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# Canadian Druggist 

Davoted to the interests of the Qenaral Drug Trade and to the Aduancement of Pharmacy.

## VOL. X.

TORONTO, DECEMBER, 」S98.
No. 12

## "APENTA"

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## Canadian Druggist

WILLIAM J. DYAS, PUBLISHER.

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New advertisement, or chanses to be addreswed
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## CONTIENTS.

Emorial.
Give Them Vour Aid.
Ontario College of Phamacy-Junior Examin-ations- (juentuons given at the liaminations. British Columbia Pharmacentical Association
A Ready llelper.
Corkbsponnence.
Synopsis of B.1. Prepanations.
The Divisional Committec Circular.
Pharmacy in Enghand.
Pharmacy Students' Association.
Syllabus ol Materia Medica.
Calcium Itydride.
Tkade Notes.
Nova Scotia Notes.
British Columbia Note,
Montreal Notes.
Prescriptions.
Points on the Preservation of Aromatic Waters.
l'uduct furmed in Koasting Coffec.
The Care and Control of Prescriptions.
Dose Table
The Study of Powdered Drug.
The Drug Trade in Fiance.
Moistening lowders for leesolation.
Pbactical. Jinis os Abertmint,
Formulakr.
Provoriraluic Noies.
Oftical. Departuent.
Aequired Hypermetrodia.
Amongst Ouk adveritisens.
books inis Mabiaznks.
Drug Rarorts.

## Give Them Your Ald.

We have endeavored to find the opinion of druggists generally in reference to the desire expressed by the commercial committee of the Council of the O.C.P. to have them yeld theirprivilege of taking the rebate of $\$ 2$ in their ammal fee, in order to apply the addutomal sum raised in furthering the organizing of the plan pro. posed by the committec, and find that upon this point alone is there any besitation on the part of drugeists, some sceming to think that if they once yield the privilege it will not again be restored. There is a very general desire on the part of the trade to see the Council take some steps to improve matters commercial and legishative if they can, but, unfortunately, when that desire has to be backed by dollars and cents, the weak kneed ones fail to stand the test.

To those who have any fear that if they once gield the privilege of rebate it will be denied them in future, should the present proposed plan fail, we beg to express the assurance that no such thought is entertaned by the Council, and that all that is asked is a fair trial of the plan which the committec has proposed. The committee undoubtedly need the sum which they have asked for in order to carry out their projected programme. There can be no definite assurance given that their plans will succeed, but they must sadly fail if they cannot return a benefit to each druggist vastly in excess of the two dollars which each one is asked to contribute. The majority of the druggists are anxious to let this committee see what it can do, and, as this is the only hope which the druggists now have of getting sone active organization to labor on their behalf, we trust all will be generous enough to sup. port it as requested.
iVe wish all our readers a happy and prosperous New Year.

Ontarlo College of Pharmacy.

## IUnIor Examinations.

At the recent junior examinations of the Ontario College of Pharmacy, held November 29 th and December 7 th to roth, inclusive, one hundred and twentythree candidates presented themselves, of which number one hundred and eight secured the desired percentages, and will be permitted to enter the senior term. which commences on January 5 th, 1899.

The attendance at the junior term, just terminated, is the largest within the history of the O.C.P., one hundred and twenty.six names having been registered, including one student from Armenia.

The high standing of George A. Evans is worthy of mention, inasmuch as he ranks highest in all subjects but one, and leads the entire class, at the head of the First Class Honors List.

The official report on the results of the examination follows :

First Class Honors, in order of merit: Evans, George A., Brooks, W. R , Colpe, George G., Barion, R. J., Thomas, Philip S., Wismer, W. E., Brownlee, T. A., Coleman, W. A.

Second Class Honors, in order of merit: Meek, V. W., lemon, F. A., Weaver, Chas., Whatmough, G., Newton, C. H. W., Morrison, P. G., Lever, John A., Skinner, R. S., Sawdon, John, (Crouch, J. H., and McIver, A. R, xq.), McDuffee, R., Dunsmoor, E. J., McFarlane, M. R., Edy, H. E., Browne, J. E., Coad, P. H., Rowan, Albert, Copeland, Clayton, (Berkell, A., and Edmunds, $H$. W., æq.), R aadhouse, H., Christmas, J. D., McNeilley, James, Ebbels, Ernest L., Capell, Thomas, Tweedale, T. B. S., (Tole, W. C., and Sieveright, F. W., we.), Willoughby, L. A., Broughton, J., (Maynard, W., and Ralpt, A. J., aeq.), White, J. W., (Duncan, Albert, and Webb, Frank H, æq.), Adams, C. T., (Sanderson, W. S., and Bond, E. H., req.), Lutz, Frank H., Brown, George $L$.

## PASS I.IST, AIIPHADETICALIN ARSANGED.

Abercrombic, J. H., Archambault, Jas. A., Brown, R. H., Cairns, J. W., Cameron, W. R., Capbert, Earnest, Carroll, I. J., Cawker, E. M., Clemens, Horace A., Collier, Herb. B., Connell, Alfred, Connolly, Chas. V., Forrest, Byron, Forrest, R. O., Frost, W. A., Garrow, Frank, Hacking, C. B., Halpin, Geo. H., Hannah, R. B., Harvey, L. R., Henderson, D. T., Hogg, W. J. A., Houghton, F. L.,

Kelly, Jas. J., Ker, R. T. A., Lankdon, J. M., Leger, Rednund, Leitch, Thos. J., L.ogan, A. J., Mathews, Geo. ML., Miller, Alex. C., Mitchell: J. H., Mutrie, W. H., MacArthur, H., MacCrostie, J. D., McDermid, J. W., McIntyre, R., McKenzie, A. J., Potter, Ed. N., Ramshaw, C. A., I.eilley, George, Ripley, Angus B., Robiuson, Ben. H, Rejibian, N. H., Sandersnn, H., Spiers, De Will, Spencer, N. St. V., Taylor, J. D., Thomas, W., Towler, P. Brooke, Tyson, A J., Waldon, Albert H., Warren, W. A., Watson, T. G., Webb, J. Frank, Wodchouse, Gcorge A., Worts, Daniel C., Wright, L. A., Young, H. S.

## STARRED IN SUBJECTS.

L.atin Posology; etc.- Yeomans, H. E., Garrow, David, Thomson, A. C., Dickson, E. A., Eldridge, H., Normain, 쿠. H. Pharmacy-Neilson, J. L.
Chemistry-Garrow, David.
Granted-AEgrotat with Pass Slanding, one candidate-livingstone, Wm .

HIGHEST IN SUBJECTS.
Pharmacy-Colpe, George G., Evans, George A., Newton, C. H. W.

Latin Posology, etc.-Evans, George A., Brooks, W. R.; Dunsmoor, E. J., all equal.

Botany-Evans, George A., Brooks, W. R., Coleman, IV. A.

Chemistry-Evans, George $\lambda$., Barton, R. J., Colpe, George G.

The supplementary examinations for those who failed or were starred at this examination will be held in January, 1899.

January 3rd, 9.30 a.m., Chemistry. and at 2 p.m., Botany.

January 4 th, 9.30 a.m., Latin and Yosology, and at 2 p.m., Pharmacy.

## Ontario College of Pharmacy.

FIFTY-SINTH SEMIGANNUAL ERAMINATIONS.
The following candidates passed in all subjects: Armitage, W. A., Brantford ; Miller, A. W., Ingersoll ; Wigle, E. R., Wiarton.

The following passed now and on previous occasions: Brethour, G. F., Ottawa; Cameron, W. L., Norwood; Collins, C. P., Princrton ; Craig, F. G., Outawa; Glassiord, E. R., Owen Sound; Haines, E. C. Owen Sound; Hewgill, W. H., Moosomin, N.W.T.; Yeffs, F. W., Havelock; Kelso, D. A., Toronto ; Scott, W. N., Bradford ; Snider, I. A., Guelph; Stewart, J. A., Ailsa Craig; Summerfeldt, W. H. C., Toronto.

The following passed in four subjects Rennie, O. E., Walkerton ; Whitton, R. A., Oltawa.

## Formula Wanted.

E. D. asks for a formula for Mist. Ferri Salicylat. Can any of our reader. furnish it?

An American syndicate has purchased five acres of iand at Thorold, Ont., and propose commencing the erection at nace of extensive buildings for the manufac ture or caustic soda and bleaching powder. They intend using Goderich salt in the manufacture of these articles, and propose to have an output of at least one hundred tons per day.

## The British Columbia Pharmaceutleal Association.

The president of the B.C.P.A. bad cause for congratulation when he met the members of the council in Victoria on the 8 th of December. There was a good attendance, the best for a long time, and everything passed off harmuniously. There were present Messrs. Sulherland, Scymor and Alkins, from Vancouver, D. S. Curtis, from New Westminster ; and Cochrane, Chadwick and Hiscocks, from Victoria.

One of the most important communications was from the council of the O.C.P. agreeing to reciprocity of diplomas providing the holder had not failed to pass the O.C.P. matriculation examina. tion. This is a move in the right direc. tion, and, it is hoped, is but the beginning of a much to be desired Dominion_diploma.

A move is in contemplation to amend the by law relating to examinations so that when a candidate has passed in three or more subjects he will not be required to take those subjects again in the event of his failing in others.

The council very wisely deciced that it is time to have something definite as to the adoption of the B.1'. '98 and have written the Medical Council of B.C. asking when the medical profession desire to have it adopted. The reply will be looked for with interest.

## A Ready Helper.

On pages 276 and 277 of this issue will be found a dose table of preparations of the British Pharmacopcia, 1S98, which has been specially prepared for The Canadian Druggist.


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| (Essence of Beel) | 5 ounce, | " | " |  |  | 4.50 |
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Pharmaceutical students will readily recognize its value as an aid to their course of study.

What may appear to be an error on the part of the compiler will be seen in the dose of lig. strychnine hydr. 'This is due to crrors in the B.1., as will be seen by comparing pages 495 and 488 . It would be advisable to erase liq. strychmina bydi from the table where it appears under the dose of 5 to 10 minims.

## Correspondence.

The editor does not hold himself responailite for the opinions of correspondents.
Correspondenis must in all cases send name and address. not necesarity for publication.

## Synopsls of B. P. Preparations.

Toithe Eujiot of Canadian Druggist:
Dear Sir,-Will you kindly permit me to respond through your colimms to the numerous inquiries for the new edition of Synopsis of B. P. Preparations, that the matter is in the printer's hands, and will probutury be completed on or about January ${ }^{15}$ th, 1890 . The work is being revised to correspond with the recent edition of B. P., and is being considerably enlarged. Thanking you, I am,

> Yours truly, Chas. F. Iieebner.

Toronto, Dec. $17 \mathrm{ith}, 1898$.

The Divisional Committen Circular.

Editor of Tile Canadian Druggist:
Sir,-Since the issue of Circular No. 4 of Divisional Committee, there seems to be somewhat of a misunderstanding as to what is meant by the $\$ 4$ fee. Would you permit me to say that the question is not merely " Are the druggists willing to have the fee raised to $\$ 4$ ?" Tlie Council have that power now to collect $\$$, in fact they do collect it, but under certain conditions they give a rebate of $\$ 2$. But the ques. tion is, " would the druggists be satisfied to receive $n o$ rebate and have a portion of tha: money used for such work as the Divisional Committee would undertake, viz., Commercial interest as well as Educational? or do you think, Mr. Editor, the druggists will prefer to give their surplus (either from $\$ 2$ or $\$ 4$ ) towards an-
other larger college-an addition to the present college-a sinking fund for insurance purposes, or for increased expenditures of present undertakings?

Now this is really what the Council erquire of the Divisional Committee, "Whetter the druggists will favor expenditure towards Commercial, mingled with Educational, advancement, or simply Educational?"

We have received a large number of replies and inquiries alreads, but there are still a large number who are yet holding their posi cards sent them for their reply. We would be giad to hear from these men at once. It is for their good as well as ours.

Thanking you, Mr. Editor, for space, iselieve me,

## Yours truly,

J. M. Hargreaves.

Paislcy, Nov. 18 th, $\mathrm{IS}_{9} 8$.

## Ontarlo College of Pharmacy.

Senior Examinations.
The following are the questions given at the semi-annual examinations, December, 1898 :

> MATERIA MEDICA.
> Examiner-D. S. SACEK.
> Time allowed, Two Hours.
t. Buchu,-(a) Nraw a diagram of the leaf. (b) Mention the different varieties. (c) Give the constituents and specify the active principle. (d) Mention five drugs, official or non-official, containing a principle analogous to that of the most important one in Buchu. (c) Mention any other one leaf of the B.P. which might be mistaken for Buchu, and state briefly how you would differentiate them. (/) Habitat. ( $g$ ) Prepar ations.
2. Mention (a) all the animal products of the B.P. (b) Habitat of each. Men. tion five drugs of the B.P. which coniain a large percentage of starch. Give the habitat of these drugs.
3. Squills.-Give (a) part used. (i) Habitat. (c) Constituents, and state active principle. (d) Are any precautions necessary in keeping the powdered drug? If so, what? (c) Preparations.
4. Licorice.-Give (a) constituents, and specify the active principle. (b) Habitat. (c) Preparations.

