster, Solicitor of Patents and Trademarks, Buffali, N. Y.

## reghrerbi augusi 29,1893

22,558 Tooth wash. James W. Johnson, New York. N. I. Filed Junc 29, 1893. Essential feature - The word "lavodent." U'sed since April 28, 1892.

23,561-Certain named Disinfecting and Therapeuticall'reparations, I chthyolsesesellschaft Cordes. Hermanni \& Co., Hamburg, Germany. Filed April, 1892. Essential feeture-The word "Thiosapol." Used since April 1, 1891.

23,562-Liniment. Robert 11 Wagner, Rye, N. Y Filed June 14, 1893. Essential featureThe word "Xternolene." Used since March 25, 1893.

23,563-Plasters, Powders, Ointments and Sarsapariila. Plintation Pharmacal Co, Memphis, Tenn. Filed July 20, 1893. Essential featureThe word "Plantation." Used since June $1,1885$.

22,564-Ointments, Salves and Similar Preparations. Soule Medical Co, I isbon, N D. Filed July 28, 189j. Essential feature-The word "Soules" and a monogram formed of the letters "S S." Used since July $1,1892$.

23,565-Headache Powders John U. OMeara, Washingion, D. C. Filed February 16, 1893. Essential feature-The word "Royal." Used since July 18, 1892.

23,566--Headache and Fever Remedy. John B. Raser, Reading, Pa. Filed July 22, 1893. Essential feature-The word "Phenatol." Used since June, 1892.

## registered septlember 5, 1893

2; 583 -I)rugs. Luitpold Sollman Cantorn, 0 . Filed March 3, 1893 Essential feature--Th • fig. ure " 3 " and the letter " $T$ " to the right of the figure ia connection words "Tried," "True" and Thuty." Used since January, 189 :

23584 -itealing Powders. Uirich W. Becker, Stapleton N. Y. Filed August 5, 1893. Essen. tial feature - The word "Siccum" Used since 1882.

23,585 - Cerlain Named Mcdicines. Joscph Ray Watkins, Winona, Minn Filed May 31, 1893 Essential fcature-The abbreviation and word "Dr, Ward's." Used since January 6, 1892.
23.586 -Remedy for Catarrh. S. C. Wells \& Co., LeRoy, N. Y. Filed August 2, $: 893$. Fis-
sential-The words "Shiloh's Catarrh Remedy" and the representation of an injector. Used since 1880.

## REGISTERED SEITEMBER 12, 1 S93.

23603 -Tonic of Mait and Hops. Hospital Tonic Co., Milwaukee, Wis. Filed June 19, 1893. Essential feature-The words "Hospital Tonic" in connection with the representation of a stalk of barley.

23,606-Antiseptic for destroying Insects, Fungi, and the like. Farbenfabriken, Vormals Fr. Bayer \& Co., Elberfield, Germany, and New Y'ork, N. Y, Filed May 22, 1893 . Essential feature-The word "Aminonnin." Used since February 5, iS92.

23,607-Salves and Ointments. William H. Lockwood, St. Paul, Minn. Filed December 9, 1392. Essential feature--The words "Good Luck" and the representation of a horse shoe and a spray of clover leaves. Used since July, iS86.

23,608--Pills. Jolly \& Sons (limited), London, Enbland. Filed May 29, 1893. Essential fea-ture-A representation of the smiling face of a girl with hair parted in the middle, surrounded by a wreath of various kinds of fruits attached to their stalks and vines. Used since December io, 1 Sga.

23,609 - Preparation for the Painless Extraction of Teeth. Garrett Layton Frier, Dover, Del. Filed July 3, $1 \mathrm{~S}_{93}$. Essential feature - The word "Alg:afuge." Used since April 1, 1893
23.6 ro-Medicine for expelling Tape-IWorms. Richard Phillips, Baird, Tex. Filed August i, ${ }_{1} \mathrm{Sos}_{3}$ Essential feature-The representation of a man's head and an awl. Used since June 1, i 893 .
2:,611-Remedy for Diseases of the Kidneys and Liver. Frederick F (nn, Rutland, Vt. Filed August 9, 1893 Essential feature-The word "Siory's." Used since April 20, 1893.

## ON THE SCOPE OF THE PHARMACOPEIA

by dr. ©. vulpius, of heidelrerg, grrmany.
Read at the International Pharmaceutical Congress.
In view of the great difference of principles which determine the scope of the pharmacopœia, it is possibly advisable for interested parties to agree on a few principles, which should determine the procedure in selecting the articles to be inserted into the pharmacopocia if the work should fully answer its purpose. These principles may be expressed in a few words, as follows:
r. Primatily it is to be regarded that all such medicaments must be accepted which the physicians of the country, through their colleagues who have been elected or nominated for this purpose, designate as important, and which are often prescribed by them.
2. Furthermore, as it is a well-known fact that quite a number of physicians continue to use, with preference, such medicaments as were at the time of their studies prescribed and recommended by the clinical teachers of the schools, therefore such
so-called older remedies should not be dropped from the pharmacopocia as loug as it has been shown by statistics that they are used in at least one-tenth of the pharmacies, although they have not been recommended for retention by the representatives of the physicians.
3. Newly introduced remedies, which however, are not officially recommended by the physicians, should nevertheless be inserted into the pharmacopcia as soon as they are used in at least onetenth of the pharmacies for a longer period than one year.

## REASONS.

The principal object of a pharmacopœia is, without doubt, to give assurance to the physician and the patient that all such remedies as are called for regularly under certain names within the boundaries of authority of the said pharmacopœia alway possess the same constitution and quality, should the same be recognized by the reigning doctrine or not.

On the other hand, the first object of a pharmacopocia cannot be to give to pharmacotherapy a certain direction in conformity with the medical views just prevalent at the time of its appearance. As, in the nature of things, these latter ideas will be brought into prominence by the representatives of medicine attached to the pharmacoperia commissions, there is danger that the older remedies will be dropped from the pharmacopocia too soon, and consequently there will no longer be a guarantee as to their quality for the large number of practitioners who are still using these medicaments.

Furthermore, quite a nuinber of physicians, leaders and representatives of the reigning school, are averse to the use of certain newly introduced remedies, without, however, being able to prevent their introduction in relatively large circles.

In both cases it seems desirable, in interest of the cause, that the decisions, based on prevalent scientific theories, as to the retention or elimination of remedies should be counterbalanced by considerations of the actual extent of use of each medicament. The groundwork for such considerations can only be gained by statistical notes, and these only by inquiries in the pharmacies as to the use of each remedy.

## PAPER PRESENTED TO SECTION ON LEGISLATION AND EDUCATION OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, CHICAGO, AUGUST 14, 1893.

ny e. l. patch, boston, mass.

The questions propounded by the committee of this section are so practical in their character that proper answers would yield us much valuable information. Personally we feel unequal to the task of giving them the close attention they merit, but after repeated solicitations we venture a few random thoughts.


## FOR FAEE SPOTS, IHSECT BITES, RASH, \&C.

> "An emollient cold sream of much convenience in many minor skin ailments where a soothing protective is required."-British Aledical Tournal.
> "، 'Vinolia' is an emollient cream for the skia in eczema, rash, cruptions, \&sc. It possesses a fragrance of distilled roses. -hancet."
> For acne spots on the face, and particularly tor eczema, it is undubtedly efficacious, frequently healing eruptions and renoving pimples in a few days. It relieves itching as if by magic "-Bahy.

50c, \$1.00, and $\$ 1.75$ per Box.


For GHAFES, TENDER FEET, OLLY SKIIMS, \&C.
" In impalpable rose dusting powder, soluble, of remarkable fineness, and well aslapted for the nursery, toilet, 'weeping' surfaces, and sweating feet."-British Medical Journal.
" ' Vinolia' Powder is well adapted as a dusting powder for toilet purposes."-Lancef.

Superseding the old toilet powders, which are apt, to cause acne by blocking up the pores of the skin."Lady's Riclorial.

In PINK, WHITE and CREAM. 50c., $\$ \mathrm{x} .00$ and 1.75 per Box.


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LUCILLINE, 2 oz. Bottle, 75c. doz., $\$ 7.50$ gross. POMADE CAPOLINE, \$1.25 "" 12.50


## LEGISLATIUN AND BOARDS OF PHARMACY.

1. What are the benefits, and what, if any, the losses to the community and to pharmacists, by reason of the existence of the pharmacy laws?

Among the benefits may be mentioned : ist. A deeper sense of the responsibility of the calling impressed upon the public mind, and, incidentally, a better appreciation of pharmacists. 2nd. Greater attention given to study and preparation on the part of assistants through a desire for early registration. 3rd. Better compensation for the carnest and thoughtful who earn registration.

A possible loss or drawback may be that the registration of assistants and proprietors on the same terms encourages a sentiment of over-confidence on the part of some young men, and by stimulating the multiplication of stores, from the legal assumption that one registered person is as qualified to open a store as any other, induces over-competition.
2. Would it be a gain or loss to pharmacists to compel apprentices to pass a board of pharmacy examination on their general education before permitting tham to begin work in a drug store?

If it were practical to exclude from pharmacy at the door of entrance, it would certainly elevate the standard. It is a question if such a possibility exists. If a high school graduation standard was required, it would imply an average age of 19 years. At that age few young men feel like giving thelr time to the scrub work of a drug store, but are impatient to place themselves where their knowledge, which just then appears to them a very large capital, can become mure quickly productive. In many cases such a young man has still the privilege of choice, and he often elects a higher education, or chooses a purely professional career. Broadminded parents are capable of studying the statistics of pharmacy, and arrive at the conclusion that its gains do not compensate for its risks, its responsibilities and restrictions. The greatest number of apprentices come from among boys 15 years of age and upward, who are denied the privilege of further attendance at school, and enter pharmacy, attracted by a false conception of the labor involved and its possibilities for gain, or impelled by its semi-professional and scientific aspects. Even so, it would be well that each applicant for the position of an apprentice should demonstrate his qualificatious, and such should be treated as apprentices and aided in all efforts to acquire knowledge, but not kept dealing out cigars, dispensing drinks, and scrubbing until the edge of all desire for attainment is completely worn off. Possibly such an examination might stimulate a better class to seek admission to the ranks, on the principle that the greater the obstacles interposed the higher the quality of mind that enters the struggle.
6. In several States only graduatcs in medicine can come up for examination and registration as qualified physicians. How would a similar law operate in pharmacy?
7. Should graduates in pharmacy be compelled to pass the examinations of boards of pharmacy before being registered?

Registration should not be dependent upon graduation from schools of pharmacy. It is well known that with high natural endowment of intel iect and ambition, favorable store surroundings, an able employer and facilities for self-instruction, a higher grade of assistant may be evolved than can be produced from an indifferent character, intellect tobacco or beer blunted, narrow practical experience and third-class college instruction. The principle of this century's life is to give every boy and girl, every man and woman, an equal chance, and debar none from filling any position the world has to offer because accident or environment has prevented their conforming to a set course of training. If they can demonstrate their ability to meet its responsib...cies and discharge its obligations, nothing more should be required,

Some can do more with an hour a day given to self-culture than others with ten hours and the aid of instructors. Tco often the rontine of class instruction has destroyed originality and dwarfed personal power by developing a class of imitators. Yet we would not be understood as undervaluing the advantages coming from higher education in all departments, but rather as deprecating the undue consideration given to mere routine or method.

Graduates in pharmacy should be treated as all other applicants. It is the office of the board of registration to personally determine the practical fitness of the applicant, not to decide upon the method of ach:eying that fitness, and not to accept prejudiced recommendations or evidences of anybody outside itself.

It is constituted, engaged, sworn and paid tos pass personal judgment, based upon personal knowledge, and not heresay testimony. If the board is so made up that it is not capable of doing this, it is the State's misfortuno.
9. What would be the gain to pharmacy and the community if the law forbade the sale of patent medicines by unregistered persons?

It does not requine technical skill or manual dexterity to handle patent medicines. In many cases it does not require mercantile acumen or versatility, the demand having already been created at great cost by the proprietor.

Any legislation restricting the sale of simple merchandise to a person, or class of persons, is class legislation, or state favoritism, and is opposed to the principles of personal liberty of action guaranteed us on all rishit lines.

The mercantile side of pharmacy must be subjected to the unucrsal laws of all mercantile pursuits, such as supply and demand, competition in trade, facility for effecting sales, and power for low purchase and favorable terms, secured by capital and superior credit.

If the time we have given in the past to discussing this question and advertising our dependence upon the profits of the patent medicine trade, had
been given to the cultivation of the sale of those goods less liable to outside competition, and to fostering a spirit of unity among pharmacists themselves, we might have reached more favorable results. Trade is merciless and selfish, and we cannot expect others to throw into our hands an added profit on pure merchandise that can be as readily sold by the young girl at the dxy goods counter as by the Ph . G. in the drug store. The friendship of the great public is measured by the " most for the money" principle, and the search for "bargains" will continue to be the ruling passion for some active merchant to gratify.

9 Should patent medicine makers be compelled to print upon each package the formula of its contents?

The publication of formulas with unrestricted sale would not be an unmixed good,

Imagine the advantage to $B$.'s bitters with the published formula: Gentian, I part; yellowdock, $1 / 2$ part; syrup, whiskey and water to make 100 parts. Opium antidotes containing half a grain of morphine to a fluidram would be more eagerly sought for than at present if their real composition was known.

Then it is a serious question whether the public would see such marvellous cures if the composition of the remedy was known. The quackery of the gold cure for inebriety shows what powerful factors imagination and faith are in the cure of distase.
12. Should boards of pharmacy publish from time to time, in the pharmaceutical press, their past examination questions, as a guide to future candidates of the nature of the subjects upon which they are expected to pass?