Extract of Licorice.-State the average anount of extract obtained from the root. What are the adulterations of the extract, and how would you cietect them?
5. Differentiate in any way you wish, microscopically or otherwise, between :
(a) Powd. Benzuin from Powd. Resin.
(b) L.jcopodum from Sublined Sul phur.
(d) Celaceum from Puatinin Wax.
(d) ! (uassia from Sonn bark.
(e) Powd. Trugncanth from Sugar of Milk.
(/) Powd. Myrrh from Powd. Cin choma.
(s) Powd. Gamboge from Powd. 'Turmeric.
(h) Powd. Rhubarb from Insect Powder.
(i) Powd. Gentian from Powd. Galls.
(i) Powd. Calumba from Poud. Ip ccacuanha.
6. Semma.-(a) Draw a diagram of the lenf. (b) Mention the constituents and specify the active principle. (c) is the aclive principle found in any other drus or drugs ? If so, state them. (d) What are the most likely adulterations of Sema Leaves? (c) Ilabitat of Semn. (/) Prep. arations.
7. Oits.-Fixed and Volatile.-(a) Gre the essental difference between Fixed Volatite Oils. (b) State the principal constitueuts of each class. (i) Mention all the fixed olls of the B.P. (d) Cive the adulterations, mpurities or deteriona. tions which occur in (e) Oil Lemon. (f) Oil Peppermin. ( $\xi$ ) How would you detect them?
8. Rhubarb.-Guse (i) constituents, and specify the active princuple. (b) Ihabi tai. (c) Principal varieties of root. (d) Microscopically, how woukd you differen tiate lowdeted Rhularb from Powdered Gamboge? (e) Are any precautions necessary in keepins Rhnbarb? li so. what? ( $/$ ) Preparations.

9 and so Oral Examinations.
Value.-10, $8,7,10,15,10,10,10,20$.

## DISPENTING.

Examimer-W. Mt xowtsey
Time Al:, wed, Three Hours.
luos Gordos.
R Plumbi acetatis. . . . gr. in
Acidi tanmei..... .. ... gr. i.
Ol. Heobrom, qi ut fiat suppos. mitte ires.
Statim utend. et repet. ut ne cesse sut.
W. Lake.

B Emp. plumbr $\ldots \ldots$; $x$ in. Part. dolent applicand.

| Rutil Dean． <br> B Sod．salicylat．．．．．．．．．．．．$\overline{\text { si}}$ ． |  |
| :---: | :---: |
| Quin．sulph．．．．．．．．．．gr．x． |  |
|  | Liq．ferri perchlor．．．．．．． 3 3j． |
| Mucil，acacie．．．．．．．．．．． 3 it． <br> Anure $\qquad$ ad．$\tilde{z}^{\mathrm{z}} \mathrm{i}$ ． |  |
|  |  |
| M．ft．mist．Cap．Coch．mod． q．4．quart hora． |  |
| J．Oliver． |  |
| 13 Camphora．．．．．．．．．．．．gr．vi． |  |
|  | Quin．sulph．．．．．．．．．．．．gr |
|  | Ext．bellad．．．．．．．．．．．．gr．iii． |
| fl．pil．vi． |  |
| R．Bonn． <br> I3 Ac．chrysophan．．．．．．．．gr．xs． |  |
|  |  |
| Ext．bellad $\qquad$ gr．$x$. Vaselini $\qquad$亏̄i． |  |
|  |  |
| M．ft．ung．m．d．utend． |  |
| Values－20，20，20，20， 20. |  |
| prescriptions |  |
|  |  |
|  |  |

1．Give the full B．P．tule for each of the following，together with mmmum and maximum doses：（a）grey powder， （b）lithia water，（c）sugar of lead，（d）salt of tartar，（e）liquor sarse，（f）black draught，（ $g$ ）Rochelle salt，（ $/$ ）Blanch－ ard＇s pills，（i）Griffilh＇s mixture，（ $j$ ） Friar＇s balsam．

2．Name and describe any incompati－ bilities in the following prescriptions：
（a） B

M．Fiat solutio．
（b） H
Hydrarg．chlor．corros gr．vi．
Kali iod．．．．．．．．．．．．．．．．． 3 i．
Quin．mur．．．．．．． 3 ii.
Strych．sulph ．．．gr．ii．
Tinc．gent．co．．．．．．．．．．．$\quad 3 i$.
Aquee q．s．ad ．．．．jviii．
M．S．A．
（c） R
Tr．ferri mur．．．．．．．．．．．．． 3 3ii．
Sodii salicyl．．．．．．．．．．．．． 3iv．
Glycerin．．．．．．．．．．．．．
Aq．ad．．．．．．．．．．．．．．．．．．．．．．．iii．
M．Fiat Mistura．
（d） 13
Strych．sulph．．．．．．．．．gr．in．
Potas．bronn．．．．．．．．．．．．．$\overline{\text { in }}$ ．
Syrupi．．．．．．．．．．．．．．．．．．${ }_{3}$ i．
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M．

## （c） 13

Bismuthi subnit．．．．．．．． 3 ii．
Sodii bicarb．．．．．．．．．．．．．． 3 i
Mucil．acaciae q．s．
M．Div．in pil．No．xxiv．
3．Translate the following：
1．Into English．
（a）Viginti unus，（b）In clavo pro re nata pingendo，（c）Macera per horam in vase leviter clauso，et cola，（d）post prandium，（c）Su－ mat unam，sextis horis donec commode purgelur．
2．Into Latin．
（a）Mix，make a powder and of such， send seven．
（b）One ounce of extract of colo． cynth，（c）From day to day，（d） Take one teaspoonful in a little water，（e）Take one pill when pain is severe．
4．Describe the process jou would tol－ low in making 30 pills from each of the following：
（a） 30 grains of carbolic acid．
（b） 60 grains of pot．perman．
5．R．Cocain mur． $10 \%$ sol ．．．． 3 i． Sat．sol．boric acid．．．．．．亏̄iv． Aq．destil．ad．．．．．．．．．．．．亏̄viii．
M．Sig．Use in a hypodeunic sytinge．
What quamities of cocain mur．and boric acid would you dispense？Explain how you would fill this prescription．
6．Translate the following into English， expressing the quantities in the Metric system：
Recipe－
Olei Ricini．unciam et semissem．
Tinctura Opii．drachmam semissem： Pulveris Acacia．
Sacchari ana drachmas duas．
Aqua Menthx piperitx uncias quatuor．
Acaciam et Saccharum crmp paululo．
Aque Menthe piperite tere；dein oleum adjice，et iterum tere，denique aquam relıquam paulatim infunde et omnia misce．
Signa－Cochlear unum statim sume et horis duabus repetenda si npus sit．

7，8， 9 and io．Oral．
Values：10，10，10，10，10，10， 40.
CHEMISTRS：
Examinct－Franklin T．Harrisos．
Time Allowed，Two Hours．
1．What is percolation？Describe carefully the operation of packing a per－ colator Give methods for recovery of menstruum．

2．Discuss the relative advantages of mercury and spirit thermometers．Con－ vert the following：
$-10^{\circ}$ Centigrade into degrees Fahren－ hett．
$-40^{\circ}$ Centigrade into degrees Fahren－ heit．
$-3^{\circ}$ Fahrenheit into degrees Centi－ grade．
－ $4^{\circ}$ Fahrenheit into degrees Centi－ grade．
3．Describe accurately the preparation of the following，giving reasons for any special manipuhation：Syrup of iodide of iron，strong solution of per－ chloride of iron，aromatic spirit of am－ monia．

4．Name the ingredients in the follow． ing preparations：Jincture of kino，resin ointment，liniment of camphor，limment of chloroform，Gregory＇s powder，black draught，resin plaster．

5．Name the active ingredients and strength of the following preparations： Fowler＇s solution，Donavan＇s solution， spirit of ether，spirit of camphor，wine of quinine，paregoric，tincture oi iodine．

6．Name the common constituents of drugs which are extracted by（a）rectified spirit ；（b）cold water．

7．Define the following terms：Crys talline amorphous，dimorphous，poly－ morphous，isomorphous，mother liquor， water of crystallization．

8．Aeetic Acil．－From what and how is it prepared？What are ordinary impuri－ thes，and how detected？Give strengths of the official acids．

9 and io．Oral，and recognition of specimens．

Values－10，7，12，12，12，8，7，12， 20.

## CHEMISTRI：

Examinem－Pall l．Scott． Time Allowed，Tuo ilours．
1．Write a brief accoum of the chem istry ot chlorine．
（ 2 ）Define＂Latent Heat＂and account for the occurrence of the phenomenon． Define＂Specific Heat＂and state why the specific heat of an element is of im． portance in determining its atomic weight．

3．Complete the following equations： $2 \mathrm{NHI}_{4} \mathrm{Cl}+\mathrm{Ca}(\mathrm{OH})$ ，（upon heating）$=$ $\mathrm{Fe}_{2} \mathrm{Cl}_{0}+\mathrm{H}, \mathrm{S}=$
$\mathrm{Na}, \mathrm{CO}_{3}+\mathrm{CO}_{2}+\mathrm{H}_{2} \mathrm{O}=$
$6 \mathrm{KOH}+3 \mathrm{~T}_{2}$
$\mathrm{SO}_{2}+\mathrm{H}_{2} \mathrm{O}+\mathrm{NO}_{2}=$
$2 \mathrm{KMnO}_{4}+10 \mathrm{FeSO}_{4}+\mathrm{SH}_{2} \mathrm{SO}_{4}=$
4．Sodium hypophosphite was pre－ pared by the action of hot solution of soda upon phosphorus．The volume of phos－ phine gas liberated was 5 litres，measured


Manufactured only by

## OOTEIN

 MRATRI』OIR \& OQ. TOIEOINTO
## Abbey's Effervescent Salt Reaches the Consumer Through the Retail Druggist Only

## WHATTHE DRUGGIST WANTS.

when he buys pills, is pills that give results. He canmot afford to risk his reputation hy dispencing pills that are insoluble, no matter if they can be ctushed mader the pressure of the thumb. l'eople do not carry around a board and ham:tier, or even a thumb, in their stomachs, wilh which to apply the necessary pressure. Therefore pills must lie soluble -no: " mashabie"-or they pass through the alimentary canal intact, and do not give results.

STEARNS' PILLS ARE SOLUBLE, and we know it, therefore we do not object to companative tests. We hold that neat to the actual clinical test there is no fairer one than that of soluhility, and we are willing to put our pille, old or new, against anybody's on that score. We have been making pills about half a century, and the testimony of the thousands of drageists who have sold our pills during that time, is that they never handled more satisfactory goods.

STEARNS' PILLS GIVE RESULTS, and are as good as moncy and skill can make them. That is one teason why it is to the druggise's intercst to buy them ; these is another reason, hardy less potent-the price. When it comes to pill prieces we are the peopic for the druggist to see, and if we cant interest him, it will be a wonler.

## 类

ASK US ABOUT THOSE PILL PRICES BEFORE YOU FORGET IT. ....

## 然

## Frederick Stearns \& $\mathbf{8} \mathbf{G o}$.

MANUFACTURING PHARMACISTS
WINDSOR, - Ont.
DETHOIT, MICII. J.ONDON, ENG. NEW צORK CITY
at $30^{\circ} \mathrm{C}$. under a pressure of $750^{\mathrm{m}}$ " How much phosphorus was used?
 + Pll:
(Alomic wi. of phosphorus 31 .)
5. Show by equations the action of (a) hydrochloric acid and (b) sulphuric acod upon ethyl aicohol. Cise the graphic formula of ethyl alcohol and of the aldehyde and acid it yields upon oxidation.
6. Describe briefly Marsh's (hydrogen) test for arsenic, explaining the nature of the reactions which occur.
i. Give a method for the preparation of magnesium carbonate, of potassium cyanide and of hydrogen peroxide. Why is ozone a more active oxidizing agent than urdinary oxygen?
S. Give a method for the detection of the acids in a solution of:
(a) Sulphates and nitrates.
(b) Sulphites and citrates.

- And of the bases in a solution of:
(c) Salts of iron and copper.
(d) Salts of lead and silver.

The following may be substituted for any one of the above questions:

A certain solution of hydrogen peroxide contains 3 per cent. by weight of the anhydrous peroxide ( $H, O_{2}$ ). Another solution of the same substance yields 15 volumes of available oxygen (at standard temperature and pressure). Compare the strength of the tru solutions, assuming both to have the same specific gravity as water.
$\left(=\mathrm{H}=\mathrm{O}_{s}-21 \mathrm{O}+\mathrm{O}.\right)$.
9 and io. Oral examinations.
Values- $12, S, 12,10,10,10, S, 10$, 20.

$$
\begin{aligned}
& \text { נ:OThiv: }
\end{aligned}
$$

$$
\begin{aligned}
& \text { Time Allonet, Two llours. }
\end{aligned}
$$

8. (a) What are the pecridophyta?
(d) Describe mode of reproduction.
9. Chlorophyll.-Explain fully its uses and properties.
10. What are buds? Enumerate and define the different kinds of buds.
11. What is a rruit? Classify and ex. phain.
12. Define the terms: (a) Species (b) phyllotaxy, (c) perianth, (d) stolon, (c) dicécious.
13. What is inflorescence? (a) Explain the different kinds, (o) describe corymb, umbel, raceme.
14. Finumerate fully all the differences between exogens and endogens.
S. Describe a plant cell.

Values-io, 10, 10, 10, :0, 10, 10, 10.

## Pharmacy in England.

Urotropine - Terpentess Essential Oits Headache Remedies bifervescing Sulphate of Solium - Kodak Limited - Chloride of Rithyl for l.ecal Aneesthesia.

One of the latest new remedies that is receiving some degree of popularity is urotropine, a compound of formaldehyde and ammonia, patented by Schering. It was introduced first as a unc acte sol vent and substitute for the expensive piperazine, it being chamed that it speedily dissolved all concretions, besides exerting a ciuretic action. lbut lately it has been discovered most useful in cystitis and purulent urine, clearing the bus from the urine no doubr, because in the system the formaldehyde exerts its antiseptic properties. Chemical!y urotropine is bexamethylene-tramme, and aldough the phonctic approximation in atsopine has already troubled the soul of one of our leading pharmacists, it is no doubt more conventent than tis chemical name. It occurs in small colorless crystals or crystalline powder, easily soluble in water, less soluble in alcohol, and almost insoluble in ether. It is unquestionably an ineresung compound, and the manulacturers have not fixed a prohibuture price, whilst they supply it in table: format a nommal increase on the ordimay price. The dose is 3 to 15 srains, the tablets being $7^{i}=$ grains cach.

Some time ago I drew altemion in these columms to Heinrich liacnsel's Terpeneless lissential olls, although 1 was not able to speak very favorality about the only specimen I had then examined. The number of oils prepared by a special process, which is Herr Haensel's secrel, and only briefly cescrib. ed as consisting of the combined oxygenated constituents of the natural sil, now ancumts to nearly thitty. Some of these are of undoubted utility. lispecially in the manufacture of soluble essences for acrated waters, liqueurs, and cordials. Curiously enough the terpeneless oils are more soluble in the diluted alcohol than the oruginal oils, and consequently stronger preparations are produced. This is largely balanced by the considerable increase in the cost. Thus in the case of terpeneless oil of bay, the increased strength clained for $1 t$ is only four times that of the commeremal oil, and the price more than four times as dear. On the other hand terpeneless lemon oil
is chamed to be thaty thates as concentrated, and the resull is not so bad. Amongst the orls that produce good re sults can also be intheded calamis oil, where sue and a half drachms sutite to flavor twenty two gallons of liqueur. The oil of orange is so powerful that it is clamed that five mmms will flavor one gallon of syrup, If it is permitted to hazard a guess as to the method of produciag terpeneless oils, the most probable method is distillation of the purest commercial specimens under reduced peessure, and remoral of all valucless stearoptenes by subsequemt freezing.

Chloride of Ethyl is being extensively used for the purpose of producing local anesthesia since the glass tubes were in roduced, by means of which the heat of the hand alone is sumiciem to cject a fine spray on temoving the cap. The liquid is of light specific gravity, bike ether, and produces its effect by reason of the cold resulting from its rapid evaporation. The spray is directed to the part repuiring to be ancesthelised, holding the tube some six or eight inches off, and aiding the exaporation by gently blowing At tirs: a pink patch is produced, quackly followed by at white place, which denotes that the part is aniestheused. This usu ally only lakes about 201030 scconds. and passes off in a couple of munutes, baving a reddish spot with a slight ting ling behind. It has been found ty one observer that the acmperature beneath the skin san be reduced to to" below zero, but the advantages claimed is that no ill effec: is produced upon ussues. leven if the surface is tender or exposed the pain can be obviated hy smearing the pare wht vascline and then applying the spray. More painful parts still or decperseated structures can be reached by first applying a compress dipped in $\leq$ per ccat. cocaine solution, and when the surface is thus locally anicithetised tie spray freely applied. It has proved most successlul in removing adenoids or small pustules, or when squeczing the pustules of acne, in operations for ingrowing toe nals, ctc., and minor operations nenerally. It was fonmerly recommended for dental exine tions, but certain precautions must be
observed. For instance, if care be not taken, it will produce similar results to those of chloroform or ether, should it be inhaled. Again, the adjacent healthy teeth must be protected, and the spray only directed to the base of the tooth. It has also been successfully employed in veterinary practice. Chloride of Ethyl is inflammable, and when burning gives rise to hydrochloric acid, which is very irritatung.
Headache powders are quite a house. hold remedy now, and for this we have to thank acetanilide. The most successful formula is composed of jo per cent. acetanilide, 20 per cent. of sodium bicarbonate, and to per cent. of caffeine citrate, and is really very efticacious. The directions usually require the pateent to rest in a recumbent position for sone time after taking the medicine, and this is no mean factor in the treatment of the nervous form of headache so often met with. The powders are sold as low as = cents each, but these are usually acelanilide alone in about 7 grain doses. A more elegant and slightly more expensive form is to dispense the remedy in cachets upon which is stamped in color the title, headache cure, and the name of the chemist. In any case, they should be neatly boxed and labelled. A small circular should accompany the remedy, and attention drawn to the varieties of headache, other than nervous, such as neural. gic, when a neuralgia mixture of bromide of quinine and tincture of gelsemium could be recommended in addition to the powders. Compressed tablets are not so satisfactory for this purpose as powders and cachets, as they make so small a package.
The succesfful flotation of Kodak, limited, with the enormous capital of $\mathcal{L}^{\mathrm{L}}, 600,000$. $(\$ \mathrm{~S}, 000,000$ ) is a proof of the sound condition of the trade of photography, especially that part which caters for amateurs. With considerable business acumen and foresight an early copy of the prospectus was sent to the trade customers of the Eastman Photographic Materials Company, and, although authority to offer a preferential allotment was specially disclaimed, it was intimated that if a special form were filled up the board would do their best to procure preferential aliotment. And this was duly carried out, many of the dealers taking the opportunity of securing small interest in the goods which they sell other than as mere retailers, This has
been found to be the soundest policy as was clearly shown in the case of Bass $\mathbb{N}$ Co., where shares were judiciously distributed first among the trade and afterwards the investing public. Whereas a good deal of the want of success in Alliopy's has been attributed to the reverse condition having been allowed to happen. Kodak Limited, comprises all the English, Cerman and French Eastman Companies and fully ninety five per cemt. of the shares of the American Eastman Kodak Co., and the net profits for ${ }^{1597}$ were $\$ 926,000$ and the first six months of $\mathrm{iSg}_{\mathrm{S}}$ show an increase of twenty-seven and a half per cent. upon these receipts.

Since the introduction of Kutmow's effervescing salt, there has been some demand for a palatable effervescing sulphate of soda, and there is, no doubt, plenty of scope for such a preparation. The pharmacopocial article is not sufficiently sweet, but with the addition of sugar a preparation is obtained that is most suitable as a laxative and can be taken even on an empty stomach by the most fastidious. Glauber's salt is the active ingredient in several natural aperient waters and is not so bitter as Epsom salts, whilst its action is less griping. The latest and best form of granular preparation is not in the usual bold granules, but a small crystalline powder obtained by rubbing the granules, whilst still damp, through suitable sieves. The advantage claimed is that effervescence is brisker and not too sustained, which is often the case with large granules as they are not attacked by the water quick enough. Consequently the customer is apt to either wait until effervescence is nearly over or gets some of the granules in the mouth.
Competition in the drug trade bids fair to become even more keen in 1899 . Already new departures are being arranged and scope extended. Ferris \& Co., have appointed a traveller in the West Indies. whe, besides covering that large field and cultivating trade with South America, is to hold stuck of their goods in Kingston, Jamaica. lyush \& Co. have opened depots, or arranged for them, in Calcutta. Cape Town, Buenos Ayres, Rio de Janciro, etc. Horner \& Sons have fresh agencies in India, and contemplate a depot in Melbourne or Syd́ncy. Hewlett \& Sons have. appointed an Australian representative; Burgoyne $\mathbb{S}$ Co. are sending a fresh man in Soutn Africa. and Evans \& Corare
pushing their Canadian business as a depot for English specialties. So far I have not heard of any arrangement for China, but when the open door is fixed something may be done, in the meantime it is evident that the enterprise of the manufacturers in the home country is not on the wane, and that they are determined to push business all over the world.

## Pharmacy Students' Assoclation.

The Pharmacy Students' Association oi the Montreal College of Pharmacy have elected the following ofticers for the term : President, H. Guerin ; Vice-President, J. Bisaillon; Secretary, J. Bourbonniere; Treasurer, A. Dastous; Committee, Mess. F. Leduc, I'. Leduc and W. Dubois.

## Syllabus of Materla Medica.

Revised in accordance with the 13 . Pr, 1SyS. This pocket reference book, revised by W. Martindale, F.L.S., F.C.S . joint author of "The Extra Pharmacopoia," is in accordance with the plan of the originators, Drs. Harvey and Davildson, and has been now made to meet the requirenems of the new Pharmacopocia.
This work has been used by students at University College, London, and is a valuable aid in concise form. The well. known ability of the revisor ensures the accuracy and thoroughness of the work. It is published at one shilling by $\mathrm{H} . \mathrm{K}$. Lewis, 136 Gower St., London, W. C.; Carveth \& Co., Toronto.

## Calcium Hydride.

Calcuum hydride is prepared by Moissan by heating pure, crystallized calcium with hydrogen in a tube, under pressure. At a dull sed heat calcium burns in a hydrogen atmosphere with the formation of a white substance of the composition $\mathrm{CaH}_{2}:$ In operating with 1 to 2 gm . of calcium, the reaction may be performed in a glass tube. Calcium hydride is a white mass of the specific gravity $1.7^{-}$ stable at $600^{\circ} \mathrm{C}$. in vacuo, not changed in an atmosphere of chlorine in the cold, but burning in it an elevated temperature with a bright flame, forming calcium chloride. With bromine and jodine the reaction is still more violent.-Ch. Centralhi.

Acetol, a remedy for toothache, is -made with acetic acid S.q6, alum 307. and water $S 8.5$ per cent. Sage, peppermint and clove oils are used in flavoring.

## SMITH'S

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Extract from Prof. Heebner's Report.
" Your haby Foon has a pecular characternete dige rublulity, not in the least mmaturally easy of ducedon. but stmply suted to the functions of thie chatd, and, therefote, entited to the highest rank."

Certificate frum a New York Lady. New Vork Cily, Uet. 29. isos.

Dear $\mathrm{S}_{\mathrm{gr}}-\mathrm{It}$ is with a sieat deal of pleasur that I tespund to your refpest for a few words concernmg the ments of your bahy Food last summes nothag 1 tried seemed to agice with my limbe one lle hat wasted away thl be was mat much better than a skeletun. and I seemed of be able to do nothans to help him. A frend of mine
 great suceese, recommended it to me. and ise solved to try :t, though I had used so many differ. eat kinds, with no succen, that t lelt vers litule comaidence in it. But from the moment 1 legan
 he is su bre and get that he tooks twice lus ape. Sour towid, whinut doubt, saved my labis's hite, nual 1 gladly recommend it others, atid lecl $2 \times 1$ not eila geopic will only give 11 a wial they will te more than satisfied with the results.
rers muly yous.
MRS. I. CHAMMERS.
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Try TRIANGLR FOOD when all other INFANT FOODS have failed

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## SELTING AGENTS FOR CANADA-

## Archdale Wilson \& Co., = Hamilton

## ANTISEPTIC THROAT PASTILLES

Prepared in accordance with the formula of DR. BARK, of the Laverpool Hospital for Diseases of the Throat, Nose and Ear
 An Infallible preventive of Diphtherja and other coniag'ous diseaces of the Thioat. A Physician states that the Jatoxysms of Whooping Cuagh tiay be prevented hy guring one of the Pastilles upon tetiting for the night, thus producing abiolute rest, both to the Patient and in the houschold Directions for Uso. - Allow the l'astalle to gradually dissolve in the mouth. Flaids should tut be tahen inmediately afterwarts Dose. -From 5 to 10 l'astilles per day, between meals, chiefly in themoming and evening. TO nit kirt akr
Er These Pastilles, which were brought out for the benefit of the Liverposi Hospial for Diseases of the Throat. Nose and Ear. have have already met with a very latge sale, both a: home and abroad. owing to their intrinsic merit The procedsfrom the sale are largely devoied to the funds of that institution.