The publication of examination questions used by boards of pharmacy and colleges of pharmary undoubtedly serves to stimulate some to acquire a certain amount of special knowledge or to store up certain facts. This is much better than ignorance, but if this temporary and superficial acquisition secures the end of registration and satisfies the ambition of the applicant, it may prevent the securing of the broader training that fits for each emergency. Yet it is not improbable that the struggle to master these isolated facts may arouse in some a desire for deeper knowledge.
11. Produce an ideal set of examination papers for a board of pharmacy, and give the principles guiding their construction

An ideal set of questions for one section and at one time would be very faulty under other conditions. The one principle of learning whether or not the applicant has proper knowledge to be safely entrusted with the care cf a store, should actuate all examinations A fool can ask questions a wise man cannot answer, but it takes a very wise man to put questions that will elicit intelligent answers from a fool In our intercourse with boards of pharmacy we have usually met with practical, sensible pharmacists, whose aim is to faithfully perform the duties of their office, and not to nęedlessly uncover the ignoranoe of the applicant upon points
they might never have occasion to meet, and so display their own folly.. We have had sent to us drug samples for identification that would seem to indicate that some boards are not as judicious in this respect as others. We cannot judge or condemn, for the sample in question may have been shown for the purpose of exciting curiosity, and not for marking the qualifications of the candidate. We recently had samples of areca put and cashew nuts sent us as having been submitted to the candidates for identification. The possibilities coming from the examination of the latter are serious in the extreme. A lady student in one of our classes had several sent to her from abroad, with the statement that the kernels were good eating, and were employed in puddings, etc. She bid into one and was badly poisoned. After quite a period of suffering she desired to examine into the matter, to isolate the acrid principle and learn the best method of treatment. We secured for her samples of W. I. nuts from anacardium occidentale and samples of E. I. nuts from anacardium orientale, or, as later authority gives it, semecarpus anacardium. We submit specimens of these varieties and of the cardol separated from them by Mrs. Ida Brigham.

Ordinary descriptions refer to the seed as white, mild. oily, edible, but also call attention to the acrid, oily body, cardol, $\mathrm{C}_{22} \mathrm{H}_{30} \mathrm{O}_{2}$, found in the pericarp and employed as a rubefacient and caustic, used as a remedy for corns, warts, ringworms and ulcers, as also to apply to the face to remove the cuticle and "produce a youthful aspect." Cases of serious poisoning from exposure to the fumes of the roasting nuts are on record, and the appearance chronicled is anything but "youthful." Cardol becomes black by exposure, and hence the synonym " marking nut" and the use of cardol by painters to give their colors a permanent black. From our experience at the time of Mrs. Brigham's assays, we learned to consider a weak solution of iodine as a ready remedy to arrest vesication. Hence on the receipt of the specimen smuggled by the candidate and sent for examination, we did not hesitate to confirm our identification by touching to our wrist the knife blade used for cutting into the nut. We used care not to puncture the skin. In due time the vesicular irruption appeared, and we painted it with indine. To our surprise, it had no apparent effect, and the irruption rapidly extended. We applied the common remedies for ivy poisoning, as Sol. Chlorinated Soda, Sol. Tersulphate of Iron, Grindelia, etc., but the inflammation steadily progressed until it involved the hand and forearm. To prevent its extension to the body, we encircled the arm with Iodoform Collodion, but the inflammation became constantly more severe. We sprayed the surface with 5 per cent solution of hydrogen peroxide, and covered it with cloths wet in benzothymol solution mixed with almond cream. This reduced the external inflammation, but pockets of pus had formed in the sub-cutaneous tissue, and no relief was had until the knife had been freely
used. The scars still carried, after the lapse of several months, remind us that our practical demonstration was complete.

Many years ago we handled poison oak with impunity, but there came a time when we were severely poisoned by it. We thought our experience then gained would enable us to cope with any similar case, but will be inclined to be more conservative in our views after this. However, it may be of service to some to call attention to a very successful course of treatment pursued by Dr F. E. Park, of Stoneham, Mass He prepares a resorcin gelatin by mixing resorcin, one-half ounce ; gelatin, five drachms; glycerin. one ounce; distilled water, two ounces. This is liquefied by warming, painted ovcr the entire surface involved, allowed to remain twelve hours, washed off with warm water and renewed each twelve hours until a cure results.

The possibility of a candidate for registration in pharmacy being poisoned by the examination of sair ples submitted, should be carefully guarded against by the use of every precaution.

We are often told that one of the weakest points in the examination is the lack of knowledge of the physical appearance and characteristics of crude drugs, chemicals and preparations. It has sometimes occurred to me that the candidate, in his store experience, coming in contact with pressed herbs, ground and powdered drugs and powdered chemicals, may not have had opportunity of seeing whole specimens. Even if he has had his attention called to them at some college of pharmacy, it is only one item among hundreds presented to him. and does not become a matter of daily experience, hence he soon forgets them. As a means of ascer taining the desire for knowledge, the habits of observation and care, the range of experience and power of comparison possessed by the candidate, it is undoubtedly well to have this feature of the examination well sustained. But the specimens should consist mostly of such as are reasonably likely to come within the reach of ordinary retail experience. They should be average specimens, and not abnormal in size, shape or color. They might include among drugs,-aloes, asafcetida, acacia, arnica flowers, anise seed, aconite leaf, aconite root, benzoin, bloodroot. buchu, cardamon, cubeb, Roman chamomile, German chamomile, cinchona bark, cascara bark, cascarilla, cinnamon, chimaphila, calamus, c-lery seed, columbo, caraway, coriander, clove, cochineai, colocynth, canary seed, Canada snakeroot, dandelion, digitalis, ergot, fennel, flaxseed, gaultheria, gentian, ginger, guaiac, gamboge, hops, Irish moss, juniper berries, lovage, licorice, lycopodium, manna, myrrh, marshmallow root. mustard, opium, orris, quince seed, rhubarb, rose leaves, sarsaparilla, senega, squill, serpentaria, senna, safflower, saffron, sassafras, sumac berries, trag. acanth, tonca beans, uva ursi, wild cherry and vanilla.

A secondary list, on which marking should be more lenient, might include ammoniac, belladonna root, belladonna leaf, blue flag, cassia fistula, coc-
culus indicus, cannabis indica, cowhage, coca, cotton root bark, cypripedium, curcuma, conium leaf, conium seed, castor, calabar bean, dragon's blood, damiana, eu alyptus, fenugreek, goldthread, galangal, golden-seal, grindelia, galbanum, hyoscyamus, ignatia bean, jalap, kooso, lactucarium, lavender flowers, larkspur seed, mastic, marigold flower, male fern, nux vomica, pink root, peppermint, red clover, spearmint, stramonium leaf, triticum.

A third list might be on exhibition, but to expect a majority mark on their identifications appears to be too great an exaction. It includes areca nut, bael fruit, buckthorn berries, French and German castor oil leaf, castor oil bean, cashew nuts, curcas or purging nut, croton seed, cacao beans, euphorbia pilulifera, Chinese and Japanese galls, Job's tears, jambul, kamala, kola: manaca, myrobalans, orange flowers, pomegranate rind, pomegranate root bark, pichi, pellitory soot, persimmon, salep, senna pods, sumbul, tormentil, veratrum.

Samples of chemicals should be such as can be identified by physical appearance, as crude sal ammoniac, sulphate of iron, sulphate of copper, iodoform, iodine, tannin, ferrocyanide of potassium, ferricyanide of potassium, carbolic acid, iodide of lead, permanganate of potassium, sulphate of manganese, valerianate of ammonium, valerianate of iron.
A candidate should not be expected to distinguish between borax, sodum phosphate, sodium carbonate and sodium hyposulphite in crystal or powder from physical tc cis, but might be asked for simple chemical tests for their identification. The same might be said of the group oxalic acid, epsom salt and zinc sulphate. Also of the group quinine sulphate, morphine sulphate and salicylic acid. Also powd. strychnine sulphate, cream of tartar and powdered milk sugar.

When we come to galenical preparations we must be still less exacting. So many are similar in colcr and near in odor that one is easly led astray. We have known examiners to be unable to distinguish between fluid extract of ergot and fluid extract of dandelion when the corks liad been shifted. Other parallels might be given ${ }^{-}$Such samples should be stricted to truly characteristic specimens, as laudanum (identified as some opium preparation,) paregoric, aromatic spirit of ammonia, spcarmint water, oils, tincture gentian compound, tincture rhubarh, syrup wild cherry, syrup squill, syrup tolu, etc.

## EDUCATION AND COLLEGES OF PHARMACY.

I. G ve a set of rules for the government of stu dents at crilleges of pharmacy.

Sut one rule is necassary: "Students are exnected to be gintlimen. Failure to observe this rule will be met by prompt expulsion from the classes of this college without recourse. Each professor or instructor in charge has full power to secure its enforcement."

For the sake of the thoughtless and indifferent, this rule is explained to mean:
rst. Each student is expected to give to his fel-
lows and to his instructors the polite consideration one gentleman gives to another.

2d. Gentlemen will not mjure or destroy the property of another, but will hold it more sacred than their own. They will consider that property acquired by collective effort, and paid for by public contribution for public good, should, if possible, be better cared for than so called private property, that its beneficence may be cxtended to others, and its highest good continuously enjojed by a greater number.

3d. Gentlemen do not deface places of public resort with expectorations, tobacco spit and smoke.

4th. Gentlemen give attention to any speaker, and do not rob their neighbors of the privilege of listening by any show of inattention, whispering, laughter, or other rude interruption. Criticism and dissent are reserved until the speaking is concluded.

5 th. Gentlemen are honest. They win scholarship by attaining knowledge, and do not gain marks by the temporary theft or borrowing of facts from others, or by the use of "ponies" and "cribs." It is never necessary to expel them for cheating during examinations.

## OBSIERVE.

It is to the mutual advantage of this college and of every student that we maintain the character of gentlemen. Such teachers are most helpful, such student are most receptive, and together a higher standard of excellence is maintained.

## notice.

We do not forget the presence of lady students, but having so far observed among them nothing but the most lady-like deportment and earnest am. bition for knowledge, we omit reference to then in. our rule.
2. Why do so many pharmacists forsake the ir profession for the study and practice of medicine ?

Pharmacists leave pharmacy for the practice of medicine because they think the latter presents to them greater social, intellectual and pecuniary op. portunities than can be gained with the close confinement to small details of a business of detail narrowed by localized surroundings, hampered by sharp mercantile competition, and shut in from broad intercourse with the outside world.
4. Give some of the most amusing blunders made during examinations in colleges of pharmacs or boards of pharmacy.

A few among many :

1. "Dehydration is the throwing out of salts."
2. "Calcination is the adding of two bodies which will cause decomposition."
3. "An emulsion is the process of emulsifying or adding to oils or fats by adding to make them of equal distribution, first by adding part in a mortar and then the rest."
4. "An infusion is a confusion of solid to liquid by means of heat."
5. "A syrup is a placid solution of sachrine, water or substances."
6. "A tincture is an alcoholic solution of the erginius of medican snbstances."
7. "Iron spatchlers should be used in weighing substances that eat."
8. "Fusion is a process of boiling drugs in water to tatract its virtue."
9. "Fittration is passing a drug through a menstrnin to extract its virtue."
10. "Decantation is a process of obtaining a mendicant by placing a solid and solvent together, thereby obtaining a residue and then pouring off the liquid."
i i. "The standard of English waits and measures is the inch, taken from a pendulum ticking seconds at the bottom of the sca."
11. How can dull and lazy students in colleges of pharmacy be kept as near as possible abreast of the work done by the inselligent anc diligent ?

By great injury to the intelligent and diligent. iowering the standard of attainment and giving out the minimum of work. Do not try it ! Work for the best men in the class; give them all they can bear, and perhaps a trifle more, (anything gained without effort is an injury, as it fails to bring development of increased power,) and let the "lazy" lag behind. Make special effort to help the dutl, and stimulate them to increased application. One strong character, highly trained, may be better than many partially developed.
6. How can colleges of pharmacy be placed ujon a purely educational basis, instead of being conducted for the money they cin inake?
i. By the drug trade of each section giving annually onc-fourth the sum now expended for associational enticrtainment and commercial interests to the establishing of an endowment fund for the nearest coll.ge of pharmacy, the income to be devoted to practical instruction.
2. By securing State endowment and the interest of State boards of education.
3. By placing the control in the hands of broadminded, liberally educated men outside of pharmacy, who shall act with an advisory board of pharmacists, thus diminishing, the petty, boyish jealousies that are entertained by fellow-craftsmen against those who are prominent workers in pharmaceutical education.
4. By securing as teachers men interested in teaching, and, if possible, securing them from want -men divorced from "the greed for gain, the thirst for power," yet ambitious for high attainment and steady progress.
7. Should any candidate be permitted to graduate in pharmacy before he is able to apply the tests and assays of the United States Pharmacopœia ?

No!
Should candidates for graduation in pharmacy not be able to make all preparations, a process for which is given in the United Statos Pharmacoрœіа ?

On the scale of the United States Pharmacopœia process they should be able. On the scale of practical manufacturing, they may not be able.

## THE MICROSCOPE IN PHARMACY.

By Joseph Hunt, A. M., M. D, Brooklyn Colicge of Pharmacy.

It is a matter of surprise that so few pharmacists make use of the microscope; and that its value in the shop is so little understood by them as a class. Pharmacy like the other arts is advancing; each succeeding generation demands a more advanced knowled ${ }_{n} \mathrm{e}$; it will not do for the druggist of the future to stand still and confine himself to the same methods which the pharmacist of a decade ago found sufficient, but he must rather take up the pestle and with it pound out new methods and new ideas.

The medical profession cannot do without the pharmacist, but they demand that he shall be something more than a skilled laborer, or a mere merchant ; that he shall have more knowledge than that required to se!! proprietary nostrums, or ready made elixirs. The pharmacist of the future will possess not only the usual knowledge of practical and theoretical pharmacy, but he shall also be proficient in chemistry and botany; and it is as chemists and botanists that they will find the microscope indispensable.

Members of the medical profession regard it as invaluable in their practice; a single glance through the tube often affording means for a positive diagnosis of disease which could be gained in no other way. As chemists, the pharmacists fill be enabled to distinguish precipitates which seem alike to the unaided eye, and to study reactions too minute to be seen without its aid; as well as to recognize forms of crystals, which could not otherwise be differentiated; but as botanists they will find it indispensable, since all our knov ledge of the minute structure of plants, and of the phenomena of vegetable life, is derived from the use of the microscope.

When we stop to consider that the art of pharmacy is based upon the application of these two sciences, chemistry and botany, one wonders that we have done so long and so well without it. The days of the old easy-going drug vender are nnmbered; keen competition is even now driving the incompetent to the wall; and the physician and the ordinary customer will speedily learn who is the scientific pharmacist, who diligently takes every precrution to guard his customers against the uncertain action of doubtful medicines.
To illustrate the uses to which the instrument may be put by the skillful apothecary, I will sug. gest examples intended as illustrative and not go into the subject farther than to hint at some of the multitude of uses which will multiply as one becomes proficient in the use of the instrument.

Probably there is no branch of pharmacognosy so difficult as the recognition of the adulteration in powdered vegetable drugs. So long as the drug is in its natural state but little difficulty is experienced, as all pharmacists are supposed to te familiar with
the natural appearance of the root, cr bark or leaf which he is handling : but when it is ground the writer knows of noihng so satisfactory as the microscope, used by one who is familiar with the characteristics of the pure article. As an illustration the writer recently read a report of the examination of forty two powdered drugs, among which but thirty were found to be pure. The following were found to be adulterated: Asafetida, jalap, rhubarb, starch in powdered cinnamon, wheat-flour in powdered eln-bark, mustard with tannio ; podophyllum, valerian ; corn-meal with fcenugreek, and inferior gum with crystals of silica in gamboge.

Jalap is sometimes not only adulterated as a powdered drug, with ordinary adulterants, but inferior or non-official varieties of root which look very like the true official jalap are substituted for it. The microscope alone will readily expose the difference by showing the observer the abundant acicular crystals of calcium oxalate, which character ze the root of the mirabilis jalapaor four o'clock. And the distinctive microscopical appearance in the starch and resin, presented in the Tampico and Vera Cruz jalap. In the former the starch is arranged in little compact masses in the cell, while in the latter it occurs in grains irregularly united, or, if isolated, much larger than those of Tampico jalap; with tubes of the last named the resin occurs in smaller masses than in the Vera Cruz jalap. (Phar. Four. and Trans, 1886, p. 917)

Powdered ipecac is frequently adulterated with potato starch and sometimes with corn meal, almond meal or licorice. When the adulterant is almond meal, it is.easy to recoznize the seed-coats and also the central part of the almond, which is composed of hin-walled hexagonal cells, smaller than the cells of the ipecacuanha, loaded with oildrops and entirely free from s.arch grains. Minute spiral vessels are frequently scattered through these cells. The outer seed-coat, or dark-brown, scurfy part of the almond is made up of large oblong cells with peculiar pits covering the cell wall, these cells being about $1-500$ inch broad and neariy twice as long.

The microscopical characters by which drugs derived from the vegetable kingdom may be identified, are based upon the anatomical characteristicsof the plant under examination. Peculiararrangement of cells into special organs or tissues; and peculiar cells and cell contents. such as starch, resins, crystals, etc., which are sometimes visible in thin slices of the part, or if not immediately visible may be brought out by the action of suitable reagents.

It is needless to say that everything organic, either animal or vegetable, is made up of cells, which consist essentially of an outer wall or membrane of cellulose, which may contain various liqnids, semi-solid, or solid matters, and that these cells vary greatly in size, shape or markings, which differences are readily apparent under the micro-
scope These variously marked cells are so minute that in the process of powdering a sufficient number will escape mutilation to enable the adept with the macroscope to readily detect their presence, or the presence of cells not belonging to the special drug under examination.
More characteristic differences, however, are found in the starch grains than in the cell structure ; for they vary greatly in size (though there is a pretty constant average for each kind), shape (which is quite characteristic), and the position of the hilum. which appears a; a dark spot in some constant situation on the granule and thereby serves to distinguish granules closely resembling each other in other respects, as between potato and arrow root starches, which are about the same in size and shape, but in the former it is on the small end, and in the latter in the large end of the grain. The starch of canna has the reputation of being the largest, and rice starch a!nong the largest known.
Crystals are of sucis general nccurrence in widely different orders of the higher plants, that there are perhaps none in which they may not be detected. Most of these crystals are of calcic oxalate, but calcic carbonate, calcic phosphate and sulphate and perhaps potassium tartrate and oxalate, etc., are met with. These occur either si gly or in groups; either separate or barely coherent, or in various forms of combination, each of which is characteristic of the plant in which it is found. When solitary and simple they are usually octahedra or prisms, and their aggregations are combinations of these; Thus we have described according to their forms and groupings, raphides, that is, needles; sphæ a, shides, etc.

Besides these we have the characterist:c resins, oil-drops and other cell contents and the planthairs and other portions of vegetable anatomy which the drug mill does not destroy; so that a glance through the tube of the instrument tells us what are present, and our previously acquired knowledge of the normal drug, whether what we see in the field of the instrument belongs there or not.

The examination of plant tissue with the microscope requires but few accessories and in general but little manipulative skill. By cutting thin slices with a sharp knife or razor in various directions the different cells, ducts, and fibres which make up the structure will be brought into view. Dried roots and other portions of plants may require maceration to soften them before making sections.

Crystals may be brought out plainly by maceration in turpentine. A polarizing attachment to the instrument facilitates their examination, as, under the polarized light, crystals as well as the starches stand out in brilliant relief against a dark background.

Starches may be seen in the powdered drug or section and $i$ is by tieir means principally that you will be able to rewugnize sophistications, since starch or meal is th most common adulterant.

It is usetul to distinguish between varinus seeds
which look very much alike; for instance, the seeds of the star-anise (Illicium Anisatum), cannot by the naked eye be distinguished from the seeds of the shikimi fruit (Illicium Religiosum), which is poisonous

The pollens, such as lupulin, often contain foreign material. One specimen of lupulin examined by the writer contained more than 75 per cent. by weight of fine particles of earth and gravel, the probable result of having been gathered on a windy day.

Commercial powdered colocynth often contains a corsiderable portion of the powdered seeds, occasionally some of the rind and sometimes also a considerable portion of wheat starch; in one instance as much as 75 per cent.

Were it necessary the writer might go on indefinitely citing instances illustrating the value of the microscope in the druggist's laboratory, if he would keep abreast with his profession and if he is really conscientious in examining the quality of the drugs he dispenses.
Many pharmacists are without doubt deterred from owning iustruments hecause of the erroneous impression that a really efficient one is expensive.

From thirty to fifty dollars is all that is necessary to procure a simply constructed yet thoroughly good instrument sufficient for the really necessary work. By getting a good stand in the first place, various. accessories, such as polariscope, additional eye-pieces, objectives, etc., may be added as the needs and purse of the owner develops.

## ARE PHARMACY LAWS A BENEFIT TO PHARMACISTS?

hy join h. ManNing.
I think so.
From the dawn of history until the invention of firearms, brute force ruled the world; but this discovery crystalized civilization, and from the protection to home and family came the slow process of working out those laws which best protected the nublic.

With the strange and fanatical belief that we ought not to profit by the experience of Europe, but little or no attention has been paid to the resuits accomplished by their stringent laws.
Those who expected to relieve the business ills of pharmacy by legislative enactment, were like Hudibras' double-barreled gun that

> "Aimed at duck or plever, Recoiled and licked its owner over."

The statutes could not hit those who would succeed under any circumstances-whose technical knowledge, tact and financial ability were such that success would come in any field, but those who claimed that the burdens of business were greater in our ranks than in any other business. Their disappointment has been so great that we can easily learn who has been "kicked over."

Another class-those who want to be let alone, who are opposed to any and all laws, who say " no laws are necessary to insure a proper conduct of their business"-from them comes the bitteria wl . They fail to see the signs of the times.

Pharmacy laws have been enacted:
rst. Because the public demand skilled men in positions of responsibility. This is proved by the laws relative to pilots and ship captains, aind the power of boards of health, inspectors of meat. etc., all of which reach one end-the protection of the public.

2d. Recause it is the quickest relief for the present without injury. We are in a transitory stage. The time is not far distant when the public will say: "No one but graduates can practice pharmacy," and when we recall the present condition -training scnools for all kinds of trades, cooling schools, trained nurses, technical schools-fitting students for the various ind strial fields, we have abundant proof that the public are in it, and the tide cannot be stopped

We can see the benefit of stringent laws in Ger-many-that wonderful country, the heart of music, the home of science. What immense industries have been developed in that country from the discoveries of examined pharmacists, the result of study under compulsion.
3. The pharmacist will be benefited by the gradual growth of a profession out of a trade. By being compelled to fit himself in some lines, he will pay greater attention to all the details.

Pharmacy laws tend to raise the business to a proper plane, and weed out from the ranks of pharmacists unworthy members.

Lastly, because it is right For this reason the laws ought to be most earnestly enforced. We shall better hold the confidence and trust of the public, if we say nothing of legislative restriction, but give it our hearty support.

You will recall Lincoln's remark, now an adage : "You may fool some of the people all the time. and all the people some of the time, but you cansot fool anl the people all of the time."

Pitisfield, Mass., july r, 1893.

## PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

-WRITT:EN AIINOR EXAMINATIONS.

$$
\text { Quebec, October } 17 \text { th, } 1893 .
$$

N. B.-You are requested to-
II. Write on one side of the paper only.
2. Number and letter your answers so as to correspond with the printed questions.
3. Keep the answers in each subject on separate sheets.
4. Number the sheets of paper in their proper order and attach them together, then fold them up and place your number on the outside.

MIATERIA MEDICA.
I. Ipecacuanha. (a) What parts are official?
(b) What are the medicinal properties? (c) What is its active principle? (d) Name the official preparations with their sirength and doses.
2. (a) What is creosote? (b) Give its solubility in water and rectified spirit. (c) What are its medicinal properties?
3. What do you mean by sapo animalis, sapo durus and sapo mollis? Give the solubility of each in water and alcohol respectively.
4. Give the dose of the following : Acet. scilla; acid. hydrocyan. dill. ; ext. aconiti ; spt. æther. co.; aloes soc. ; liq. am acet. ; pulv. antimon. ; argenti oxyd.; butyl-chloral hydr.; vin. colchici ; inf. digital; hyd. iodid. rubr.; kermes mineral.

## chemistry.

1. (a) Define specific gravity. (b) How is sp. gr. expressed in figures? (c) One imperial fluid ounce of a liquid weighs 412 grains; what is its sp. gr. ?

2 Give technical name, molecular weight anu chemical-formula of the following: Saltpetre : glauber salt; copperas ; blue vitriol ; white vitriol ; borax ; tartar emetic, and ethiops mineral.
3. Define the prefixes sub; per; hypo; di; and give one example of each.
4. Chlorine. (a) Give source, mode of prepar ation and properties. (b) Name two acids containing it, giving their formulas and molecular weights

PHARMACY.

1. (a) How is syr. simpl. of the B.P. prepared ? (b) Grve its sp.gr. (c) Name the official syrups of the B. P.
2. What is meant by infusion, decoction, maceration, percolation and repercolation, and give two examples for each.

3 How would you prepare the syr. ferri phosphatis of the B. P, and give its dose.

4: Write out the following prescription in Latin in full, and criticize therapeutically:

Take: Citrate of ammonium, two drachms; comnound tincture of gentian, tincture of nux vomica, of each one ounce; water, sufficient quantity to make four ounces. Mix.

Direction-One tablespoonful every four hours.

## Pharmaceutical Examinations.

The preliminary examinations of the Pharmaceutical Association of the Province of Quebec were held in Montreal and Quebec on Thursday. Octo$\mathrm{b}=\mathrm{r} 5$ th, when thirty-five candidates in Montreal and six in Quebec presented themselves. Of these only one passed in all subjects, besides two candidates who had presented themselves for examination on one subject only. There were also two of the candidates who passed in all subjects but history. These will be required to present themselves at the next examination for that subject only. The names of the suecessful candidates are Joseph Oueeneville. of St. Henri ; A. R. Webb and E. J. Thivierge, of $M$ mntreal. The names of the candi-
dates who passed on all subjects but history are Valmore Ledoux, Granby, and T. E. Gagnar, St. Aime of Richelieu. The remainder of the candidates were referred for further study. The subjects for examination are English, French, Latin, arithmetic, geography and history. The examiners of Hie association are Prof. Isaac Gammill and Prof. A. Leblond de Brumath. The next examination will take place on the $4^{\text {th }}$ of January, 1894. Intending candidates must give ten days' notice to the secretary, Mr. E. Muir.

## THE UNITED STATES PHARMACOPEIA, 1890.

The long-looked-for seventh decennial edition of the U.S. Pharmacopocia has been published, and is now in the hands of American pharmacists. The work bears evidence of careful preparation, and is fully abreast of the advances made in the last decade. The most noticeable change from the last edition is the apoption of tne solids by weight and liquids by measure plan, for the proper expression of which the metric system is used. This action of the revision committee now leaves the British the only pharmacopœia in which the old style weights and measures are used, and it is to be hoped that the next edition of this authority will fall into line with the rest of the world. Other changes are, the total discarding of the old style of chemical notation which, in the Pharmacoposia of ${ }^{1} \mathrm{SSO}$, was printed with the new, and the adoption of the more modern nomenclature of the salts, such as sodium chloride instead of chloride of sodium, ferrous sulphate instead of sulphate of iren " mild mercurous chloride" and corrosive mercuric chloride to replace the " mild" and "corrosive" chlorides of mercury, as being more definite and expressive A suggestion was made to the committee to adopt the new phonetic spelling proposed some time since, such a bromin for bromine, sulfur for sulphur, but as the time was not considered ripe for such a radical change, it was not accepted.

In botaizical nomenclature the Paris Code of ${ }_{1} \mathrm{S67}$ has been followed.

The tests given for the various salts are very complete, and when applied will easily demonstrate the presence of more than traces of adulterants, and for quantitative analysis the volumetric method has been adopted wherever practicable as being more suitable and sufficiently accurate for the necessities of the retail pharmacist.

The assay of alkaloidal drugs received much consideration from the committee, with the result that only opium, nux vomica and cinchona are ordered to be assayed, thus following the example of the B. P. committee. Crude opium must contain not less than 9 per cent. of morphine, the powdered opium from which the various preparations are made must contain not less than 13 per cent.
nor more than 15 per cent. The acetum, tincturæ, tincturæ opii deodorati and vinum must assay trom I. 3 per cent. to 1.5 per cent. of morphine, thus making these preparations nearly double the strength of corresponding prejarations of the B. P., the tincture of which should assay 0.75 per cent., the liquid extract about 10 jer cent, and the wine about .83 per cent. The p:ocess of assay (ammoniated ether) is also much simpler than that of the B. P., requiring less manipulation, and in our hands has always yielded more uniform results and a purer product. In the assay of nux vomicæ, the alkaloids extracted by chloroform are treated as recommended by Schweissinger, Beckurts and Caspari, with decinormal $\mathrm{H}_{2} \mathrm{SO}_{4}$ and centinormal KOH, using tincture of Brazil wood as an indicator, taking 364 35 the molecular weight of the mixed alkaioids on the supposition that they äre present in equal quantities, ( 334 strychoine + 394 brucine $\div 2=364$.) This is a more complicated method than that of the B. P., in which the alkaloidal residues are directed to be weighed. The titration of alkaloidal residues no doubt yields much more accurate results than weighing in cases where only one alkaloid is present, as in the assay of ipecacuanha, when the emetine is isolated in a crude condition, but in the case of nux vomica, in which varging proportions of strychnine and brucine are present, the results must be inaccurate, and instead of 15 per cent. of alkaloids the percentage will vary in proportion to the preponderance of one or the other alkaloid, causing in extreme cases a variation of 7 to io per cent. The B. P. is also open to the charge of inaccuracy as there is a liability of other matters being extracted and weighed as alkaloids. In the assay of cinchona, which must yield 5 per cent. of alkaloids, a modified Prollius method is used instead of the lime process of the B. F.