None genume uniess bearing a label with the above Trade Mask and name withe whe promiriots.

## —__ SOLE PROPRIETORS

## 

37-41 St. Jean Baptiste St., Kontreal. 23 Front St. W., Toronto, Canada. and 137 Pearl St., Boston, United States


## Blue Seal Vaseline

## Reduced Prices

Size No. 1<br>" No. 2

$\$ 4.60$ per wross 9.60

The New Preparation :

## "WHITE LIQUID VASELINE"

It is a chemically pure Vaseline, which gives the best results for spraying purposes and in the treatment of such delicate urgans as the eye, ear, throat, and other delicate mucous membranes. Put up in eight-ounce and 16 -ounce glass-stoppered bottles and in five-pound cans.

PRICES:


Ghesebrough Manufacturing Co., Gonsolidated. CANADIAN BRANCE:

## Trade Notes

Charles Hall is opening a new drug store at Reaburn, Man.

James Doan, druggist, Kingsville, Ont., has made an assignment.
S. E. Hick has removed his drug business from Paris to Goderich, Ont.
E. L. Jackson, Uak River, Man., has sold his drug business to Dr. J. Kirk.
A. T. Andrews, of Gladstone, Man., is opening a branch drug store at Plumas, Man.
R. D. Stiles, druggist, Pictou, N S., has offered to compromise at 25 cents on the dollar.
H. A. Peacey \& Co., druggists, Cumberland, B.C., have dissolved partue:ship, Dr. laprence retiring.
F. Jordan is commencing business again in the premises formerly occupied by him in Goderich, Ont.

The drug stock of the cstate of R. 1). McA. Murray, St. Martin's, N.B., has been sold to E. S. Hafficld.

Dr. R. E. Lejordhow is opening a new drug store, cor. Greene avenue and St. James strect, Montreal, Que.

The fallure is announced of R. H. T'remaine, druggist, Amherst, N.S. An attachment for $\$ 3,782$ has been filed.

The Canadian American Glass Com. pany of Detroit, Mich., are about estab. lashing a hranch factory at Kingsville, Ont.
H. R. Lancetot has purchased the drug business of C. S. Stroud, cor. St. Lawrence and Prince Arthur streets, Montreal.
H. L. Mackinnon has purchased the entire interest in the drug business carried on under the name of the Medr. cal Hall at North Sydney, N.S.
"The Fancy Goods Company of Canada," with capital stock of \$100,000, and headquarters at Toronto. Ont, have applied for letters of incorporation.

The Sydenham Glass Co., of Wallaceburg, Ont., have commenced the manufacture of flint glassmare, and are employing an additional number of hands.

Mr. H. L. Mackinnon, who has been for some gears in charge of Medical Hall, North Sydney, has purchased that business, and his many friend. wish him success in his new undertaking.
W. F. Howard \& Co., Winnipeg, Man., have moved their drug business from the premises nccupied by then for a number of years on Main street to a more conmodious store on Bannatyne avenue.

## Nova Scota inotes.

The exeeptionally bad weather of the past month bas rather thrown a danper over the retail drug trade of the city, but under improved conditions, and a colder atmosphere, there is get time for a Christmas boom.

A new drug store is being opened up at historic Louisville, in Cape Breton, by Dr. Freeman ONeil, whose friends pre. dict a sucecssful business career for him.
A. W. Kemudy, who passed the Pharmaceutical Exams. In Nova Scotia, is doung business in St. John's, Newfoundland, and reports inde in a flourishing condition in his line there.

Mr. Fred E. Pentz, the Hantsport druggist, has been ill with typhoid fever, but expects to be at his business in a very few days now.

Dr. A. F. Falconer, who for many years practised his profession, and did a drug business in Sherbrooke, N.S., died recently as that place. Dr. H. A. Payzant is now carrying on a drug business in Sherbrooke, and has associated with him Mr. A Mchaniels.

Mr. J. J. Turnbull, formerly of Antigonish, is :ow in partnership with Mr. D. A. Wiaterbotham, at Sydney Pharmacy, in Sjdnef. C. 13 .

Messrs. Copeland $\&$ Co., of North Sydney, have now a branch store at Sydnes Mines.

Mr. H. E. Wilson, of Windsor, reports busmess good in that town. Windsor is making rapid strides into prosperity, and developing into a new town in place of the one that was swept out of existence by the destructive fite of Octoher ist., 1897.

## British Columbla Notes.

The Brash Pharmacopoia, r8g8, is not in general use throughout this pro:ince. There are many druggists who have yet to make up their first prescrip. tion calling for ' 9 S preparations. The physicians are slow to make the change ; in fact, many have not taken sufficient interest to even enquire as to the changes.

A meeting of the Councll of the B.C. P.A. will he held in Victoria on Thursday, Dec. 8th. It is hoped that some
thing will be done at this meethy to bring about something definite as to the adoption of B. P', '93.

Mr. Curtis, druggist, of New Westmm ster, is busy rebuidding. When tumshed his store will be one of the handsomest on the coast. He purchased the onk wall fixtures and atso socta foumann in Victoria.

Business has been remarkably good up to time of writing, and the indications for holiday trade are good.

Anemt your article on the ownership of prescriptions it may be of interest to some to know that the Britash Columbin Legislature fixed things for us this way : Sec. 26 Pharmacy Alt-Anj person who presents a prescrpution to any qualified druggist to be filled shall be entilled to have such prescription returned to him by such druggist.

## Montreal Notes.

It is stited that Mr. Lanctot has pur chased the business of Dr. Stroud, comer of St. Lawrence Main and Prince Arthus street, and that he will make his new stand his headguarters. If is a most sensible move on the part of Mr. Ianctot. and his confteres will ush hm success in his venture.

When Judge Loranger took the case of the Pharmaceutical Assocmation against a well-known departmental store for selling drugs and medicmes contrary to the pro visions of the Quebec Pbarmacy $A$ ct en delibere, he remarked that it was hard to tell a pharmacy now when one passed it, as many of them were more like fancy stores than professtonal looking phar. macies.

The counctl of the Pharmaceutical is sociation is leaving no stune unturned to checkmate the departmental stores and corner grocerymen if they persist in trying 10 get the Pbarmacy Act repealed, in order to enable them to sell all kinds of drugs and medicines ad lib.

The grocers are begmning to realize the fact that, in aiding the departmem stores to gobble up the pharmacists, they are only preparing a rod for ther own backs.

Mr. Charles E. Scarff, pharmacist, St. Catherine street $14: 5$, has been appointed sole lessec of the righ to manufacture in Canada the suppositones of Burroughs, Welcome \& Co., London, England. These articles are patented in Canada, and, in future, all orders for importation must be sent to Mr. Scarff direct.

# ontario college of pharmacy. 

Junlor Examinations, December, 1898.

PHARMACEUTICAI. I.ABORATOKY.
Examiner: Cilas. F. Het -Nk, Ph. G., Phme. B. (Tor.)
Time allowed, Two hours.

1. Prepare 100 grams of strong solu! tion of lead subacetate in accordance with the following formula:

Liquor Plumbi Subacetatis Fortis, P.B.
Lead acetate. ......... $\$ 8.750$
Lead oxide, in powder. . 34.375
Distilled water. . . . . . . 213.000
Will make of finished solution, 250.
Heat the distilled water until it boils, and dissolve in it the lead acetate. Add the lead oxide gradually and boil gently for thirly minutes, keeping the lead oxide suspended continually. Finally, filter the resulting solution and make it weigh 100 grams.

Buttle the liquid, label (using Latin titie), and hand to the examiner.
2. Determine the specific gravity of the liquid in twoounce bottle handed you.

Report on strong solution of lead sulsacetate.

State the amount of each ingredient used :
(a) l.ead acetate. (b) Lead oxide. (c) Distilled water.
(d) Illustrate by means of an equation the chemical change which takes place in preparing this solution.

Report on specific gravity determina. tion:
(c) Quantity of solution used, both weight and volume.
$(f)$ Weight of an equal volume of water.

## (g) Specific gravity.

Exhibit figures in all the calculations required.
N.E. - Neatness of work. order in arsarge. ment, and cleanliness of working desk and outfit, will enter as important factors in your ratings.

## ANALYTICAL CHEMISTKY.

Eraminer: Grahan Chantixs B.A., MI.B.

## Time allowed, Two hourt.

1. Detect the base and acid in sub. stances marked " $A$ " and " $B$."
2. Detect the acid in substance markcd "C."
3. Detect the base in substance marked " D."
4. Write cquations illustrating the ac.
tion of hydrogen sulphide upon (a) Lead nitrate, (l) Chlorine, (c) Zir c sulphate.
5. Write equations illust ating the action of hot sulphuric acid upon (a) Carbon, ( $b$ ) Potassium bromide, (c) Copper.
6. Write equations illustrating the action of dilute sulphuric acid upon (a) Barium oxide, (b) Ferrous stiphide, (c) Magnesium.
7. Describe experiments showing how you would distinguish:
(a) Solution of chlorine from a solulion of hydrogen persvide.
(b) Nitrous oxide from oxygen.
(c) A nitrite from a nitrate.

## PHAlimacy.

Examiner: Cmas. F. Hkemshr, Ib. G., Ihm. B. Time Allowed. Two and One.ball Hours.

1. Metrical. System.-Give the dertvation of (a) the unit of linear meastre; (b) the unit of weight ; (c) the unit of capacity. State the equivalents of the following in customary weights and meas. ures; (d) gram, (e) liter, (f) meter.
2. What are the approximate metrical equivalents for: (a) grain, (b) fluid ounce, (c) inch. How many cubic centimeters are represented by (d) a liter, (e) a cen. tiliter.
3. Add the following and state the number of (a) kilos, (b) av. lbs. represented by their sum :-475 dekagrams, $71 / 2$ kilos. $21 / 4$ myriagrams, 7.36 dectgrams, 460 milligrams. 3 hectograms and 34 centigrams.
4. Specific Gravitr:-(a) Describe the hydrostatic balance, and ( $b$ ) mention its utility. (c) What lactor is required and invariably determined by experiment, in order to ascertain the specific gravity of every substance; ( $d$ ) how is this determined in the case of a substance like silver?
5. What is the specific gravity of the following B. P. substances:-(a) Acidum fiydrochioricum, (b) Sfiritus Rectificatus, (c) Liq. Ammonic Fartis, (d) Liq. I'umbi Subacetatis Fortis, (e) Glycerinum, (f) Ether Purificatus.
6. Siate the percentage streng'h of (a) Rectified Spirit, (b) Solution of Animouia, (c) Purified Ether, (d) Chlaroform.
(c) What is the specific gravity of a watersoluble substance weighing 8.755 grams, that weighs in purified ether (minimum sp. gr.) 7.505 granıs.
7. Extraction:-(a) Define; (b) name the processes which it includes. (c) Explain the theory of exhaustion as exhioited in percolation, and (d) show why
plant drugs cannot be exhausted by maceration. (e) Give tests for exhaustion. ( $f$ ) In what cases is maceration preferred to percolation; ( $g$ ) Why re drugs damp. ened previous to packing for percolation?
8. 225 fluid ounces of official Alcohol, 60 p.c., are wanted, how much alcohol, 90 p.c., and water are to be mixed to furnish this amount?
9. (a) Define Evaporation-in-vacuo, and (b) describe apparatus required. (c) State advantages of this over other methods of evaporation. (d) Describe a properly constructed water-bath, and state object of its use.
10. Syrupus Ferki Iodidi-(a) How is it prepared; (b) how should it be stored: (c) why should it not be dispensed when yellow in color, what is its (d) strength; (e) its dose ?
11. Give two methods for preparing Granular Effervescent Salts, and mention the usual constituents of such mixtures.
12. Potassium Hydroxide is soluble in two parts of alcohol, 90 p.c.; a saturated alcoholic solution weighs 400 Grams and has sp. gr. 0.975 ; (a) what weight of salt is contained in the solution, and (i) what is its percentage strength; $(c)$ what is the percentage strength of an aqueous saturated solution of Ammonium Chloride?

## CHEMISTRY AND PHYSICS.

> Examiner: A. Y. Scotr. B.A., M.D., C.M. Time Allowed. Two Hours.