The abstracts which were introduced in the sixth edition, and which were expected to be very popular, have been eliminated from the present edition, as it was found that, although theoretioally presenting many advantages, they were sevici presciàveù.

Only two of the aceta, opium and squills, have been retained.

Of the acids, acid. acetic. dil. varies slightly in strength from the British, as it contains 6 per cent. of real acid, the B. P. containing 4.27 per cent. Acid arseniosum has been changed to acid arsenosum. Most of the dilute mineral acids are made of ro per cent. strength. Acid phosphoric, the sp. gr . of which is 1.710 , contains not more than 15 per cent. of water, while acid phosphoric, conc. B. P., sp. gr. 1.500 contains 33.7 per cent. of water.

Confectiones are reduced to two, rosæ and senne.

The tests for purity of chloroform, creosote and chloral are much more explicit and thorough than those of the B. P.
(To lie continued.)

## M上. E. <br> 

FOR INVALIDS, CONSUMPTIVES AND DYSPEPTICS.
$T 7$ his combination containing the finest quality of Porter, together with Pepsin (the digestive power of 10,000 grains of albumen to the bottle) Extract of Malt and Dandelion, appeals to the understanding of this profession as being well adapted to a numerous class of cases. In no single instance has it been rejected by the most delicate stomach. It is especially adapted to the following cases:
a. Convalescence from actutc diseases such as Typhoid Feier, Cholera, cti.

1. In Atonic Dyspepsia its effets have been most mariellour, enabling patients to luke all kinds of food with comjort that woald not otherinise be re'ained by the stomach.
c. In persons of Consumptive ten iencies it has lieen found to lic a most perfect suchstitutic for Cod Lizer Oil, the cxtract of Malt supplying the fat-producing elements meicssary to the supply of auasted tissuc, liesides the tonic and stimutating effects.
d. In the treatment of cases of unnatural craving for Alcoholic Stimulants, or Alcohotism, at has bem found to answer admirally in allaying the irritation, womiting, and consitucnt desire for stimulants of an unhcalthy nature.
c. It is especially adapted for administration to Nursing Motners.
$f$. In :rasting diseases of Children.
g. Where there is slecplessncss from fatulente, over-taxed brain and neroous system.

Samples can bo obtained free by the Profession, on application to $\qquad$
The Malto Peptonized Porter Company,(Limited,) THURO, NOVA SCO:IA.




The abore is the trade name of the liquid laxative remedy manulactured by the CALIFORNI FIC SYRDP OGAFAN̄X, of San Francisco, Cal, Lovisville, Ky, New York, N.Y., U.S. A., and has been registered in the Camadian Patent Office.

SYROP OF FIGS sells well and gives general satisfaction. It will be extensirely advertised in Cauada during the coming Winter and Spring.

We offer it to the trade at $\$ 6.00$ per dozen, and it retails at 75 cents per bottle.

The remedy is a combination of the medicinal principles of plants known to be most beneficial for the purposes intonded, and it is verp pleasant to the taste, and geantle, yet effective in cleansing the system, dispelling colds, headaches and ferers, and permanently curing habitaal coustipation.

Your orders respectfully solicited.
Yours truly,

## California Fig Syrup Co.,



## Membray's

## Kidney and

Liver Cure.

Tins preparation has jumped to the front by virtue of its indisputable merit.
Stocked by all leading Wholesale Drug and Patent Medicine Dealers in Canada.

Testimonials furnished on application.

## Membray Medicine Co. <br> of Peterborough, (Ltd.) <br> peterborough. - - canada.



Fatal to Cockroaches and Water Bugs.
"NOT A POISON."
It attracts Cockroaches and Water Bugs, as a food they devour it and are destroyed, dried up to shell leaving no offensive smell.
. . . Kept in stock li all Whiocsale Druggists . . .

## EWING, HERRON \& CO., Montreal

 Sole Manufacturing regents for the Dominion.
## WIGHTS <br> Corn \% Wart Cure

The best, the oldest, the most reliable remedy for Corns. Warts and Bunions again on the market. A sro and infallible cure. Hundreds of certificate to provo its cficacy. Beery druggist should hero a little stock on baud in anticipation of the demand. an I mmakios contracts with every newspaper.

PRICE.-260 and 500 a bottic.
1 doz., 81.85; gross, 18.00 .

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CHAPMTAN'S IMTPROKED' Anti-Moth Paper

The value of "Anti-Motn" Paper as a protector of Woolen Goods, Furs, etc., from moths, has been fully proved by the increasing demand and sales each year.

Its success has of course brought many imitations into existence.
The Cenuine Anti-Moth Paper is clean and will not soil the hands or the most delicate white Woollers and Furs.

It is pleasant in odor, and has the hygienic and medicinal properties of the Pine Tree.
It is better and cheaper than Camphor or any of its worthless imitations.


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| " "1 pulv ......) b | 13 |  |  |
| "\% "1 pur........lb | 25 |  | Montero |
| " hydrosulph sol .....lb | 40 |  | matrcero |
| " hypophosph.......oz | 25 45 | lb 3.00 16 6.50 |  |
| " molybdas........or | 25 |  | nion Jack |
| monocurb........lb | 36 |  |  |
| nitras grau.... . . .lb | 31 | 25 lb 30 |  |
| " crist .......lb | 35 | 25 lb 30 |  |
| " oxalas pur. . . . . . . ${ }^{16}$ | 75 |  | and Mennel |
| " phosph.............. lb | 125 40 | lb 4.75 |  |
| 4 sulphas com......lb | 9 | pur 20 | $\cdots 1 \cdot 1$ |
| " valerian...... ... 0 z | 40 |  |  |
| Amygdala amara..........lb | 60 |  |  |
| Amyl nitras....... . . . . . 0 or | 16 |  | wontero Gigar Factory, |
| " nitrito ...............ox | $\begin{aligned} & 15 \\ & 35 \end{aligned}$ |  |  |
| Amylum pulv.............lb | 9 | cwt. 8 | - MONTREAE. |
| Annatto Hibpan opt ........bb " Fullwood $\frac{1}{2}$ oz \& 1 oz lb | 60 100 |  |  |
| Antim crocus palv...... . . ${ }^{\text {b }}$ b | 20 |  |  |
| " nigrum pulv........lb | 12 | 50 lb 10 |  |
| " $\quad$ oxiü..................ib sulphurat precip....ib | 56 |  | Tuine of Cod miver oil |
| " tartarat pulv...... .lb | 45 | 10 lb 42 |  |
| Antikamnia..............0z | 180 |  | With peptonate of IRON. |
| Antipyrin Knorrs'.........nz | 1.10 | úvz I.ús 10-250z1.00 | An entirely new and original |
| Apiul green ........ .... . 0 z | 05 |  | eparation which contains $25^{\circ} \mathrm{l}$, of |
| Apomorph hydroch, ..... .gr | 4 |  | pure Cod Liver Oil , as represented |
| Aqua anothi.............lb | 10 |  | by its active niedicinal constituents, |
| " anisi..............lb | 10 |  | Morrhuine, Butylamine, Amylamine |
| " aurantii flor trip....lb | 25 | Win qt 20 | - ${ }_{\text {d }}$ lodine, Bromine and Phosphorus. |
| " camph.............lb | 10 |  | Modern investigation has proven that the value of Cod Liver Oil as a |
| " cassia.... ..........lb | 10 |  | If 3 medicinal agent is not due simply to |
| " cinnam........... .lb | 20 |  | the fact of its being an oil, but to |
| " destillata..........gl | 12 | carboy 10 | the valuable active principles which |
| " floridm ...... .....gl | 500 |  | it contains, is noted above. Each fluid ounce of the Wine |
| " $\begin{aligned} & \text { lauro cerasi. . .........ib } \\ & \text { menthm pip......... } \\ & \text { " }\end{aligned}$ | 10 | Whrqt 20 | contains four grains of Peptonate |
|  | 25 | Whr qt 20 | - of Iron, the most readily assimilat- |
| " sambuci flor........lb | 25 |  |  |
| Argenti chloridum..........oz | 250 250 |  | Iron, it heing partially predigested and frec from :typtic properties. |
| " nitras cryst.L. B \& \& Co.oz | 85 | 10.50 lb casa | Stearn's Wine may be used in all |
| " " fus (4 to oz)oz | 100 |  | whingile are indicated, and furthermore it is |
| " oxidum...........oz | 240 |  |  |
| Aristol.......... oz cartoons | 185 |  |  |
| Arsenicum alb. pulv....... lb | 10 |  | \% |
| Arsenici bromid........... 02 | 40 |  | Sold by all prominast |
| " iodid ............ ${ }^{\text {oz }}$ | 60 |  | Wbolesaio Dreg-kostey. |
| " tersulph pulv ......lb | 25 |  | Lex |
| Asphaltam axot ... ......lb | 15 | 100 lbs 12 | Friumion slearin e BU., |
| Atropina pare............dr | 100 |  | Manufactizing piarracists. |
| Atropinco sulphas...... . . dr | 80 | oz 4.00 |  |
| Auri chloridum ( 15 gr ).... doz | 360 | L. B. \& Cos. 450 | and New York City. |




Badua aurantif.... ........ 10
" capsiai..................... ib 25
" cassim................... 3 ib 35
" " pulv..........ib 05

| " | juniper pulv . . . . . . 1 lb |
| :---: | :---: |
|  | xnuthoxylon ..... .lb |
| " | pimontro...........lb |

Balsam canad................ 1 b 1
" conibs.... .........
" peruvian............ oz
" tolut.... .......... .lb
Barii carb pur.............. ${ }^{\text {b }}{ }_{35}^{60}$
" ohlorid pur .... .... . .lb 25
" hypophos ... .......oz 25
" nitras exsio .........Ib 20
" nitrato C. P.......... 1 lb 35
" sulphate pur ..........1b 50
" sulphide "1 ........ 07.
Bath Pipo................. 10
40
Bay rum St. D............gal 375
Boborino sulphas. ........ .oz 90
Benzive refined ............gal 40
Bismuthi carb......... .... 1 lb 800
" citras..............oz
" salioylas ……....0z
". sub gallato ...... oz
" subiodld ......... oz
"، valeriani.. ........ . oz
Bismuthum (metal)....... . . 1 b

' pulv
16
Bromine ......... .......... oz
Bromoform ...... .......... oz 40
Cadmium ....... .......... oz 10
Cadmii bromid .... ....... oz 20

Caffeina pur.... ............ oz 25
$\begin{array}{ll}\text { " citras.............. oz } & 25 \\ \text { Calamina proparata...... } 1 \mathrm{lb} & 7\end{array}$
Calci bromid..... ....... .oz
": carb. præcip.........lb
© éhlonia. anjat........!b
" fusum pure..lb

- fused crudo.. 16
( hypophosphis........lb
" lactophosph..........oz
" nitras.... ...........lb
" ${ }^{\text {nhosphas pracip....lb }}$
" sulphas............... lb
" sulpho.carbolas.......lb
" sulphis.... .... ... .lb
Calx ohlorinsta.... ........lb 5
Cainphora Amer in packets l....... lb 7
"، "، calkes...... lb
" Ang. Hd's ........ lb
". " ozs .... lb " " flowers, lb Dutch............ 1 lb
Camphor monobromid..... .oz
Cantharides Russian ....... . lb
Cantharidine...........grain
Cap papav. alb. ... ........ 100
Carbo animalis pur pulp... lb
Carbo ligni.................. 1 lb
Carbo ligni pulv..... ....... 1 b
Carbon bisulphidum ... ..." "
Carmine ...... ....... ..... oz
Caryophyllum, Zanzibar . ..lb
87
87
80
.
140
8

Whr. qt. 70
11) 2.00

нес. 2.75
lb 4.60

10 lb 2.65
keg 9
do 10
lb 1.20
lb 2.25
lb 2.25
V. Creta precip.

1h 9 กn
pulv. 20
keg 4 brl. 37
$\ddagger 8$
brl 70
case 75

## pulv. 80 <br> pulv. 85 <br> 10 lb 7 <br> 10 lb 11 <br> 25 lb boxes 18 <br> Winch. 40 <br> Belumdonna Plasters.

Made with an idea of giving the exact effect; of Belladonna quickly, surely, every time alike.

Made of standard extract of Belladonna Root, yielding an even amount of Atropia combined with Boracic Acid in an absorption producing base that softens the skin and frees the pores from clogging matter.

## Penctration is aimed at

in all our plaster bases.

Belladonna Plaster as made by Johnson \& Johrson, has been adopted by 400 hospitals and many thousands of physicians as the standard of excellence, as giving more im. mediately pronounced and uniform action than any other known.


## Zona’s Belladonna Plaster.

## SPREAD CN SILK.

Sells to a trade that want the nicest form of Belladonna Plaster ever made.

| Very Soft. | Very Flexible. |
| :---: | :---: |
| Very Clean. | Very Handsome. |

Very Comportable.

Full List of J. \&o J.'s Goods
on application to . .
THOS. LEEHING \& CO,
25 St. Peter Street.


## Mrs. Winslow's Soothing Syrup

is an Old and Well Tried Remedy, and for over FIFTY YEARS has been used by millions of mothers for their CHILDREN while CUTTING TEETH with perfect success. It soothes the child, softens the gums, reduces ininammation, aliays all pain, cures wind colic, is very pleasant to the taste, and is the best remedy for diarrhœa. Sold by druggists in every part of the world. PRICE TWENTY-FIVE CENTS A BOTTLE. Be sure and ask for Mrs. Winslow's Soothing Syrup and take no other kind, as mothers will find it the Best Medicine to use during the teething period.

## BUFFRLO LITHIA SPRIIGGS. No. 2.

The waters from these Springs have been recommended by the leading doctors in the United States as very beneficial in cases of affections of the nervous system. The waters belong to the alkaline class, and can be used as a remedy for Gout, Rheumatism and Stose in the Bladder.

THOS. F. COODE, Proprietor,



Wire Corkscrews.
PLAIN-Tinned Wire.
STAMPED-Name in Raised Letters stamped to order.
DECORATED-Enameled Tin handles with name or advertisement printed to order.
—Pricor ard Camplos on application. -
GILMOUR \& CO., MONTREAL.


## OIEASE'S Liquid G ve.

Fish Glue will be found stronger than any other glue, and being liquid is always ready to use. Does not require heating.
PACKAGES-1 0z. TO 5 GALs.

- Chase's Mucilage.GILMOUR \& CO., MONTREAL.


## TURKISH DYES.

- Seventy-four Colors

Fast Shades

## BRAYLEY, SONS \& CO. <br> MONTREAL,

## Ceverntons Spegialiles*

On and after this date, the price for our Preparations will be as follows


[^1]

## HUNT'S BOTTLE CAPS.

Nos.
$\overline{\mathrm{u}}, \mathrm{i}, \bar{z}, \bar{z}$, for phials, $1 / 2 \mathrm{oz}$. to $2 \mathrm{oz} ., \quad 35 \mathrm{e}$ 10, 20, 30, " " ، " " " 35c
3B, 4, 4B, " " 3 " 68 " 40 c
$5,5 \mathrm{~B}$ " " " 8 " 45 c
$51 / 2$, " " 10 " 45 c
6,
39,
The sizes ${ }_{3} \mathrm{~B}, 4 \mathrm{~B}$, and 5 B are better adapted for Thicklipped Bottles or where Short Corks are used.

Nos. 10, 20, 30 for Short Necked Phials.

## Mansell, Huti, Catty \& Co, (Lttu)

 Cressy Road, Hampstead, LONDON, ENG.FOR SALE BY LYMAN, SONS \& CO., Montreal, Que. IYMAN, SONS \& CO., Montreal, Que
LYMAN, BROS. \& CO., Tomonto, Ont.


TRUSSES.

## I. B. SEELEY \& Co.

For 'rwenty Years exclusive Manufacturers or
Hard Rubber Trusses, Supporters and Pile Pipes,

## Leather and Elastic Trusses.

Abdominal and Uterine Supporters,' Shoulder Braces, Elastic Stockings, Knce Caps, Anklets, Body Belts, Rheumatic Bandages, Suspensories, etc.

Seeley's Hard Rubber Trusses,
MADE IN EVEKY DESIKABLE PATTERN.


Will successfully retain the most difflcult form of HERNIA or RUPTURE with comfort and safety, thereby :ezihiiing in a radical cure. Impervious to moisture, may be used in bathing; and flting perfestly to form of body, are worn without inconvenience by the ycungest child, most delicate lady, of the laboring man, entirely avoiding all sweaty, sour, padded unpleasant ness, being light, co.l, cleanly, and always reliable. Endorsed by leading Surgeons, Physicians, Medical Colleges, both bere and in Europe. Over 100000 applied in Philadelphia.

Avoid the various imitations made to loo's like SEELEY'S and to sell on the enviable reputatinn acquired by our goods d ring the past 25 years, by purchasing only Hard Rubber Trusses, stamped, spring and strap, "1. B. SEELEY \& CO.-Warranted."

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ESTABLISHMENT:
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## 28 S. ELEVENTH STREET,

PHILADELPHIA, U. S. A.

"Mechanical Treatment of Hernia and Illustrated Catalogue." Contents: Hernia or rupture delineated: its cause, treatment, and cure. Also Corpulency, Abdominal Weakness, and Varicoiele. Buok of 98 pages and 180 illustrations. Malled on applization.


| Guprum scales...... .......lb |  | 40 |  |
| :---: | :---: | :---: | :---: |
| Currie powder............ll |  | 35 |  |
| Cusso |  | 10 |  |
| Damiana. . . . . . . . . . . . . ${ }^{\text {l }}$ b |  | 40 |  |
| Dextrine, | e, white. . . . . . . . . .lb | 10 | б0 lb 8 |
|  | yellow. . . . . . . . . 1 lb | 9 | ${ }^{\prime}$ |
| Diapente | e. ........... . ...lb | 30 |  |
| Diuretin | "Knoll" . . . . . . . . 0 \% | 175 |  |
| Dolichos | pruriens pubes....oz | 60 |  |
| Elaterium | m................. ${ }^{\text {dr }}$ | $3{ }^{\circ}$ |  |
| Emplast. | . arnica. . . . . . . . . . 1 l | 250 |  |
|  | ammoniaci . . . . . . . b | 85 |  |
| " | belladonnæ.... ..lb | 100 |  |
| 16 | calefaciens.... . . . ${ }^{\text {lb }}$ | 90 |  |
|  | cantharidis. ... . . lb | 75 |  |
| " | ferri...... ......lb | 25 |  |
| " | galbani..... ......lb | 60 |  |
|  | hydrargyri . . . . . . .lb | 70 |  |
|  | opii ...... ${ }^{\text {a }}$ | 85 |  |
|  | picis...... ..... . ${ }^{\text {l }}$ b | 25 |  |
|  | plambi.... . . . . . . lb | 25 | 10 lbs 20 |
|  | resin¥...... . . . . 1 lb | 25 |  |
|  | roborans...... . . . lb | 25 | 10 lts 20 |
|  | saponis.... .......lb | 25 |  |
|  | vigo....... ......lb | 70 |  |
| Ergota... | ... ...... ..... . .lb | 90 | pulv. 1.00 |
| Ergotinam | m Bonjean...... .oz | 75 |  |
| Ergotine | Bonjean Gen. . 30 gm | 200 |  |
| Eserine sul | sulph 5 or 10 gr . tube.gr | 10 |  |
|  | gib fort...... . . . . ${ }^{\text {l }}$ b | 75 | Whr qt $7 \theta$ |
| Ess. zing Eucalypto | tol...... . . . . . . . . .0s | 20 | lb 350 |
| Europhen | n ................. oz | 200 |  |
| Eralgine | e.... . . . . . . . . . . व8 | 125 |  |
| Extract. | .acon. (rad alco.).. os | 35 | lb 4.80 |
| " | aloes barb........ ${ }^{\text {b }}$ | 75 |  |
|  | " "pulv.... oz | 10 | lb 1.25 |
| " | " socot....... " | 10 | lb 1.25 |
| " ${ }^{\prime \prime}$ | anthemides ...... " | 20 | lb 2.50 |
|  | belladon ang..... " | 25 | lb 3.50 |
| " | * pulv ...." | 25 | lb 2.50 |
|  | " aqueos. . .oz | 15 | lb 1.50 |
| " | " alcoh .... oz | 25 | lb 3.00 |
|  | calumb. . . . . . . . .oz | 25 | lb 325 |
| " | cannabis indicm... 0 z | 25 | lb 3.00 |
|  | cascara sagrada... . 02 | 25 | lb 3.50 |
| * | cinchonø flav.... . 02 | 25 | lb 3.50 |
| " | colchici.... . . . . . oz | 20 | 1b 2.60 |
| * | " acet...... 0 z | 15 | 1b 2.00 |
| " | colocynth co...... ${ }^{\text {oz }}$ | 25 | 1 l 3.00 |
| " |  | 20 | 1 l 2.50 |
| " | conii...... ..... . 0 oz | 10 | lb 1.00 |
| " 6 | conii pulv........ 02 | 20 | 1 b 250 |
|  | copaibm resin .oz | 15 | lb 1.50 |
| " | digitalis.... .... . .cz | 20 | 1b 2.50 |
| , | .4 pulv.... 02 | 30 | lb 350 |
| " | ergotm pulv...... oz | 60 |  |
|  | gentianæ...... . . . 1 l | 45 |  |
| " | Filicis Maris ether.oz | 25 |  |
| " | : pulv.... .oz | 25 | lb 3.00 |
|  | hamamelis dest ...gr | 125 |  |
|  | glycyrrh mol...... ${ }^{\text {lb }}$ | 075 |  |
| ,6 | "1 pulv.....lb | 075 |  |
| " | hellebor nig..... oz | 25 |  |
| $\because$ | hamatoxyli ...... ${ }^{\text {lb }}$ | 80 |  |
|  | hyoscyam.... .... 02 | 20 | lb 2.50 |
| " | " ${ }^{\text {aquos .. .oz }}$ | 10 | lb 1.00 |
| " | " pulv .....oz | 25 |  |
| " | " exot.... 02 | 15 | lb 1.50 |
| " ig | ignatia amara..... . 02 | 60 |  |
| " ${ }^{\prime}$ | ipecse acetic...... oz | 150 |  |
|  | jaborandi.... .... oz | 60 |  |
| "، | jalapæ........... .oz | 25 | lb 3.50 |
|  | " pulv...... .oz | 35 |  |
|  | krameris......... . 0 z | 25 | 1 l 3.50 |



Patented in Canada and . . the United States. . .

## The Triumph Feeding Bottile

No Rubber Tube, No Meticl Tube, Fluid Flowing only


FOR SALE BY ALL DRUGGISTS.


Capsules
Oleum Santal (Midy) always gives satisfaction in Gonorrhœa and Cystitis. The oil is distilled by Midy's process, from the best freshly-cut Mysore Sandal Wood, and is vastly superior to commercial sandal oil, copaiba, cubebs, etc. Original botiles contain 40 capsules of 5 min -imseach-they are value for money and pay to sell.
gRIMAULT \& CO., Paris,
LYMAN, SONS \& CO., MONTREAL.

In Amenorrhœa of anæmic or chlorotic patients, one capsule 2 or 3 timesa day, given a week preceding menstruation, rarely fails to induce a normal flow.

## APIOLINE <br> (CHAPOTEAUT.)

The true active principle of Parsley, differing from the so-called Apiol.

Dispensed in spherical capsules of 20 centigrammes.

Original bottles contain 24 capsulem.

In Dysmenorrhœa, (congestive and spasmodic) amenable to internal remedies, the suppressed, irregular or painful menstruation is promptly relieved.
 An Illustrated Prised Cataloguc on application.

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## INJECTION

Outsells all Similar preparations Combined.
The most effective and at the same time an absolutely non-po.sonous cure for

## 

All Druggists, o are in the habit of pushing reliable goods only, are advise. to carry Big G in stock. Once started, it soon becomes a rapid seller, and remains staple.
———Orde: 80 as to Avoid Risk of Freezing in Transit.

The manifacturers, THE EVANS CHEMICAL CO., Cincinnati, O., will furnist: advertising matier, with dealers' card, free upon request.

| Extract | lactuct....... . . . 02 | 20 | 1 l 2.20 |
| :---: | :---: | :---: | :---: |
| " | logrood...... ...lb | 11 | (15 \& 30 lb boxes) |
| " | " 1 lb pxts..lb | 15 | ( $30 \mathrm{lb} \mathrm{boxes} \mathrm{)}$ |
| * | " 1 lb pkts..lb | 16 | ¢ |
| " | * ${ }^{\text {l }} \mathrm{lb} \mathrm{pkts} . . \mathrm{lb}$ | 17 | " |
| 1 | 14 asst. pkts..lb | 161 | " |
| " | lnpuli......... ... 0 z | 25 | lb 3.00 |
| ' | malt....... ......lb | 25 |  |
| " | mezerei $\not$ ther. . . . . 02 | 60 |  |
| ${ }^{6}$ | nucis vomic. . . . . . 0 z | 40 | 165.40 |
| ${ }^{6}$ | " " pulv...oz | 40 |  |
| " | opii....... ........ 0 \% | 90 | lb 18.50 |
| ${ }^{\prime \prime}$ | opii pulv........... ${ }^{\text {oz }}$ | 100 |  |
| c | " 1 liqnid...... ..lb | 125 |  |
| " | papaveris ..... ..os | 16 | lb 2.25 |
| " | physostigmatis....oz | 200 |  |
| $\because$ | podophylli..... .. .or | 25 | lb 3.00 |
| * | quassiæ. . . . . . . . 02 | 20 | lb 2.40 |
| * | rhamni frang..... 02 | 50 | lb 5.00 |
| " | " pulv........ 0 oz | 40 |  |
| * | sarste jam..... . . . oz | 30 | lb 4.00 |
| ${ }^{4}$ | rhei \&. I......... . 02 | 25 | lb 3.50 |
| " | 8arsm jam co.. . . . . oz | 28 | lb 3.25 |
| " | sarsm houd so .....oz | 20 | lb 2.75 |
| 6 | stramonii fol..... . 0 oz | 20 | lb 2.50 |
| ${ }^{6}$ | stramonii pulv .... oz | 25 | lb 3.00 |
| * | taraxaci..... . . . ${ }^{\text {b }}$ | 50 |  |
| * | valerian . . . . . . . . Oz | 15 | lb 2.00 |
| * | veratri viride.... .oz | 45 |  |
| Fabmp | physostigmatis. . . ...lb | 50 |  |
| Fehling | $\mathrm{g}^{\prime} \mathrm{s}$ solution. . . . . . . . ${ }^{\text {l }}$ b | 100 |  |
| Fel bov | vinum purificst...... oz | 20 | 2.00 lb |
| Ferri | ammon chlorid...... lb | 60 |  |
| 4 | * persulph(iron alum) | lb 40 |  |
| " | " protosulph.....lb | 25 |  |
| " | "6 tartras......lb | 75 |  |
| " | arseniss...... . . . . . oz | 15 | lb 1.60 |
| " | bromidam ...... . . . 0 oz | 20 | lb 2.00 |
| * | carbonas sacch.......lb | 30 |  |
| " | citras soluble . . . . . . lb | 65 |  |
| " | ei ammonii citres.... ${ }^{\text {b }}$ b | 65 |  |
| " | et quin. cis., 4\%..... oz | 15 |  |
| * | " ، ${ }^{\text {c....lb }}$ | 175 |  |
| " | " $10 \% \ldots .$. . ${ }^{\text {a }}$ | 20 |  |
| " | " 6 . $\ldots$...lb | 250 |  |
| " | " P. B....0z | 25 |  |
| : | c* " .....lb | 300 |  |
| " | * Hd's....0z | 25 |  |
| " | " amorph.... 0 \% | 15 |  |
| " | " " | 175 |  |
| " | " et strych. cit, oz | z 35 |  |
| c | " " Ed's,oz | 20 |  |
| ، | et strychn. citras 1\%.oz | 14 | 10 oz 181 lbl 1.75 |
| " | hypophosphis...... .0z | 20 | lb 2.50 |
| " | iodide...... . . . . . . . 0 z | 40 |  |
| * | lsctas....... ...... . .lb | 75 |  |
| * | perchlorid...... .... 16 | 35 |  |
| ، | phosphas.... ....... .lb | 85 |  |
| " | pyrophosph........ .lb | 80 |  |
| " | sulphas commercl. ... lib | 2 | brl 1.00 gross |
| " | .، exic...... . . 1 l | 9 |  |
| " | " par.........lb | 7 | 10 lb 6 |
| * | sulphid...... ......lb | 15 |  |
| " | valerian.... ........ 02 | 25 |  |
| Ferram | m dialyratum....... 08 | 40 |  |
|  | redsctum....... . . . ${ }^{\text {b }}$ | 75 |  |
| ' ${ }^{\prime}$ | tarterstam........lb | 80 | 10 lb 75 |
| Flor. | anthem. oph French..lb | 85 |  |
| ${ }^{6}$ | " Roman......lb | 90 |  |
| " | " German.....lb | 30 |  |
| $\bullet$ | arnicat.......... ... ${ }^{\text {b }}$ | 35 |  |
| * | lavand..............lb | 15 | pulv. 25 |
| " | rose gall........... . lb | 175 |  |
| " | " white...........lb | 75 |  |
| Polis | sconiti...... . . . . . . . . b | 25 | puiv. 40 |
|  | belliadon .......... . . ${ }^{\text {b }}$ | 25 | pulv. 35 |

## STRENGTH.

STRICTLY PURE. PEROXIDE

- OF -


HYDROGEN
MANUFACTURED BY

## A. PEUCHOT,

Bya special process, for Medicinal and Surgical purposes.
Peuchot's Feroxide of Hydrogen has been recognized by the most eminent Chemists, Physicians and Surgeons as the purest and most reliable product on the market. Adopted in more than twenty Hospitals of New York, including Bellevue Hospital.