1. Nitrogen, phosphorus, arsenic, and antimony occur in the same vertical column of the periodic sysiem. What analogy is there in their chemical and physical behavior justifying thes classifi. cation?
2. Define the terms allotropism, molecule, multiple proportion, catalysis, dissociation.
3. (2) Give fully the preparation, properties, impurities and tests for the impurities of sulphuric acid.
(b) How much oxygen measured at $17^{\circ} \mathrm{C}$ and 756 mm . are required to oxidize 500 grnis. of iron pyrites, and how much sulphur dioxide at $0^{\circ} \mathrm{C}$. and 760 mm . is produced?
4. What precautions should be observed regarding the examination of wellwater? Name some of the common impuritues, and how they would be detected.
5. Hydrogen Chloride-How is this substance prepared? For what is it used? How is its composition determined? Why is the formula HCl . and not $\mathrm{H}_{2} \mathrm{Cl}_{2}$ ?

## LITTLE'S PATENT FLUID《(NON-POISONOUS) SHEEP DIP

For the Destraction of Ticiss, Lice, Mange, and all Insects apon Sheep, Horses, Cattle, Pigs, Dogs, etc.

Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.
Removes Scurf, Roughness, and Irritation of the Skin. making the coat soft, glossy, and healthy.
Removes the unpleasant smell from Dogs and other animals.
"Little's Sheep Dip and Catte Wash" is used at the Dominion Experimental Farms at Oltawa and Brandon, at the Ontario Industrial Farm, Guelph, and by all the principal Breeders in the Dominion; and Farm, Guelph, and by all the principanced to be the cheapest and most effective semedy on the market.
\& 17 Gold, Silver, and other Prize Medals have leen awarded to "Litle's Sheep and Catle Wash" in all parts of the world.

Sold in large Tins at 75e. Is wanted by every Farmer and Breeder

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Sole Agent for the Dominion.
To be had from all wholesale druggists in Toconto, Hamilton, and l.ondon.


Cheap, Harmless, and Effective
A Highly Concentrated Fluid for Cheoking and Proventing Contagion rrom Infectious Disoases.

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In a test of Disinfectants, undertaken on behalf of the American Government. "Little's Soluble Phenyle" was proved to be the best Disinfectant, iveing successfully active al 2 per cent., whilst that which ranked second required 7 per cent., and many Disinfectants, at 50 per cent., proved worthless.
"Littie's Soluble Phenyle" will destroy the infection of all Fevers and all Contagious and Infectious Disenaes, and will neutralire any bad smell whatever, net by disguising it, but by destroying it.

Used in the Landon and Provincial Hospitals and approved of by the Ilighest Sanitary Authorities of the day.

The Phenyle has tbeen awarded Gold Medals and Diplomas in all parts of the world.
Sold by all Druggists in 25c. and sos. Bottes, and St.00 Tins.
A 25 c. botlle will make four gallons strongest Disinfectant. Is wanted by every Physician, Houscholder, and Public Instisution in the Dominion.

## 

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## I.R. Porous Belladonna Plaisters

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 Our Perfection Olass Sponge Cases.
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BALA
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Sticks 4, 6, 8, 12, 16 to the pound.
MEILOK \& RITTENHOUSE CO.'S
and
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Aiso the old reliable SOLAZZI.


KERRY, WATSON \& CO.
Succesoorv to the Lombinn Deng Campany,


IThas come to our knowledge that certain manufacturers have placed upon the market l3elladonna Plasters which are made to show a high test for alkaloids, but which it is upenly stated are not made of Bclladoma, but of other drigs. (See Proceedings A.P.A. 1S90, page 155 , also American Journal of Dharmacy, April, 1898, page 182.) We are also ir possession of facts that tend to show that plasters made strictly in accordance with the Pharmacopocia, containing a proper portion of Extract of Belladonna, from the laboratories of the most reputable pharmacists in the world, such as Allen \& Son, London; E. R, Squibb \& Sons; Parke, Davis 太 Co.; Lloyd Bros., Cincinnati, are condemned by certain assayists as being below the pharmacopuial standard.

We ate also aware that Delladonna Plasters, contatning little or no Belladomn, but stuffed with alkaloids for show assay, are accepted as conforming to the Pharmacopicia. We are also aware of the many difficulties and the lack of uniformity in the chemical assay of Belladonna Plasters, especially in rubber compound. (A recent published report of an assay by several analysts shows a variation of several hundred per cent. as applied to the same sample of Belladonna Plaster.)

In view of the uncertainty and unreliability of chemical tests commonly applied to Belladonna Plasters, and in view of the fact that they are of little value to the druggist or physician, who is unable to verify or disprove them, we are led to make the following offer:

We will pay Five Hundred Dollars for the best process of testing Belladonna Plasters, adapted to the use of the druggist and phy. sician possessed of ordinary intelligence and faculties, which will show:

1. Whether a given sample of Belladonna Plaster is made of Belladonna, or is compounded from some uther drug or drugs, or filled with moydriatic alkaloids for assays or other purposes.
2. Whether or not a given sample of Belladonna Plaster conforms to the pharmacopocial requirements.

In other words, a procees which will enable any buyer or prescriber to judge of the reliability of the Belladonna Plasters on the market.
Further details and information as as this award will be made upon application. The award will be made by a committee of pharmaceutical and medical authorities to be hereafter named.

Johnson's Belladonna Plaster is made of Belladonna; it conforms in strength of drug to the United States Pharmacopœia (incidentally to the B.P. 1885).

We are desirous of securing a process that can easily be applied, and that will convince buyers of Belladonna Plasters of the accuracy of this statement.
Address corresjondence

Care of GILMOUR BROS.
485 St. Paul St., Montreal
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## Johnson \& Johnson

New Brunswick, N.J., U.S.A.


Sixe, Inclualing Frame, $10 \% \times 9$. Inches.

ADAMS' HAND-FINISHED

## Gems of

## Fine Art

If you want a handsome gem of genuine art get one of these pictures. There are six different scenes, all from French Masterpieces, set in gold filigree frames.

One goes to each customer with the following Assortment, viz.:

6. Write an account of the chemistry of ammonia.
7. Sprengel's Air Pamp - Describe fully the structure and principles.

- 8. Find the percentage composition of potassium nitrate.

9. 100 vols. of oxygen are mixed with 150 vols. of hydrogen and exploded. What volume of gas is left, and of which gas?
io. Find the formule of a sub. stance containing copper $25.39 \%$, sulphur $12 . \dot{8}+\%$, oxygen $25.67 \%$, and water $36.1 \%$.
latin, prescriptions, posology, \&c.

> Eriminer: J. T. Fotheringham. 'lime Alloweel, Two Hours.

1. Expand into full Latin and trans. late:-Cap., Cochl., Ampl., ad. ij. vic., Lat. dol., 0.
2. Name and define the component parts and sub-divisions of a regular magistral prescription.
3. What are the main organs of Excretion? Write short notes on their excretions.
4. Define, with examples where necessary, the following terms :-Idiosyncrasy, a Secretion, an Excretion, Endothelium, Myocardium, Systole, Peristalsis, Metabolism, a Ferment, Toleration.
5. Give dose of each of the following: -Ac. Tannic., Ac. Hydrocyan. Dil., Ac. Sulphuros., Extr. Bellad. Viride, Extr. Cinth. Liq., Extr. Taraxaci, Inf. Digitalis, Liq. Arsen. Hydrachlor., Liq., Morph. Acet., Liq. Trinitrini, Mist., Crette, Ol. Crotonis, Pil. Hydrarg., Puto. Antimon., Ti. Nuc. Vom.
6. Discuss briefly the following terms: -Anodyne, Anæsthetic, Caustic, Stimu. lant, Narcotic.

## Botany.

E.rammer. A. Y. Scote, iB.A., M.D. C.M

Time Allowed. Two Hours.

1. What do you understand by the following terms, viz.:-Cambium layer, Suberisation, Interstitial deposit ; Adventitious roots; Diocious, Gynæcium, Dichogamy, Estivation?
2. What are the functions of a root? Describe fully a longitudinal section of a root. Distinguish between a rcot and an underground stem.
3. Describe what is meant by Phyllo. taxy, giving the different varieties.
4. Describe the different varieties of Anthotaxy. Draw and describe the various kinds of Indefinite Inforescence.
5. Classify fully, and explain your classification of liruits.
6. Write brief notes on (a) Cell-wall, (b) Protoplasm, (c) Chiorophyll, (d) Starch, (c) Reproduction of new cells.
7. 8, 9. Describe fully the three samples.

A Ploneer House In the Manuficture of Pharmacoutical Proparations.

Difteen jears ago Messrs. Frederick Stearns \& Co., of Detroir, established a Camadian office and haborator; at Wingsor, Ont., in view of theirmpidly incrensed trade with the druggists of this country. Ever since its establishmemt the volume of business has grown larger with each succeeding year, requiring additional equip. ments and enlarged space, and a visit to the laboratory shows that it is furnished with all the latest and best machnery and apparatis for the manufacture of all pharmacuutical preparations. The same "Stearns" is a famihar one to all druggists throughout the length and breadth of this country, and "Stearns quality" is everywhere a synonym for excellence.

This firm has just published an exceedingly valuable catalogue, which reRects the greatest credit on the compilers, and will be an omament as well as a practical work of reference on the desk of every pharmacist.

The arrangement of the work is admirable, and the various tables of information are especially deserving of notice. Amongst those particularly commending themselves are tables of synonymis, poisons and their antidotes, percentage solutions, dosage, thermometric equiva. lents, metric and ordinary equivalents, together with various notes of reference, rules for diluting alcohol, proportioning doses, etc. The work is one that will be found equally useful for the physician as well as the pharmacist, and we have no doubt that the trade will appreciate the catalogue as a ready helper in the laboratory and dispensary, as well as a reminder of the pharmaceu tical preparations for which this house is noted.

Cypress oil is being used for whooping cough with good effect. On being sprinkled upon the pillow and sprayed in the room an abatement of the patients symptoms sets in in a few days.

Cream of Tartar and pumice powder in equal parts remove stains from teeth.

## Proserlptons.

REGUEATIONS AS TO THE OWNERSMID, RENEWALS AND THE (ENERAL ITSP: simos of lerescrilltons in wit PARTS Of JIIE WORLD
(Continued from last isuse.)
Costin RICA.
In every drug store or private botigum there shall be kept a book to copy pre seriptions in numerical order without leaving any blank spaces, which copy shall be made at the lume of filling the prescription. This book shall be preserved five years, counting from the day on which the last prescription is copied. and shall be presented whenever compe. tent authority demands it. Before being used, this book shall be taken to the office of the faculty, and the president shall pat and sign on the first page a statement which shall show to what drug store the book belongs, how many folios it contains, and in what condition he finds it, afterwards the secretary shall put at the top of each folio the seal of the sectetary's office.

Every medicine dispatched should bear a ticket or label, which indicates the number of the estabhshment and its steuation, the mode of admmstering the medicune (in conformity with the prescription), the price, and the number of the order, which must agree with that of the original prescripton.

## honduras.

The law and practice in regard to disposition of physicians' prescriptions is for the druggists to copy them in books kept for that purpose. The original is returned to owner and the copy preserved it:definitely.

In regard to renewal of prescriptions, the law requires that physicians shall write " repeat" on the prescription. In practice, where dangerous drugs do not enter into the prescription, druggists often renew prescriptions without this formal. ity.

## bahamas.

Phystcians' prescriptions are required, when once filled, to be kept on file always-never destroyed.

A prescription can be renewed at any tume at tne pleasure of the druggist ; and he can give a copy at any time be so desires.

## cuba.

A store where prescriptions are com. pounded is cailed in Spanish farmacin, while a wholesale house is a drogucria.

The later need not be owned or managed by a registered pharmacist.

Physicians' prescriptions are filed, and some pharmacists also copy them into books. The files are kept for many years.

The druggist, by law, may retain the prescription paper when filled; he will, -however, give a copy if the customer is going out $u$ feach of the pharnacy.
west indies.
There is no law in regard to the final disposition of physicians' prescriptic:se when once filed by the druggists, but the general practice in respect of the same is to keep them on file as a permanent part of the records of the stores filling the same.
There is no law governing the renewal of prescriptions, but the general practice in respect of the same is that they may be renewed as often as desired. Copies may be furnished at the option of the druggist filling the same.

ARGFNTINE: REIUBI.IC.
Prescriptions not containing poisons are generally delvered to the customer after having been copied in a book kept for the purpose. Those containing poisons have always to be kept by the pharmacist for his own safeguard.

Druggists have nothing to do with prescriptions. The pharmacist gives copies of them if required to do so.

## おRAて, 1 ..

Physicians' prescriptions are copied in a book kept for that purpose in the "pharmacia," but it is not obligatory to keep them on file after having been filled.

The renewal of prescriptions is in no way restricted to Brazil, except when they contain poison. In such cases the request of a physician is necessary. A repetition of the prescription in detail and the name of the physician who gave it must be plainly written on the label of the bottle or box containing the article prescribed.