IMPORTHNT HOTICE.
If the Ozone test is applied to A. Peuchot's Peroxide o Hydrogen, viz. : Starch and Iodide of Potassium paper, it will show a blue reaction, much deeper than any similar preparation.

## A. PEUCHOT, <br> Manafacturing Chemist,

II2-II4 Wooster St., New York.
Wholesale Agents:
Escablishod 1800.
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Montreal.
Wholesaio Druggista.


STABILITY.
NON-IRRITANT.

## A True Tonic Effect

is obtained by the use of Pepsin to assist weakened digestive organs-a more rational course than to over-tax them by stimulating the appetite.

## Armour's Pepsin Tablets (3 grains each)

 are pure Pepsin, of exceptional power and agreeable odor and taste.Canadian Price List:
Pure Pepsin, soluble or insoluble powder, and soluble scales, i-oz. bottles, $\$ 14.40$ per lb net.
$\mathrm{x} / 4 \mathrm{lb}$ bottles (single bottles) $\$ 12$ per lb . net.
$1 / 2 \mathrm{lb}$ ". (single bottles) $\$ 12$ per lb. net.
I lb. of above in one delivery 5 per cent discount.
Tablets of Pure Pepsin, three grains each, in flat bottles for the pocket:
Large size, 75 tablets in each bottle, one dozen in a box, per dozen bottles, $\$ 7.20$ net.
Small size, 20 tablets in each bottle, one dozen in a box, per dozen bottles, $\$ 2.40$ net.
Glycerole Pepsin, concentrated, io minims are the equivalent of one grain of our Pepsin possessing a digestive power of 2,500 , for the speedy preparation of liquid forms-Wines, Elixirs, Etc. r-lb. bottles (single bottles) $\$ 1$. So net.
One dozen bottles Glycerole Pepsin in one delivery, 5 per cent discount.
We shall be pleased to send samples of these preparations to druggists upon request

## Armour \& Company <br> Chicago.



## ANATOMY OF THE

## GENTURY • ATOMIZER

## No. 15.

For Spraying oither Oil or Water.


F-5-io. T pered Throat Tube, serews on botlle $G$ at $C$.
B-iongue Depressor, slips on tube at H. F.
1-Slip Nasal Cone, fits on tube at H .
D - Improved Valve Chamber, containing Aluminum Valves.
L-Washer, fits on totule at M.
K-Soft Rubber Feed Tube.
H. Tip for Spraying Oils.

Aluminum Valves. All Hard Rubber and Elass. Sprays eifher Oill or Water. 5 -Inch Curred Throat Tube. Screwe Firmily on Bottlo.

LYMAN, SONS ET CO.
For Sale by
LYMAN, KNOX et CO.
KERRY, WATSON E CO.


Sroarior to Carbslic Acid for Olegrs, Wounds, Sores, te. Bemoves Scari, Boughness and Irrhation of the Skid, mairing the coat soft, Glossy and herithy.
Eomores the onpleasant smell from Eogs and other animals
"Little's Sheep Dip and Catte Wasb" is used at the Dominion Experimental Farms, at Oltawa and Brandon ; at the Ontario industrial Farm, Guclph, and by all the principal Breeders in the Dominion-and pronounced to be the cheapest and most effective remedy on the market."
2TII 7 Gold, Silver and other Prize Medals have been awarded 10 "Lrtule's Shecp and Cattle Wash" in all parts of the world.
Sold in large Tins at 81.00 Is wanted by every farmer and breeder in the Dominion.
ROBERT WIGHTMAA, DRgealst, - OWEH SOUKD, OMT.
SOLE AGENT FOR THF DOMIMJON.


One of the Best Selling Articles on the Market To-day.

## DR. T. A. SLOCUM'S

Oxygenized Emulsion of

## Cod Liver Oil

Since the small ( 35 Cent) size was put on the market, the demand has been wonderful.

Every bottle of the small size sold, will sell several of the large.
It is the best Emulsion of Cod Liver Oil made, a fact that is abundantly testified to by leading Physicians and Pharmacists.

When you sell an Emalsion of Cod Liver Oil you should sell tho besto
Seven Reasons Why

## SLOCUM'S OXYGENIZED EMULSION

Meets all the Requirements of a perfect Emulsiou:


## It is the Only Absolutely Pure Emulsion Manufactured.

For sale by all the leading Wholesale Houses in Canada, or direct. We pay charges on all Cash Orders.

## T. H. SLOCUM \& CO.,

$$
186 \text { Adelaide St. West, }
$$

Gum storax liquid ..........ib $\quad 15$

| " | thus..................... | 15 |  |
| :---: | :---: | :---: | :---: |
| " | tragacanth | Ribbons ..lb | 90 |
| " | " | Alleppo opt lb | 75 |
| " | " | " No.2.lb | 60 |
| " | " | pulv. opt..lb | 80 |


$\begin{array}{ll}\text { Humulus lupulas.......... } 1 \mathrm{Bb} & 20 \\ \text { Hydrarg. bicyanid........02 } & 30\end{array}$


Hyoscyamine..............gr
Ichthyoe. inc. Brazil......... ${ }_{4}$. 240

| " | " | Rnagian packets |
| :---: | :---: | :---: |


Iodoformam................. . $0 z$
Iodol.................................
Iodum crude .......... ..... oz

Kamala........................ 1 b
Kousso ........................ oz 10
Kava Kava....... ............ 1 lb 90
Lactopeptin ozs........... doz 850
Lactucarinm ang............oz 70
Lanolin.......................Ib 35
Lapis calam. prep...........1b 7
" pumicis select.........1b
Eepteidrin........... . 1 lb
Lichen Hibern opt........... 1 z
Licorice Corig............... lb $\quad 30$
" Solazzi ............... ${ }^{16}$ b
" Solazzi $\ldots \ldots \ldots \ldots$...... ${ }^{45}$

- Y \& S.stick.......lb 35
$\begin{array}{llll}\text { " Pellets, } \bar{Y} . \& ~ S . . . l b ~ & 40 \\ \text { M. \& R...lb } \\ 40\end{array}$
Lignum guaiaci rass ...16 7
"t quassiæ incis.......lb
"t sant. flav. grd.....lb
Liniment aconiti........... . 1 o
belladon........ . . lb
campa............
camph comp..... .lb
iodi...............Ib 150



## ANTI-

 DANDRUFF.THE object in view when Anti-Dandruff was first produced was to offer the public a preparation for the hair that would in the first place remove Dandruff effectually and also act as a perfect hair-dressing without containing any ingredient injurious to horr, head or scalp. Anti-Dandruff has in a short time proved itself a perfect specific for th. hair, and now stands in the estimation of its patrons as being head and shoulders above any similar preparation.

> Why ? It removes Dandruff with 3 applications. "، " It makes the hair soft and pliable. "، It is not of a greasy or oily nature. " " It stops falling of the hair-Is not a dye. " It is of a nature peculiar to itself. " It possesses a most agreeable and deli. cate odor.

Price for Anti-Dandruff,
$75 c$ per bottle. $\$ 6$ per doz.
We trast there :uill be no cutting.
DR. L. A. SMIIH \& 80.

```
dgzen
```

| 31 b 7.50 lb |
| :--- |
| 7 lb 7.25 lb |
| 1 l |

Ilh 7.00 lb
sec 65

25 lb 2856 lb 27
lb 5.90
lb 5.90
lb 4.50
lb 5.25
lb 18.50
ordinary 6
100 lb 5
Keiths 50
Sac 15

50 lb 9
Rub 10
Whr. qt. 80
35
Whr. qt. 55

## EMPTY

Gelatine Capsules,
Manufactured by the

## Waren Carpule Co.

Cor. 12 th \& Mabantette St.,
Detroit, Mich., U. S. A.

They are uniform in size, perfect in fit and cut, no ragged edges. Clear and white.

Samples free. When ordering of your jobber, specify the


The trade supplled, with free samples and other advertising matter prepaid, by addressing

$$
\begin{aligned}
& \text { D. DENSMORE \& CO., } \\
& { }_{\text {27I }}^{\text {Queen Street East, }} \\
& \text { - TORONTO, Ont. }
\end{aligned}
$$

## $\Longrightarrow$ MUNN'S $=1 \Longrightarrow$ MEMEBRATMD... Liquid Fish Glue $\rightarrow$ Cod Liver Oil次 FROZEN and STRAINED. <br> Pure and Free from all Sediment. <br> Far Superior to NORWEGIAN FOR SAMPLES <br> S. MUNN \& CO., 22 St. John Street, MONTREAL.

Celebrated Brand of
Cognac Brandy
FAUSTIN FRERES,


| Liniment opii..............1b | 90 |  |
| :---: | :---: | :---: |
| " saponis co. .......1b | 45 |  |
| " " c pot iod..lb | 80 |  |
| " terebinth.........15 | 30 |  |
| Liquorammon. acot conc ...lb | 35 |  |
| " ammon fort s. g. 8801b | 12 | 12 Wrihr. qts. 9 |
| " antim. chlor........ 1 lb | 18 | W. qt. 16 |
| " arsenicallis.........lb |  | pt, Whr. qt . 8 |
| " arsenii et hyd. iod. .lb |  | W.qt. 20 (Donovans) |
| 6. ferri dialysatus . ....lb | 40 | W. qt. 35 lb |
| " perchlor fort. . 1 lb | 12 | Whr. qt. 11 |
| " " pernit.........It | 14 |  |
| " " persulph.. ....lb | 25 |  |
| " hydrogenii perox....lb | 50 |  |
| " plumbi subacet.... .lb | 12 | Whr. gt. 10 |
| " potassm............1b | 7 |  |
| '. santal flav comp. .. 1b | 150 |  |
| " sodii chlor..... ...lb | 16 |  |
| '6 strychaine.........lb | 50 | Whr. qt. 45 |
| Lithii bromid...... . ...... 0 oz | 25 |  |
| " carbonas...... .... . 0 z | 25 | lb 3.20 |
| " citras.............. oz | 20 | lb 2.75 |
| " hippurate.......... oz | 150 |  |
| ، iodid........... .... 0 z | 50 |  |
| salicylat...... . .... 0 oz | 30 |  |
| Litmas................. ${ }^{\text {b }}$ | 60 |  |
| Lapulinum...... .........lb | 60 |  |
| Lycopodium...... .........lb | 80 |  |
| Macis...... ........... . . . 1 b | 120 | pulv 1.30 |
| Madder compound.... ....lb | 10 | carboy 9 |
| " Dutch ......... . . 1 l | 12 | brl 10 |
| Magnes citr. gran. Bishop. . 1 b | 80 | 7 lb 75 |
| " " " Lyinam. 1 b | 35 |  |
| " calcined .... 1 lb tins | 50 |  |
| "، $6 . \quad . . .{ }^{\text {c }}$ " bots | 65 |  |
| Magnesii carb levis 1 oz pkt lb | 22 | 10 lb 20 |
| " " $\quad 2 \mathrm{2}$ ". 1 lb | 20 | " 18 |
| " " " powd..lb | 25 | 1 lb tins |
| " chloride .... ...... 3 | 30 |  |
| " sulphas..........lb | 3 | Brl. 1.50 |
| Magnesium, wire or ribbon oz | 75 | Porajer 50 |
| Maltopepsin " $\frac{1}{2} \mathrm{lb}$ bots........ doz bot | $\begin{aligned} & 525 \\ & 635 \end{aligned}$ |  |
| Mangan chlorid.......... . lb | 50 |  |
| * oxyd. nigr . . . . . . . 1 lb | 10 | idi. 72 |
| " sulph.pur...... . .lb | 60 |  |
| Manna flak select......... 1 lb | 175 |  |
| Maranta Bermuda, . . . . . . . 1 lb | 45 | 10 lb 42 |
| . Jamaica . . . . . . . 1 lb | 15 |  |
| Mel. canadensis.... ..... . 1 lb | 15 | 10 lb 14 |
| Menthol.... . . . . . . . . . . . . 02 | 35 | 1 l 4.50 |
| Morphinm acetas.... . . . . . oz | 215 | 10 ozs. 200 |
| " hydrochloras.... $0 z$ | 215 | " 2.00 |
| " - sulphas....... . oz | 225 | " 2.10 |
|  |  | (in yth or phials 2sc or extrz |
| Moschns, in grain . . . . . dram. | 550 | 4.503 .50 |
| Naphtha mineral .........lb | 50 |  |
| Naphtha vegetable .........lb | 60 |  |
| Napt'aline resublimed......lb | 50 |  |
| Naphthol Bets.... ....... oz | 10 | lb 1.40 |
| Nickel sulph cryst....... lb | 75 |  |
| . ammon. sulp....... lb | 35 |  |
| Nux. areca select .......... 1 lb | 20 | pulv 35 |
| 1. myristicm (limed)....lb | 90 | pulv 1.00 |
| " ." opt.(unlimed)lb | 100 |  |
| " vomica ............ ${ }^{\text {b }}$ | 12 | pulv 23 |
| " Kola. . . . . . . . . . . . 1 b | 50 |  |
| Olio Resin Capsin.......... 0 \% | 85 |  |
| ." Cabets..........oz | 50 |  |
| O1. sbsinth.............oz | $40^{\circ}$ | 1 l 4.75 |
| " amygd. dulc..........lb | 50 | Whr. qt. 45 |
| " " cssent. sine acid pruss....... 02 | 50 |  |
| " anethi Ang...... ...oz | 95 | 1 l 4.50 |
| " anisi.................lb | 275 | Whr. qt. 2.50 |
| " anthem Ang.........0: | 200 |  |
| " surantii...... .......ll | . 325 | Winch. 3.00 |
| " bergam saper..... . . . 13 | 400 |  |

ESTABLISHED 1859.

## HENRY R. GRAY,

 Prammaceutical Chemist,
## 122 ST. LAWRENGE MAIN STREET 122

## (Corner of Lagauchetiere)

$\cdot \mathbf{M K} \cdot \mathrm{O} \cdot \mathrm{N} \cdot \mathrm{T} \cdot \mathrm{R} \cdot \mathrm{E} \cdot \mathrm{F} \cdot \mathrm{L} \cdot$

The following Specialties, all of which have been well advertised, more particularly the "Castor Fiuld," may be oblained at all the Wholesale houses at Manufacturers' prices :-
Gray's "Castor Fluid," for the hair.
Gray's "Saponaceous Dentifrice,"-An exceilent antiseptic dentifrice.
Gray's ". ental Pearline," - An excellent antiseptic toothwash.
Gray's "Sulphur Pastilles" for burning in diphtheritic sases.

[^2]

## Fragrant. Delicious Coffee in a Moment!

## LYTKAN'S FLUID COFFEE.



## J. M. FORTIER'S THE



Are the Leading
Sellers in the Dominion:


TO GAIN AND RETAIN CUSTOM, DEALERS SHOULD KEEP UP THEIR STOCK OF THE CELEBRATED.

J. M, FORTIER, , maike.that Raw LeafTTobaceo,

Creme de la Creme Cigar Factory, 41 to 153 ST.MAURICE STREET, MONTREAL.

STICK ${ }^{4}, 6,5,12,34$ and 16 sticks to the 1 lh ． LICORICE Packed in 5 lb ．Wood Bones．
 CATALUNA LICORICE， 100 Sticks in a lox． POWDERED EXTRACT LICORICE， POWDERED LICORICE ROOT， AMMONIACAL GLYCYRRIIIZIN，in Scales．
THE MELLON \＆RITTENHOUSE CO．， 228 North 22d St．，PHiladelphia，Pa，

## ＂OMFRVIエ工耳＇S

－－－－－FINE；

## CHEWING GUMS

＂MEXICAN FRUIT＂THE FAVORITE．sc．Bars－36 Bars in Box－6 Flavors in each Box．
＂DYSPEPSIA＂PEPSIN GUM． 20 Bars in Box－5 Sticks in each 5c．Bar ；each Stick contains I grain Pure Pepsin sufficient to digest 2500 grains fond．
The Finest Goods， The Choicest Flavors， The Nicest Packages． FOR SALE BY THE WHOLESALE DRUG TRADE． london．canada

| O1. 暗iko ............ . .lb 36 |  |  |  |
| :---: | :---: | :---: | :---: |
| " вucc | Buccin. root ..........lb | 05 | Whr. qt. 00 |
| " tana | tanacoti opt . . . . . . . oz | 80 | lb. 4.25 |
| " toro | torobinthinm. . ....... ${ }^{\text {l }}$ b | 50 |  |
| " | " coml....gl. | 05 | bri. 58 |
| " theo | theobromatis.... ....ilb | 68 | (tableta) |
| " valo | valorinn.... ..... .... oz | 100 |  |
| " vorb | vorbon¢...... ...... oz | 10 | bot. 8 |
| " vini | vini..... ...... . . . 0 oz | 36 | lb 3.50 |
|  | ylang-ylang...... . . . oz | 700 |  |
| Opium Turo............... ${ }^{\text {b }}$ |  | 600 |  |
|  | " pulv..........oz | 40 | lb 0.00 |
| Os sopire. | pir.... .... ...... . . .lb | 28 | soleot 40 palv 35 |
| Otto roso Doupsi. . . . . . . . . . oz |  | 700 0 |  |
| " | " virgin..... . . . . . or | ${ }^{9} 00$ | opt 11.00 |
| Pancrartino, Mornon's...... 0 oz |  | 100 |  |
|  |  | 85 |  |
| Papoid. | Id........... ......... $0 z$ | 325 |  |
| Paraflinu | ffinum durim. . . . . . . .lb | 20 | 50 lb 15 |
| Paraldehy | dehydo....... . . . . . . 0 z | 20 | lb 2.26 |
| Pepsin ...... ...........lb |  | 225 |  |
| " nu | pur.sol pulv. Marck's. 1 lb | 300 |  |
| " Mo | Morck's soalos . . . . . 1 l | 500 |  |
|  | ang. coml.......... oz | 30 | lb 8.50 |
| " Bo | Boudnult's. . . . . . . . 0 z | 120 |  |
| " mo | modicinal Morson's..oz | 85 |  |
| " por | pord Morson's...... 0 oz | 225 |  |
|  | sacchar. ... ....... . . 0 z | 25 | lb 3.50 |
|  | Jonsen's scales " .oz | 125 |  |
| 1 A | Armour's.......... 0 . | 90 | 1612.00 |
| Petrol Brand | 1 Barbadens...... . . . 16 | 16 |  |
| Potrolatum A. . . . . . . . ........ 1 b |  | 18 5li | ) 16101 bs 14251 bs |
| " | " B..............lb | 1751 | os 15101 bs 18251 bs |
|  | " C. ............lb | 16 Eib | be 14 10lbs 12251 lbs |
| Phonacet | acetino Bayer...... . . .oz | 80 | 1h 6.50 |
| Phonolphthalein....... ... 0 \% |  | 100 |  |
| Phosphorous. . 11 lb tins. . 1 lb |  | 85 | 1 lb bots 1.00 |
| Pil. hydrarg. . . . ...... . . 1 lb |  | 70 |  |
| Pilocarpin Hydrochlor, gr. 10 <br> " nitras .... gr 10 |  | $\begin{aligned} & 5 \text { or } 10 \\ & 5 \text { or } 10 \end{aligned}$ | tubes <br> tubes |
| Pipe clay..... .............. lb <br> Piperina ............... .. $0 z$ |  | - | 100 lb 4 |
|  |  | 100 |  |
| Pipemzin Bayer, $\frac{1}{3}$ oz bottle. oz <br> " tablets... 10x10 gr |  | 550 |  |
|  |  | 240 |  |
| Pipor alba................ib |  | 20 | pulv 22 |
|  | Cayeune........ .... ${ }^{\text {lb }}$ | 25 | 10 lb 20 |
|  | nigran..... . . . . . . . ${ }^{\text {b }}$ | 17 | pulv 1925 lb 17 |
| Pix Burg | Burgund bladders.....lb | 10 | 20 lb 9 |
| Plumbi acetas brown .......lb |  | 10 | 50 lb 9 |
| " | - " Xtls .... ....lb | 12 | 60 lb 10 |
| " | " O. P.........lb | 25 |  |
| " | iodid. . . . . . . . . . . 0 z | 35 | lb 4.50 |
| " $n$ | c nitras coml.........lb | 16 |  |
| " | - oleas..............lb | 100 |  |
|  | oxyd pulv........... 1 b | 9 | keg 7t (litharge) |
| " | rab.......... . lb | 8 | keg 6 (rad lead) |
| Podophyllin resin..........oz |  | 35 |  |
| Potassa | ssa caustica sticks..... lb | 85 |  |
|  | salpharata...... . . ib | 35 |  |
| Potasaii e | saii scetas. . . . . . . . . . . lb | 45 | gran 50 |
| " | kicarbonas .......lb | 16 |  |
| " | " pulv.....lb | 17 |  |
| " | bichromas.... ... lb | 15 | keg 121 |
|  | binoxalas........ . ${ }^{\text {l }}$ | 23 | 10 lb 22 |
| " | 4 pulv.... . 1 b | 25 | 10 lb 23 |
| " | bitart . . . . . . . . . . . 1 lb | 30 | keg 24 brl 28 |
|  | bromid...... ....... 1 l | 55 | 5 lb 50 |
| ${ }^{\prime}$ | carbonas..........lb | 14 | 10 lb 12 |
| " | " pearl ashes.lb | 10 | 100 10 9 |
|  | ohloras.... . . . . . . 1 lb | 30 | keg 27 |
| " | " pulv...... . .lb | 90 | keg 27 |
| ${ }^{\prime \prime}$ | chlorid. pur. ......lb | 30 |  |
| " | chromas ......... . . 1 l | 60 |  |
| " | citras neatme . . . . . ${ }^{\text {lb }}$ | 70 |  |
| " | 4 cyania. C. P......lb | 100 |  |
|  | " gold plater.lb | 75 |  |
| " | " fased ....1b | 45 |  |

# BRANDIES $0^{\circ}$ 

## From

Coutanseaux Aîné,

COGNAC, FRANCE.

## Geo. Laffont \& Co.

BRAND
In stock at ———n

## Iyman, Sons \& Co. <br> montreal.

## DICK'S UNIVERSAL MEDICINES

 FIOrses and Cattle.

DICK'S BLOOD PURIPIER is no sham made ap to sell only, bat is prepared from the best materisl. Ono prokaso of Dick's Blood Purifier wo confidently beliove containg moro real medioinal strength and virtue than ten times its weight of any other Powdor in 4 tho market it tones up the systom, imparce now life and vizor, and 18 admpiod for the cure of Norms, loss of appoeite, roughness of the hair or cont, atoppase of Wator and bowels, all coughs and
colds. inflammation of the lungs and colds. inflammation of the lings sha glands of the throat, horse distomper, hide bound, botts, sourvy, loss of ound horn distemper, black tongue, \&a., snd also will backen the herycs, snd in recont cases effect a ouro. In fact there is no cape of disesse among Horsos and Cattlo where Diol's Blood Parifier is not callod for, and by its timely sdministration will save the lives of many valuable animals.

DICK'S BLISTER, for Spavine, Ringbodes, Curbs, Swellings, \&c.
DICK'S OINTMENT, for Cuts, Burns, Bruises, Saddie Galls, Sores, Flesh Wounds, Scratches, \&c.
DICK'S LINIMENT, for Swellinga, Scald, Contusionz, Frost Bites, Cracked Hecis, Chapped Hands, \&c., but above ail tor Rheumatism.

RETAIL PRICE LIST:
Dick's Blood Purifier, ..................................500


Try DICE'S MBDICINES and bo convincod of thoir morit. Ask for them and take no other. Advertising oards and oirculars sent on appliontion.
DIGK \& CO., Montreal.
P. O. Box 482.

##  <br> $\rightarrow \rightarrow 0 \leqslant$ SIAANDARD $\rightarrow=0$ "CRYSTAL" PEPSIN PREPARATIONS

PEPSIN In Scales or Crystalis and the same Powdered

For the special use of the Physician. CRYSTAL PEPSIN TABLETS FOR POPULAR USE.
PRICE LISt: $\{$ CRYSTAL PEPSIN, Scales or Powder, . . . . per oz. Botte, $\$ 1.25$
Jensen's Pepin (bor been the standarl, because giving the best practical satisfaction, owing to intrinsic value and uniforme quality. Sof far as the digestive power of Jensen's Pepsin is concerned, the many tests of it made ly the highest authorities, and publisheit extensively, prove its high power.

The ready solubility of Jensen's Crystal Pepsin perfectly adapts it for all liquid forms.
To anch druggist carrying Jensen's Tablets in stock, we will mail, postpaid, upon request, one of cur elegant advertising banners, representing a Swedish peasant girh

## CARL JENSEN \& CO, 100 Maiden Lane, NEW YORK

Sole Agents for Canada: LYMAN, SONS \& CO., MONTREAL.

## Vichy Water <br> BOTT'S MALT PREPARATIONS.

(SOURCE DUBOIS)
Ruede Nimes, 126 Vihhy, (OppositeCelestins)
Authorized and controlled by the State.
Approved by the Academy of Medicine, Paris.


Dyspepsia, Affections the the Stomach, Liver, Intestines, Kidneys, Bowels, Diabetes, Gravel, Gout, Rheumatism, Obesity.

The coldest (II degrees) of Vichy Waters.
Taken as Table Water, gives Appetite and assures a Good Digestion.
For Sale at all Druggists and Mineral Wo.ter Merchants.
General Agents for Canada : : : :

## A. BRISSET \& SON, guaranteed genuine. Thontreezl

Pure Malt Stout ani Wine of Malt

Recommended strongly by prominent Physicians all over the Country. for sale by rll druggists.