URUGUAV.
Prescriptions are kept on file, lega:ly for three years, but they are also kept nuch longer by the druggists. The longer his file and the higher his running number, the greater his reputation as a good pharmacist.
The prescription can be renewed at any time, and as often as wanted, unless 11 should have been revoked by the physician givang it. Druggists cannot give copies for other cases without the
consent, verbal or in writing, of the physician giving it.
venbzulit.d.
Prescriptions are generally copied in a book for that purpose; these books are kept for an indefinite time.
Prescriptions may be renewed at will, if they do not contain morphine or similar poisons, in which case an order from physician is required. Druggists are permitted to give copies of prescriptions at any time and under all circumstances.
dutch inda.
The druggist retains the original prescription, which must be kept on file for twenty years; he may give the customer a duplicate if it is called for.
Any prescription can be renewed on demand, without any formality, except prescriptions containing poisons, such as morphine, etc., when an authorization must be obtained from the prescribing doctor for a renewal.
hong kong.
Regarding the disposition of prescriptions, practice follows the English custom of returning them to the customer.

## japan.

Prescriptions for poisonous or astringent medicines must be kept by the dispen. sing druggist for ten years, and cannot be renewed, except by authority from the physicians who made them. There is no restriction as to copies of prescriptions. None of these provisions are at present enforced against foreign druggists in Japan.

## PERSIA.

The practice in regard to the disposition of the prescription is that it is generally returned to the person for whom it is prescribed when it has been dispensed. There is no accepted law or practice as to what right the druggist has in a prescrip tion presented to him. He can renew it or give a copy of it, if it happens to be to his interest to do so.
aUSTRALAS!A.
There is no law regulating the final dispostion of physicians prescriptions. Some pharmacists treat such prescriptions as their own property, while the usual custom is to return the prescription to the buyer, after taking a copy for file. I find no law regulating this practice.
shw Zealand.
Regarding the renewal of prescriptions and therr disposition after once filled by the druggist, no law is in force, and how
long the prescriptions are kept on file is a mater of choice.

HAWAIAN ISLANDS.
There is no law in regard to the final disposition of physicians' prescriptions when once filled by the druggist, the practice being the same as pursued by houses in the United States.
There is no law governing the renewal of prescriptions. All the druggists recognize the American rule that the legal title to the prescription is in the patient, and will always return the original, keeping a copy for their files.
As a rule the druggists here refuse to renew prescriptions without the sanction of a physician. The ingredients of the prescription control this to a great extent.

## Points in the Preservation of Aromatle Waters.

F. E. Bigelow (Massachusetts Pharmaceutical Association) has recently confirmed by experiment the statement that the aromatic waters keep better when loosely stoppered than when tightly carked. Access of air preserves the fresh and agreeable effect of the water, but, when tightly closed, the odor partly disappears and becomes stale. The subsequent access of air will, however, restore the true odor.
Mr. Bigelow says it is well to remember that, though essential oils are volatile in the air, and subject to change, they are much less volatile than water, and consequently exposure cannot :weaken aromatic waters. Moreover, light affects the oils much more than air, and is more to be avoided.

## Product Formed in Roasting Coffee.

H. Jeckle has conducted extended experiments on this subject. As material he used the condensation product from volatile substances carried off by means of pipes from the roasting ke.tles employed in large coffee-roasting establishments. He found in this acetone, furfurol. caffeine, ammonia, trimethylamine, formic and acetic acids. These normal products are present in variable quantities, caffeine, furfurol and acetic acid predominating. Caffeine is the only substance present peculiar to coffee. The odor and taste of roasted coffee are due to a number of substances, but particularly to furfurol. That a quite appreciable quantity of caffeine is lost in roasting was determined by repeated experi-ments.-Sudd. Ap. Ztg.

# Scott's Emulsion Calendar 

The Lion, Beaver and the Eagle: the cmblems of Power, Peace and Prosperity. We do not see how there could be a better combination. Do you?

Cod-liver oil, the Hypophosphites, and Cilycerine: the food and medicine found in Scott's Emulsion. A combination unequaled-as staple as salt, the standard preparation of cod-liver oil.

With such thoughts in mind we prepared our Calendar for 1899 . We feel sure you will be greatly pleased with it. The cover is a most beautiful specimen of lithography, with all the richness and softness of coloring so characteristic of this art. Of course, the Lion, Beaver and Eagle, with corresponding flags, are the prominent features.

These Calendars are the handsomest and most expensive we have ever produced, and will be appreciated by your best patrons

At the same time do not forget the merits of Scott's Emulsion. We are doing our best to create a good demand for our goods. We only ask you to keep well supplied so no customer may be disappointed. We will send the purchaser to you. We hope he will ask for our particular preparation, for then we feel sure he will get it. While he is there we hope you may sell him something else also. Thus, while you are serving us, you see we may also serve you in a double sense.

Wishing you a Merry Christmas and a Happy New Y'car, we remain, Most sincerely yours,

## SCOTT \& BOWNE,

Toronto, Ont., Canada.

## Labatt's India Pale Ale

Is an extellent nutrent tonic. Physicians desiring to prescribe will hardly find anything superior to this.- Michlh /omernal.
"We find that the Ale uniformly well agreed with the patients, that it stimulated the appetite, and thereby mereased nutrition. The taste likewise was alwass highly spoken of. In nervous women, we found that a glass at bedtime acted as a very effective and harmless hypnotic." - Superintemdent of large Unilid Shates /lospital.

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## Specialties....

Our Standard Fluid Extracts will compare with products of any other Laboratory on the continent.

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## "Chateau Pelee" Medoc.

Cuses 12 Qis., \$3.75. Cases 24 Pts.. \$4.75.
lifual to Impmed Clatet at double the price.

If jour Wine Merchant does not keep OUS CL. 4 REI send in order disect.

## J. S. HAMILTON \& CO. BRANTFORD, ONT.

General Agents l'elee Ixiand thine Compmis; limited.
All Whulesile Drugsists keep in stock and will supply
retail druggists with
Wood's Phosphodino, Rotalls $\$ 1$.
Cook's Cotton Root Compound, No. 1, Rotalls $\$ 1$.
Cook's Cotion Root Compound, No. 2, Rotalls $\$ 3$.
Maty; retail ituggists sell duzens of these goods while
others only sell a few boves. The reacon for these varia-
tionsinsales are that one orders from his jobler an not less
yuantity than une dozen Wood's Hosphodine, one dozen
Cooh's Cotton Koot Compound No. 2, anil places the dozen
cartons on his show case where they can be seen and ex-
animed by customers. The other orders an few hoves and
hides them in a drawer behind his counter where they
cannot be seen, or what is still worse, waiti until a cus:
tomer asks fur the goods and then ofdets a lox or two:
thus one drungist salls matiy dopens, the other a few boxes
or thone at all. These goods all afford a liberal proft to
the retailer, and are hberally, advertised in: nearly all
pappers from Cape Breton to British Columbia. No retail
drusist can make a mustake in ordering from his johber
af least one dozen each of these goods and placing them on
his how case where they can, Qe seen. Drugaiats who
have only purchased a few boves and placed them in a
drawer behind cherr counter will, by purchasing in quantify
and placing where they can be seen, be surprised how
quichty they will be sold. There is only one ravj to sell
twals, and that is so lech a supply.
the oldest - thebest
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Nature's Remedy


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Female Complaints, Etc.
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isS Wellington St., TORONTO.

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COCAINE, PEPSINE, NARCEINE
The ANTIGASTLAI.GIQUE WINCKLEER, is the most effective remedy known to medical scrence for Discaves of the Stomach, Cramps, Indigestion, Dyspepsia, Gastralgia, Vomiting after meals, and during l'regnancy:
DOSE: One or two tablespornfuls fifteen minutes before meals, or when symploms appear.

## Winoker Iniigastralgic Pills

COCAINE, PEPSINE, NARCEINE
Sume direction as for the WINCKI.1:R ANTI.
GASTRAIGIQUE.
DOSE: One of two pills fifteen minutes before meals, or when symptonis app arar. This is specially recommended to the people whu can't stand the preparations lighty alcoholized.
WINCKLER, I'harmacist, Montreuil, Selne. MONTREAL M. DECARY.
TORONTO: Tho Druggists' Corporation of Crnudr, Limited
STIMULATING and ReFRESHing

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KOLA, COCA and LIME GLYCEROPHOSPHATE
A Stimulating Tonic. It Strenathens the EntIre System.

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TORONTO: The Drugglsts' Cornorrtion of Canada. Limited.

The Care and Control of Prescriptions.

13, J. MI. Gmon, St. I.ouis.

Should the druggist be required by law to retain the original copy of every prescription compounded by him, and to furnish a copy only on request of the patient or of the physician?

The following is a section of the Mis souri pharmacy law :
"Every druggist, proprictor of a drug store or pharmacist, shall carefully preserve all prescriptions compounded by him or those in his employ, numbering, dating and filing them in the order in which they are compounded, and shall produce the same in court or before any grand jury wheneser thereto lawfully re quired, and on failing, neglecting or refusing to do so, shall be deemed guilty of a misdeme:anor, and on conviction shall be punished by a fine of not less than fifty nor more than one hundred dollars."

By the enactment of this section the lawmakers were inspired, not so much whth the desire to protect the physician and the druggist, as to provide a means of detecting the unlawful selling of intoxicating liquors by collusion among the three parties primarily interested, the consumer completing the triangular arrangement; but, white the disreputabie doctor and druggist may be punished by this provision of the law, others may utilize it as a shield and a defence. That all prescriptions should be carefilly t.led and in such manner as will insure them from damage while rendering them readily accessible, druggists generally are agreed; but the thoughtful care exercised in this important branch of the busi ness is not uniform.

It is not the purpose of this paper to discuss methods.

By the wording of the section of the Missouri pharmacy law quoted, the drug. gist is directed to file the prescription handed him to be compounded. This mearis the "original," not a "copy," yet the primary object of this section was not to decide who, in the State of Missouri, shall be consid d the legal owner of this interestit orap of paper.

The command to t..: druggist, in the words of the law, leaves no doubt as to the proper custodian of the prescription, and, as a logical deduction, decides the ownership. The model law which this association hopes ulcimately to frame might appropriately contain such a sec. tion.

Druggists may be made defendants in damage suits. For a surcessful defence, if the fact to be established is the corred compounding of a pescription, the presentation in evidence of the ongimal is quite essential. The question as to the ownetship of the prescription is an old one, but so long as it is an open and vital one the discussion is in order

A decision by one of the higher courts would be welcome. The mfetior courts, in passing upon it, have contradicted oric another.

No linal decision is possible until there shall be a law for iuterpretation. Bach state is at the mercy of its lawmakers. For a set of men in convention assembled to agree that certain matters should be controlled by law is simple enough. To secure the enactment of such a law by the state legislature is usually a very dif. ferent matter. Legislation asked for by druggists is often regarded with suspacion. It is thought to be for the benefit of a class, the general welfare character of it not being usually recognized After all of our gratuitous service to the pmblic, our allruism may still be doubted.

I: is a mistake to suppose that all of the ills of which we complain can be remeded by legislation, but this thought need not deter us from effort in what we conceive to be the direction of improvement. It ought not to be difficult to convince physicians and patients that druggists are the proper custodians of prescriptions ; but what stand stall the druggist take if there be no law brhind which he can retteat? It is not mbusual for a customer to say: "Please return that prescription whth the medicine You may make and keep a copy of it if you wish to do so."
The druggist comphes, and takes his chances on any future complications. To do otherwise would be to invite a contention which a politic business man studies to avoid. The practice $o$ questing copies of prescriptions originals remaining in the possessio. the druggist, is a growing one.

From his standpoint the practice of refilling prescriptions, unless so authorized by the physician, must be considered in this connection. If we concede it to be the patient's privilege to demand and receive a copy of a prescription prepared for him, then it is not possible for the physician to control the matter of its repetition, unless there be an understanding on this point at the time it is wrtten. The druggist, if requested by the doctor
not to give a copy of a prescription, will certamly see that his wishes are respected. It is the duty of the druggist, furthermore, to firmly decline to give a cops of a prescription except upon the reguest of the phystrian, if it should contain morphne, cocane, or any other potent and dangerous drug. By the eversise of tact and politeness, he ean prevent the precipi tathon of an unpleasam scene. With Whese exceptons the patient is likely to receive a copp of his prescriptom when he asks for it, and he is at liberty to carry "t from store to store and get "bids" on the cost of compounding it.

Physicians very properly object to the frepuent repettion of their prescriptions whout consultation with them, but get an illiheral policy on their part is apt to estrange patiems, and result in damage to their prattice in the end The doctor, above all others, whit be a man of good judgment He ustathy is prititie, disereet, and actful.

Evil consequences do undoubtedly often follow mdiscrimmate selfmedicabon. By a munal understanding beeween the two professtons, ether with or without legal enactments, phystcian, pharmacist, and patient would all be benefited.

Hesules the Ahtansom is Giraurni, another tree inas recently been discovered that yelds tataric acte. This is the boobab tree of Senegal, whose famaccous palp surroundang the seed has been found to contan nearly $a$ per cent.of free tarianc acad, and neaty 12 per cent. of bitartate of potassiom.

Sunlowers in Maharia. - An cmi nent Iedan medical ufticer is satisfied that the growth of sunflowers in malarial sull is better than eucalyptus as a preventive of malara. The Govermment of India are mahng extensite experiments to determanc thas puint.

A Prench doctor has invented an elecinic helmet, mosde of wheh is a small motor that vibrates strips of steel, the motor making 600 turns per minute. This whizaing is supposed to cure ner vous headache, and put the sufferer to sleep.
l'owdered Lanolin.-This is a German preparation composed of magnes. carb. zinc. oxide, or talc. with lanolin. The lanolin is dissolved in ether and the powder added; on evaporation the residue is powdered.

Giving all the Drugs of the British Pharmacopœia,
(The figures represent istuius

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br soids and minims for liquids.)



## The Study of Powdered Drugs.

The rapid advances which have been made in chensical knowledge, as exhibited in the large number of synthetic remedies which from time to time are put upon the market, appeal so strongly to the imagination of some pharmacists as to cause them to think that, because chemistry increases in importance, botany must necessarily decrease. A little consideration of the great number of remedies derived from the vegetable kingdom, and of the varying uses to which they are put in the practice of medicine, will at once convince the most sceptical that there is little fear that they will be displaced by synthetic products for many years to come. One need only allude to coca leaves, cascara sagrada, strophanthus, eucalyptus oil, and araroba, all remedies introduced into medical use during this generation, to show that there is no reason to doubt that many valuable medicaments still remain to be discovered for the healing of mankind. A more general study of plant analysis is likely to lead to much more fruitful and more imnediate results, so far as remedıal agents is conccrned, than is the prosecution of synthetic chemistry. In saying this it is not intended to depreciate the latter, but there is reason to think that it is claiming so much attention as to interfere mith the pursuit of systematic plant analysis.
In order to be properly equipped for the pursuit of plant analysis and for the control of the supply of crude drugs, as well as for the manufacture of efficient liquid and solid preparations from them, the pharmacist must possess a knowledge of botanical histology. Otherwise he will either have to rely upon the dealer from whom he obtains his materials or place his faith in external characteristics which are not infrequently modified by methods of collection and preparation for the market, as well as by the infiuence of varying soils and climates. And there is always a danger, as exper:ence has shown, that a substance somewhat similar in appearance may be inadvertently collected in place of the genuise article. Above all it is desirable that the pharmacist should be able to judge of the purity of the powders winich he almost invariably obtains from the manufacturing druggist. If the current of wholesale manufacturing pharmacy is not to cintirely swamp the truc art and craft of pharmacy the technical training of the pharmacist must rest
upon the assured rock of science, and it must be acquired in a manner which will permit of him becoming interested in it beyond the mere desire to pass his examinations. This can be done if means are taken to provide a proper progression of his studies.

In the case of vegetable histology as applicd to drugs it generally happens that the student-the examinee of the immemediate future-devotes at most a few hours to the subject, trusting to the chance of being able to satisly the examiner, and is carcless of any thought of the possible use of the knowledge in his future work. But even if desirous of conscientious'y mastering the subject to the utmost of his opportunities, he too frequently becomes bored by the number of details of structure, the respective significance of which he is unable to appreciate because of the lack of that previous knowledge of general botanical histology which alone can bring them into proper perspective.

There can be no doubt that a pretty good acquaintance with the anatomy of flowering plants obtained by practical work with the microscope is an essential to the acquisition of a sound knowledge of the histology of druss. In order to obtain this the student should first make himself thoroughly familiar with the various kinds of cells and vessels and the tissues which they form-epidermis, cork fundamental parenchyma, endodermis, pericycle, phloem, xylem, medullary rays, and pith as well as the varieties of stereom. He shonld then make himself acquainted withthe anatomical characteristucs of roots, stems, leaves, flowers, fruits and seeds as exhibited in the types found in the usual biological text-books, a: the sane time learning to recognize with case the different tissue systems both by means of their clements and the reactions the elements give with reagents. Then he should pass on to study in detail the various peculiarities of the different cells: the varieties of thickening of epidernal cells, and the appearance of their walls in surface viex; the forms and sculpturing of lignificd cle ments, stone-cells, vessels, fibies; the frequency, characters, and disposition of hairs and glands; the nature and disposition of cell contents, crystals and their composition, starch and its size and form of granules, inulin, tannin, resins, and oils. This is beyond what is required for educational work in biology. It is to be remembered that in the use of anatomy as arplied to the recognition of
plants every detail is of value, just as every reaction in the identification of a chemical is of value, but in the latter case the knowledge is so well tabulated, $b$ :cause the subject has been so well worked. that it often suffices to apply a few crucial tests while the others are ignored. In the anatomy of plants, however, so much remains unknown that the anatomist dare not overlook a single character wit':out running the risk of falling into error. It is not sufficient to ifarn a few distinctive features to be sure of recogriaing a particular drug, for unless it agrees in every particular in accordance with botanical principles, there is every reason to conclude that it is derived from sume other plant.

Following on, it is advisable, as far as time will allow, that as many plant structures as possible should be submitted to examination in order that some of the many abnormalities of plant structure should come under observation. This is of considerable importance because subsequently it will be found that the anatomy of many drugs does not at all conform to the type specimens of the ordinary biological class, and, unless the student is prepared by a course such as is suggested, he will fall into the error of ascribing undue significance to characters which may be ordinal or generic and he may overlook specific characters. Another reason why he should proceed beyond the study of type specimens is that he may learn something of the mortification which plant members undergo by secondary growth. Roots and stems when mature depart in the arrangement and character of their tissues very considerably from the typical structure of the first year. Cells are lignified, the epidermis disappears and is replaced by cork, deposits are formed, roots assume the apparent arrangements of stems, and other changes take place.

While pursuing these studies the use of the microscope and microchenical reagents and stains will become familiar. Comparatively few reagents are really requisite, but the action of each of them upon all kinds of lissuc should be well understood. It will be found that some of thent greatly assist in bringing into prominence other features than those for which they are specifically used. The most generally useful book for these who intend subsequemly to follow up the study of the histology of drugs is Suasburger's "Practical Botany;" translated by Hillhouse. A much more usetul work. in some respects is Gerard's "Traite Pratique de Alicrographie," of which, unfortunately; there is no English translation. A somewhat smalier and a litule more systematic Euglish work on simular lines is a desideratum.-Pharmincutionl Inurual (Ens.).

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## The Drug Trade in France.

In France pharmacists are divided into two classes, pharmacists of the first class, and pharmacists of the second class. The length of time necessary for the taking of a degree in pharmacy is six years for either class. Three years of this period are spent in the laboratory of a pharmacy, doing practical work as an apprentice. The remaining threc years are spent in undergoing a regular course of study in one of the French schools of pharmacy

Before entering upon his collegiate course the applicant for the degree of pharmacist of the first class must have taken one of the following degrees. Bach elor of letters, bachelor of science, or one of three other degrees incident to the French system of education, for which there are no corresponding titles in the United States.

For the degree of pharmacist of the second class it is only necessary to produce a certificate of graduation from one of the French high schools. The course of study and the time and character of the examinations are the same for either class, except that for a degree for the pharmacist of the second class the graduate must be examined in the department in which he wishes to practise his profession. The French schools of pharmacy do not require a foreign student or gradu ate of pharmacy to follow a complete course of studies before awarding him a diploma. On the contrary, he is given credit for studies previously pursued, and permitted to come up for final examination after having attended the lectures on the most advanced branches. The Mirister of Public Instruction, and not the iaculty of the school, determines to which class the foreign student or graduate of pharmacy shall be assigned. To this official all applications have to be made. and to him full particulars regarding previous studies have to be given.

If the applicant be a graduate of a for cign school, more than one year's study is rarely exacted; although, in this, much depends upon the college which originally granted the degree. The English, German, and Austrian colleges of pharmacy, for example, are held in high repute, and graduates from these countries can readily obtain their degree in France. Graduates of American schools meet with more difficulty.

As French students of pharmacy are required to have taken certain classical

[^0]degrees before entering the college, fureign candidates for a French degree are obliged to furnish proof that they have taken equivalent degrees in their own connery. In other words, a graduate of an Amerı can college of pharmacy, no matter how proficient, would not be given a degree $\mathrm{m}^{\prime}$ France unless he were a bachelor of let ters or presented certificates of an ad vanced education at home.

The number of pharmacies is not lim ted. A pharmacist of the first class can establish himself in any city or commune by registering his bame with the prefect or sous-prefet of the department in which the city or commune is lucatced. A phats macist of the second class can only engage in business in the department in which he received his diploma. If he desures to change the location of his $p^{\text {pharmacy }}$ and remove to another department, he will first have to undergo another examination in that department and recenve a new certificate of aptitude.

While the laws by which a pharmacist is governed are severe, and infracuons render him hable to heavy fines, or per haps imprisomment, he is carefully pro tected from unjust competition. In France no one but a duly qualificd apothe cary is allowed to sell, or offer for sale, any gharmaceuncal compounds or prep. arations for the use of the sick, except in special cases. Although, according to the strict letter of the law, a pharmacost can only sell medicines ordered through a doctor's prescription hiy tolerance such articles as perfumery, fine torlet soaps, toothbrushes, etc., can be purchased in almost any pharmacy.

There are prescription drug stores, or pharmactes, and stores for the sale of crude chemicals (drogueries). It is not necessary to have a degree in pharmacy to open one of the latter, whinch deal sole iy in such articles as acids, borax, tartar, paints, oils, turpentine, camphor, etc. If the proprietors of these stores sell any pharmaceutical compounds or any of then drugs in medicinal weights, they are liable to a heavy fine. They can, however, self certan articles of a poisonous nature for commercial or industrial purposes by car rying out the regulations prescribed by law. The list of poisonous substances is as follows. Hydrocyanic acid, vegetable alkaloids and other salts, arsenic and its preparations, belladonna together with its extract and tincture, chloroform, hemlock together with its extract and tincture, cyanide of mercury, cyanid : of potassium, digitalis with its extract and tincture, tar
tar emetic. hjushamus with its extract and tincture, meotine, nitrate of mercury, opium and its extract, phosphorus, ergot, stramonium together with its extract and tuncture, corrosive sublimate, cocculus indicus, and essence of absinthe.

The laws regulating the sale and use by druggists and manufacturers of the substances comaned in the above list are practically as follows.

Anyone wishing to sell one or several of the poisonous substances will first have to make a declaration to that effect before the mayur of the commune and give the address of his establishment.

Chemosts or manufacturers using one or seteral of the abovenamed substances m their busmess must also make a simiar declaration. The declaration is entered in a register kept for the purpose and a copy of the entry given to the declarer. In case of the removal of an establish. ment a new declaration must be made.

Poisonous substances can only be sold or delvered to merchants, chemists or manufacturers who have made the above declaration. They may also be deltvered to pharmacists, but only upon a written order signed by the purchaser.

All purchases and sales of porsonous substances will be entered in a special register numbered and signed oy the mayor or a commissary of police. The entries are made mmediately at the tume of the sale. They mdicate the nature and quantuly of artules sold, together with names, professtons, and addresses of the seller and purchaser.

Manufacturets employing posonous substances in their business are also obliged to keep a register in which are entered the purposes for which the porsons are used.

The sale of medicinal compounds of remedies, the ingredients of which are
$y$ known to the propretors, is absoely prohibited in France. The law requires the inventurs or owners of such remedies to communicate the recept of their preparations to the Mimster of Con: merce, with a list of diseases to which bey are applicable, and a statement of the actual trats to which the medicines have been submuted. The National Academy of Medicine then exammes the composition of the remedics to ascertan if their administration mught be dangerous in certain cases, if the remedies are good in themselves; if they have pro. duced, or will still produce, beneficial effects un humanity, and the proper price to pay to an inventor of a remedy recog.
nized to be useful. The recompense is based (1) on the merit of the discovery, (2) on the advantages which have been obtained, or which are hoped to be obtained, in curing human ills, (3) on the personal advanteges which the inventor has already derived trom the remedy, or may hope to derive from its adoption.
If the inventor is not satisfied with the amoum allowed in payment for his invention, he has the right to appeal to another conmission, which may be appointed to revise the work of the first, to rehear the parties interested, and to make another report.
The minister, from the conclusions of the two committees, and after having granted a hearing to the inventor, will make a decision, naming the amount to be paid. An agreement will then be drawn up between the minister and the inventor, and ratifed by the conseil d'etat, and the secret published without delay.