Ohainable Wholesale from Messys. L. YMAN, SONS \& CO. at the jolloaing prices:
Pure Malt Stout, $\$ 1.60$ per doz
Wine of Malt, $\$ 2.60$
WHMPR R. TOUBAM \& SOISS,
Agents.

| Potasuil hyprophosph．．．．．．．lb 1 60 |  |  |  |
| :---: | :---: | :---: | :---: |
| ＂ | lodd．．．．．．．．．．．．．${ }^{\text {lb }}$ | 425 |  |
| ＂ | nitras．．．．．．．．．．．．．．lb | 10 | 112 lb keg 7 |
| 11 | nitres pulv．．．．．．．．．lb | 11 | （Cran） $10 \mathrm{keg} 7 \frac{1}{1}$ |
| ＂ | ＂O．P，Moroks．．．lb | 30 |  |
| ＂ | oxalas，noutral ．．．．lb | 25 |  |
| 11 | permangan par．．．．lb | 85 | 10 lb 80 |
| ＂ | pruss．flav．．．．．．．．．lb | 85 |  |
| ＂ | ＂rubr．．．．．．．lb | 75 |  |
| ＂ | silicas ．．．．．．．．．．${ }^{\text {l }}$ b | 30 |  |
| $"$ | ＂Liq．．．．．．．．．．lb | 20 |  |
| ＂ | sulphas．．．．．．．．．． 1 lb | 12 | pulv 13 |
| ＂ | sulpho－cyanid．．．．．oz | 16 |  |
| ＂ | sulphocarb．．．．．．．lb | 100 |  |
|  | salphuret．．．．．．．．${ }^{\text {lb }}$ | 85 |  |
| 11 | tartras．．．．．．．．．．．．ib | 80 |  |
| Potassi | ium．．．．．．．．．．．．．．oz | 800 |  |
| Propyla | lamine ．．．．．．．．．．．．．． 0 \％ | 76 |  |
| Palpal | aloes c．canolla．．．．．．${ }^{\text {b }}$ | 40 |  |
| ＂an | nntimonialis P．L．．．．Ib | 60 |  |
| ＂cot | cateohu compl．．．．．．．${ }^{\text {lb }}$ | 70 |  |
| ＂ 0 | cinnam comp．．．．．．．．lb | 75 |  |
| cr | cretm aromat．．．．．．．Ib | 120 |  |
| 11 | ＂ 1 c．opio．．lb | 150 |  |
| ＂ | ＂comp．．．．．．．．．lb | 60 |  |
| ＂ | ＂¢．c．opi6．．．lb | 75 |  |
|  | oretm c．camph．．．．．．lb | 25 | 10 lb 20 |
| ＂gl | glycyrrh comp．．．．．．．lb | 30 |  |
| Ip | pecao comp．．．．．．．．．${ }^{\text {b }}$ | 140 |  |
| ja | jalap comp．．．．．．．．．．ib | 75 |  |
| ki | kino comp．．．．．．．．．．lb | 125 |  |
| rh | rei comp．．．．．．．．．．．．1b | 76 |  |
| ＂${ }^{\text {a }}$ | sapo cast．．．．．．．．．．．．．${ }^{\text {lb }}$ | 25 |  |
|  | ＂＂alb．．．．．．．．．lb | 85 |  |
| ${ }^{4} 80$ | soammon comp．．．．．．os | 80 |  |
| ＂ 88 | seidlitx Howards．．．．．${ }^{\text {lb }}$ | 25 | $7 \& 141 \mathrm{~b}$ |
| Quinine | mes Disulph．．．．．．．．．．． 08 | 50 |  |
| ＂ | bromid．．．．．．．．．．．． 08 | 76 |  |
| ＂ | oitras．．．．．．．．．．．．．oz | 80 |  |
| ＂ | hydrochlor ．．．．．． 0 x | 60 |  |
| ＂ | iodid．．．．．．．．．．．．．0s | 100 |  |
|  | phosphas．．．．．．．．．${ }^{\text {oz }}$ | 75 |  |
|  | salicylas．．．．．．．．．oz | 65 |  |
|  | sulph German． C ．． 08 | 95 | $100 \mathrm{oz} 24 \quad 25 \mathrm{oz} 25$ |
| ＂ | ＂Howard＇．．．os | 40 | 100 os 96 |
| ＂ | ＂＂． 40 oz | 88 |  |
| ＂ | tannato ．．．．．．．． 02 | 50 |  |
| 1 | valorian．．．．．．．．．．．08 | 75 |  |
| Rad，ac | aconiti ．．．．．．．．．．．．．．lb | 20 |  |
| ， | 16 contus．．．．．．．．lb | 25 | puiv 30 |
| an | nnchnsw．．．．．．．．．．． 1 lb | 20 |  |
| an | angelice．．．．．．．．．．． 1 lb | 30 | pulv 35 |
| ar | arctii（burajock）．．．．．．${ }^{\text {lb }}$ | 18 |  |
| ＂b | belladon．．．．．．．．．．．ib | 18 | contus． 30 |
| cald | calam．aromat．．．．．．．．lb | 30 |  |
| ＂${ }^{1}$ | calumb．．．．．．．．．．．．．ib | 20 | pulv． 20 |
| ＂ 0 | surcumm Madras．．．．．lb | 10 | ＂ 12 |
| ＂g | galangal minor．．．．．．lb | 18 |  |
| ＂ | 6 pulv．．．．．．．．lb | 25 |  |
| $" \mathrm{~g}$ | gentian，select．．．．．．．lb | 10 |  |
| ＂ | ＂gromad．．．．．．lb | 12 |  |
| ＂ | ＂palv ．．．．．．．${ }^{\text {b }}$ | 15 |  |
| צ | ginseng．．．．．．．．．．．．．lb | 480 |  |
| ＂${ }^{6}$ | glycyrrh decort．．．． incis ．．．．$\}$ lb $^{\text {l }}$ | 25 | 10 lb 22 |
| ＂ | ＂dee＇t pulv ．．．lb | 60 |  |
| ＂ | ، sicat．．．．．．．．${ }^{\text {b }}$ | 10 | bundles 12 |
| ＂ | ＂grd．．．．．．．．．lb | 12 | brl． 11 |
| h | holleb alb．．．．．．．．．．lb | 12 |  |
| ＂ | ＂＇pulv．．．．．．． 1 l | 16 | keg 14 br． 13 |
| ip | ірево．．．．．．．．．．．．．． 1 lb | 250 |  |
| ， | ＂pulv．．．．．．．．．．．lb | 275 |  |
| ＂ir | iridis Florentine ．．．．．lb | 50 |  |
| 0 | ＂．＂pulv．lb | 60 |  |

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Non－Poisonous and Non－Corrosive in Use．
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BE ATRE OF SUBSTITUTIOH.

| Rad．jalapre ．．．．．．．．．．．．．．Ib |  | 45 |  |
| :---: | :---: | :---: | :---: |
| ＂．${ }_{\text {ar }}$ |  | 55 |  |
| ＂ | kramerim opt．．．．．．．．．．lb | 30 |  |
|  | pareire brava．．．．．．．．lb | 40 |  |
|  | pyrethri．．．．．．．．．．． 1 lb | 35 |  |
|  | thei E．I．opt．．．．．．．Ib | 125 | cubes 1.00 |
|  | ＂＂sec．．．．．．．lb | 75 |  |
|  | ＂＂elect opt．．．lb | 225 | fingers 1.50 |
|  | ＂．pulv elect opt ．．．．lb | $\because 50$ |  |
|  | ＂＂E．I．opt．．．ib | 125 |  |
| ＂ | ＂＂＂sec．．．lb | 80 |  |
|  | sanguinarix．．．．．．．．．lb | 14 | pulv 16 |
| ¢ | sarse Hond．．．．．．．．．lb | 45 | incis 50 |
|  | ＂Jam．．．．．．．．．．lb | 70 | ＂ 75 |
|  | ＂Mex＇can．．．．．lb | 18 | 2 lb 16 |
|  | scillæ sicc．．．．．．．．．．．${ }^{\text {lib }}$ | 12 |  |
|  | ＂pulr．．．．．．．．．．．lb | 30 |  |
|  | seriegre．．．．．．．．．．lb | 75 |  |
|  | spigelix．．．．．．．．．．．lb | 45 | puiv 65 |
|  | sumbul．．．．．．．．．．．．．lb | 90 |  |
|  | taraxac sicc．．．．．．．．．lb | 15 | 10 lb 15 |
| ＂ | toruentillæ．．．．．．．．． lb | 25 |  |
|  | ＂pulv ．．．．lb | 35 |  |
|  | zingib．Afric．u．b．．．．lb | 16 | 20 lb 15 bag 13 |
|  | ¢＂pulv．．．lb | 18 | 30 lb 16 |
|  | ＂Jam．u．b．．．．b | 25 | bri 23 |
|  | ＂＂＊bleached．lb | 30 | 10 lb 28 |
|  | ＂＂pulv opt．lb | 30 | 10 lb 2 S |
|  | ＂＂＂sec．lb | 25 |  |
| Resin | flav．．．．．．．．．．．．．．． 1 l | 4 | brl 4.00230 lbs. |
|  | ＂pulv．．．．．．．．．．．lb | 5 | 50 lb 4 |
| Resor | rcin xtls．．．．．．．．．．．．．oz | 25 | lb 3.06 |
|  | resublinn ．．．．．．．．．oz | 50 |  |
| Rhizo | omaarnicx．．．．．．．．．．．lb | 30 | coutus 40 |
|  | cimicifugau．．．．．．．${ }^{\text {b }}$ | 15 |  |
|  | podophylli．．．．．．．${ }^{\text {b }}$ | 14 |  |
|  | serpentaric．．．．．．．lb | 55 | pulv． 90 |
| ＂ | valerianm．．．．．．．．lb | 15 | pulv． 22 |
| Roug | ge－Jewellers．．．．．．．．．b | 65 |  |
| Sacch | harine．．．．．．．．．．．dram | 20 | oz 1.20 |
| Sacch | h．lactis pulv．．．．．．．．．lb | 30 |  |
| Sago | perlat．parv．．．．．．．．．is | 6 | bag $5^{\frac{1}{3}}$ |
| Sat | prunella glob．．．．．．．lb | $\stackrel{20}{0}$ |  |
| Salic | cinum．．．．．．．．．．．．．．．oz | 20 | 1b 275 |
| Satol | 1．．．．．．．．．．．．．．．．．．．．．．oz | 40 |  |
| Salop | phen ．．．．．．．．．．．．．．．．oz | 160 |  |
| Sant | oninura ．．．．．．．．．．．．oz | 20 | lb 9.75 |
| Sapo | Castile Alb Contis ．．．lb | 16 | box 15． |
| ， | ＂＂Shell．．．．．lb | 12 | － 10 |
| $\checkmark$ | ＂Virgia．．．．lb | 12 | ＂ 10 |
| ＂ | 4 «：$\because$ cakes bor， | 50.7 |  |
| ＂ | ＊Mottled opt ．．． lb | 12 | box 11 |
| ＂ | ＂． 4 con．．．lb | 10 | ${ }^{\prime} 9$ |
| － | ＇${ }^{\text {a }}$ cakes gross | 475 |  |
|  | mollis ang．．．．．．．．．． $\mathrm{lb}^{\text {b }}$ | 10 | 20 lb 8 |
| ＂ | $\because \quad$ German Green．Ib | 35 |  |
| ＂ | ＂Green opt．．．．．lb | 55 |  |
| Scam | mmonia resin pulv．．．．．ib | 375 |  |
| Scop | karii cacunin ．．．．．．．．．．${ }^{\text {b }}$ | 25 |  |
| Sceal | le Cornut ．．．．．．．．．．lb | 75 |  |
| Sem | canary．．．．．．．．．．．．b | 6.2 | bag 6 |
| 12 | cardam ．．．．．．．．．．．．lb | 175 | 1.50 \＆ 1.25 |
| － | ．4 decort．．．．．． 16 | 101 |  |
| ＂ | ．pulf．．．．．．．．lb | 150 |  |
| ＂ | celery．．．．．．．．．．．． 1 lb | 25 |  |
|  | chenepodii．．．．．．．．．．${ }^{\text {lb }}$ | 25 |  |
| ＂ | colchici．．．．．．．．．．．．．b | 55 | pu＊จ． 65 |
|  | cydonim．．．．．．．．．．．．lb | 50 |  |
|  | cymini．．．．．．．．．．．．．．lb | 20 | pulv． 25 |
| ＂ | fonngrrecci．．．．．．．．．．．lb | 5 |  |
|  | hemp．．．．．．．．．．．．．．．．ib | 5 | ground 6 brl 5 <br> bas 43 |
|  | hyoscyam．．．．．．．．．．．．lb | 60 |  |
| ＂ | jambnl．．．．．．．．．．．．．oz | 15 |  |



6years in Canada and United States，and sales largely due to their merit．Often im－ itated．Costs you $\$ 8.00$ per dozen．We desire to establish and advertise local druggists as ！agents；quick sales and profit thus insured to such agencies．Get this advantage for yourself by writ－ ing to the solf manufacturers，EUREKA CHEMICAL CO，DETROIT．No duty to pay．

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## You are a Partner in it.

TWO or three years ago we made a new throat lozenge by putting some well-known drugs (wild cherry, liquorice, cubebs, tolu, etc.) together and compressing the mixture with sugar, named it "Frog in your Throat ? roc", the retail price a part of the name (\$7 a gross).
The jobbers wanted it before they knew it was good for anything ; and we never heard of a retail druggist dropping it. Evidently the name set it going ; but the lozenge itself is what keeps it going.

It is worth our while and yours to know how it succeeded so easily. May be well learn something from it. (1) the name was a good one ; (2) the package sold it ; (3) people who bought it wanted more ; for (4) it tasted good and cleared the voice; (5) it led to other good things; and (6) they helped one another. There are thousands of people who do not intend to be out of Frog in your Throat. The business is well established, and you are a partner in it.

What is the consequence? There are millions of headaches every day, and "Headache Stop roc', will stop them. About 3 a headache, no harm done, at a profit to retail druggists of $11 / 2 \mathrm{c}$ a headache No small business.

Another is "Easy Physic io"-German liquorice powder compressed and made agreeable$\$ 7$ a gross

We could not make them better foray amount of money, One of the things to learn is that 5 and oc bits of nickel and silver that people are glad to bring you are better than bars of gold that you can't get at. We practice what we preach.


HANCE BROTHERS \& WHITE
Pharmaceutical Chemists

## Suspensory Bandages <br> 



CAMDEN, NEW JERSEY, U.S.A.

## WRITE FOR PRICE LIST.

Our Goods are carried in stock by Lrman, Sons \& Co.


Prescribed by more than $25,00 J$ physicians during the present year:
It will sustain and nourish babies, children, inralids and aged people when all else fails.

Creates new and ritalized blood faster than any other food preparation in the world.
For overworked and insufficiently nourished people; over-taxed professional and laboring men.

Builds un the system after severe illuess when recovery is slow and the appetite poor.
Nursing mothers, teething infants and pung children thrive surprisingly by its use, a change for the better being perceptible often within 24 hours.

It is the only thing that will permanently cure nervous prostration, dyspepsia, cholera infantum and excessive irritability of the stomach from any cause.

Read the remarkable testimonial from Col. Fred. Grant, regarding the prolongation of his father's life by the use of Bovinine :
"During the last four months of his sickness, the principal food of my father, Gen. Grant, was Bovinine and milk - and it was the use of this incomparable food alone that enabled him to filish the second volume of his personal memoirs. October Ist, 1885.

Frfd. D. Grant." Send for pamphlet contanning testimonials from a large number of the leading physicians of the country.



## GREEN MOUNTAIN



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ADD. 1777.

## G. B. Kent 洷 Sons, London,

ESTABLISHED A. D. 1777.

are the manufacturers of the most durable 䶂nglish wire

for fair,


Shaving,



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Import orders of 12 dozen and upwards for Best Tooth Brushes, may bc.stamped gratis with the name and address of the retailer.

Tent's Brushes are for sale by all wholesale druggists and druggistsssundrymen in the $\Phi_{\text {ominion }}$.


[^0]:    ITYMENT，SONS \＆CO． Aェッ』ェロ。

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    Cor. Bleury \& Dorchester Streets.

[^2]:    