By ministerial decrees a number of foreign medicinal preparations, after having been examined by the Ecole Superieure de Pharmacie at Paris have been allowed to be imported into France and placed on sale. Other foreign proprietary medicines and pharmaceutical compounds failing to receive the sanction of the above-named schonl cannot be introduced into this country, The names of these different compounds are all contained in a book published by the director-general of customs at Paris, from whom a copy can be purchased. The title of the publication is Notes Explicatives du Tableau des Droits de Douane, and the information respecting medicinal compounds will be found in volume II.

No American proprictary medicines are imitated in France, although some standard articles, like Scott's Emulsion of Cod Liver Oil, Carter's Little Liver Pills, eic., are put up in this country by or under an arrangement made with the American propriet)rs, in order to avoid customs duties and the cost of transportation.

In department stores no medicines of any kind are permitted to be sold, though perfumery, soap, glycerin, face powders, tooth wash, brushes, ecé., can be bought in these establishments at prices very litthe in excess of wholesale rates.

The Bryant Press have printed 1,000 , 000 Almanaes for the Dodds Medicine Co., Torento.

## Moistening Powders for Percolation.

While expressing his conviction that no conscientious pharmacist will prepare tinctures from fluid extracts, C. J. Wolfe (Amer. Drug.) recommends as preferable to thai described in the pharmacopocia his own method of moistening the powdered drug preparatory to packing in the precolator. He takes a round tin can (or 5 -ounce quinine bottle) and into this places the powdered drug, which must not fill it more than two thirds. The menstruum then is poured in gradua'ly,shaking the can from the bottom after each addition of fuid. Now the lid is placed on the can and the latter shaken up and down vigorously, with the result that in a short time the drug is evenly moistened throughout without the formation of objectionable lumps; although this may be more certainly obtained by throwing in also an old-fashioned glass stopper. After inspection of the contents replace the lid and set the can on a shelf in a warm place, where it may macerate the requisite length of time without appreciable loss of alcohol. From this can the moistened drug is really transferred to the precolator. The advantages of this method are obvious.

## Practical Hints on Advertising. <br> 13: Chaklks iustin Ratre, New lotk.

Whentver you propose successful modern advertising to the average representative of a business that has beretofore been little advertised, you are met with the statement that "this business is different from others. You can': apply dry goods methods to it. Bargain counter advertising won't succeed. You can focl women with that sort of thing, but we deal with men, and we must do dignified, straightforward advertising."

A man who says that shows that he hasn't thought deeply on the subject. He thinks that because you propose the use of progressive methods-1897 methodsyou must necessarily want to make a clown of yourself or that you want him to institute a bargain counter. The "bargain coumter" seems to stick in his mind more than anything else. He says it with a sneer of ignorance. He doesn't understand the principle of modern advertising or modern stors-keeping. He can't see that the principle of all advertising is the same, whether it be bargain-
counter advertising or any other kind of advertising, the fundamental principle is the same. The man who has something to sell wishes to tell his story in a convincing way to the man who wishes to buy-or the man who ought to buy-or the man who would buy if he knew the advantages to be secured by buying.

A whole lot of these people say: "Buyers are intelligent men who cannot be fooled by bargain-counter advertising." Now, I wish to say, that I don't believe anybody is fooled by bargain-counte ${ }_{r}$ methods. They are not fooled simply because there is no effort made to fool them. The bargains that are placed on the bargain counter are genuine bargains. The storekeeper who will deceive anybody with his bargain-counter offerings would be making the most expensive blunder of his life. He would be doing the most foolish thing he could possibly do in his business.

The man who doesn't know anything about modern store-keeping sees the mer.chant advertising day after day offering special cut-price bargains. He doesn't investigate, he doesn't think, but he says immediately that such a state of things cannot exist, and that the merchant must be a liar and a thief. Nothing is further from the fact.

The principle of offeriug bargains is just as simple as A, B; C, but the bargains must be genuine if the result is to be satisfactory. Every man in business understands that it is worth something to get a new customer-that it is worth something to get a customer into his store. He is willing to have this done. The merchant has found that the best way of paying for new customers is to give them a real and startling bargain that they will remember. He knows, for instance, that if he advertises 50 cent silks for 19 cents a yard for a certain day he will crowd his silk department with buyers.

He knows from experience that the chances are ten to one that before the silk buyer leaves the store she will remember some other thing. she wishes to buy, and this she will buy at the fair and regular price.
D. Jayne $\mathbb{\&}$ Son, Philadelphia, issuc their almanacs in seventeen different languages.


## $33_{3}$ per cent. profit for Retailers. A saing of 60 per cent.

 for their Customersis a record breaker, has beaten all comers IMAGINE GIVING YOUR CUSTOMERS I6 OUNCES of a perfect polishing and cleansing soap, that will not scratch the silver, for 10 CENTS, AGAINST 10 OUNCES of a coarse, gritty soap that retails for 10 cents.

## BOND'S SOAP makes Tin like Stwer, Copper like Gold, Brass like Class, Jaint New, Kitchen and Dairy Utensils Clean and Bright, Silver Beautiful, Bright parts of Cycles, Harness and Machmery equal to new.

## MAKES NO SCRATCHES Manufactured


BOND'S SOAP
is excellent for scourng stone steps and tile pavements, for vashong fiours, linoleum and paint ; for Removing Dirt and Grease from everything.

[^1]H. B. MUIR \& CO.. $\underset{\text { Canadian Agents: }}{1}$ St. Helen St., MONTREAL JOSEPH CARMAN, WINNIPEG, Man.

A. K. LEDGER, 603 Hastings St., VANCOUVER, B.C.

# The Hamilton Cash Register 

 is THE
## National Cash Register

We Gu, rantee to Save You from $\$ 5$ to $\$ 100$ if you buy a HAMILTON CASH REGISTER

## Detail-Adders and Total-Adders

of all kinds. the nevest thing in cash registers.

This 1898 Cash Register is the result of years of work and thousands of dollars spent in experimenting.

THIS is a No. 35 press-down key totaladding register. It shows at a glance the total amount of the cash sales for the day. It has, in addition, a printing attachment, which, when the keys are pressed, automatically prints on a strip of paper the amount of each transaction. This strip) of paper is accessible only to the proprietor and furnishes a permanent record of the business done in the store each day.


Do not be Deceivea
by the misleading advertisements of the National Cash Register Co., of Dayton, Ohio, and the misleading statements of their agents.
The Hamilton Brass Manuiac. Go.
Limited
manufacture all kinds of Detail and Total-adding Cash Registers as manufactured by the National Cash Register Co. When the National Cash Register Company's agent is quoting prices to you ket a description in writing, and do not allow him to talk you out of it. Get the number of the Register he is quoting you prices on, then send the number of the legister with the description to the

Hamilton Cash Register Co.. and we will supply you with the same register in eveay respect from $\$ 5$ to $\$ 100$ less than the price quoted you by the National Cash Register Company's agent.

## HAMILTON CASH REGISTER

Manufactured by the

## Hamilton Brass

## LIMITED

## Formulary.

IMPROVED IODINE ONTMENT.

> Lodine............. .... .gr, 20 ,
> Polastium iodid... ..........it. 4.
> Sndium Sulphate............gr. 40
> Water .........................

Use the least quantity of water to effect a colorless solution, then add :


Bromoform is making rapid headway in the treatment of lung troubles, etc., but its administration has hitherto been handicapped by its causlicity and disagreeable taste. Mathieu and Richaut rerently recommended "bromoform water " (in the Mrunchener mediciuisch Wochenschrifl) as a pleasant preparation of the medicament, and now comes Gay, in The Therropie der Gegensoart, and recommends " bromoform rum" as a substitute, especially in the treatment of children. It is prepared as follows:

| liromofor | 12 parts. |
| :---: | :---: |
| Chloroform | Sparts. |
| Rull. | 200 parts. |

Mix, and agitate sharply.
For childien under 2 years the dose is 15 to 20 drops; from $2 t 04$ years, 20 to 30 drops ; from 4 to 8 years, 30 to 40 drops. Adults may use from 2 to 3 drams. -National Druggist.

## wine of cascara sagrada.

Bitterless fluid extract of cascara . . 300 parts. Sherry wine........ .................... 300 parts. Simple syrup... .................. 150 parts. Curacan liqueur.. ................. ... 50 parts.

Mix, let stand, and filter.

## MARKING INK FOR BALES.

Shellac 2 parts oy weight, borax 2 , water 25 , gum arabic 2 , Venetian red sufficient to color.

Boil the shellac and the borax in the water until solution is complete, add the gum arabic, and take the vessel from the fire. When the solution has become cold, add sufficient Venetian red to bring it to a suitable consistency and color. This ink must be preserved in a glass or earthenware vessel.

If a color other than red be desired, substitute for it lampliack, ultramarine blue, or a mixture of ultramarine blue and chrome yellow.

Ccchineal, pulverized fine........ 2 ors.
Crean of tartar. . . . . . . . . . . ...... 2 02s.

Mix and add
Boiling water. ............ ....S uzs.
let stand for a quarter of an hour, then neutralize by adding

Cathonate of potash. ......... . 1 or.
After the neutralization add

| Alum (powdered)..... <br> Gumarabic (powdered) |  |
| :---: | :---: |
|  |  |
|  |  |

ors.
Mix.

Mr. W. J. Sanborn contributes to The Painters' Magasine the recipe for a paint solution (emulsion paints) for which he claims great wearing qualities. It is as follows:


The four solutions are prepared in separate vessels. Add the lye to the limewater solution: pour in the glue water, and finally add the zinc solution. Add water to make a total of twenty gallons, and stir in the whiting.

## FKENCH PERFUMERY POWDERS.




The scented rice flours are prepared from :


Peppermiat water and coloting matter as required.-Kanhrst. Kiend, Pharmaceutical for:rnal.

> EMUISION OF COD I.IVEK AND CHOCO l.aren
> Decoct. carrageen (2:100) 150 pant:
> Ol. jecor avelli. , , 2so parts
> Glycerin … $\quad$ bo parts
> Chocolate prowier $\quad 30$ parts
> Tinct. watill. , g.s.

The chocolate powder is mixed wrth the mucilage and heated until a smooth mass has formed. After cooling, the codliver oil is added and the mixture beaten with an egg whisk.-Zeit. d. sllg. cest. Apoth. Ver., Pharmaceutical fournal.

FORMALIN MOUTH WASH.
The following recipe is due to Ganz.
Fifty grammes of to per cent. formaldehyde are cissolved in $\mathrm{t}, 000$ grammes of spmits, add-

| Tincture of benzoin. | s. |
| :---: | :---: |
| Tincture of myth | 50 gm . |
| Oil of peppermint.. | 3 gins. |
| Anise oil. | 2 gms . |
| Cassie oil | 1 cm . |
| Cinuamon oil. | 15 drops |
| Cochineal powider | $=$ gins. |

The whole well stirred and filtered.Deutsch. Amer. Apot\%. Z̈eit.

## Photographic Notes.

Montreal Cainera Club.

About forty members of the Club attended the neeting at the Club rooms, No. 4 Phillips Square, on Tuesday cuening Dec. 6th. After the business had been got through the chairman called on Mr. H. R. Cornish, the representative of the American Aristo Co., to give his demonstration entitled "Aristo Platino with single Toner."

Mr. Cornish had brought a number of

Skr-Blue Tones on Collodio. Chloride Paper.-That useful litte publication, Helios, says that these tones may be obtained by deep printing and then washing for seven or eight minutes in several changes of water, then fixing for ten minutes and washing for the same period, afterwards toning in the following bath:

| Lead nitrate .... ............. 75 grams. Ammonium sulphocyanide...... 40 Chloride of gold and potassium.. $0.5^{\prime \prime}$ |
| :---: |
|  |  |
|  |  |
|  |  |

sulphates give no precipitate with barium chloride, but on warming barium sulphate slowly separates, and chlorine is evolved. Ammonium persulphate is very soluble in water, but aqueous solutions gradually decompose, a sulphate being formed and oxygen liberated. It is a powerful oxidizing agent, organic coloring matter being bleached by it and alcohol oxidized into aldehyde. The salt is used by rubbing a little of the moistened powder on the fingers, and then rinsing of with water. It will be remembered that potassium persulphate $\left(\mathrm{KSO}_{4}\right)$ was introduced some time ago under the name of anthion,


Scene In Rosedale.
prints, which he toned with the single Toner, together with some that had been brought by the members, explaining the different points very clearly as he proceeded. The results were very satisfactory and considerable valuable information was gained by all present.

The meetings of the Club, which are held every Tuesday evening during the winter, will be particularly interesting this month as the sets of slides from the American Lantern Slide Interchange are of such a high standard that an enjoyable evening is assured.

The prints should remain in this bath till the desired tone is obtained, and finally washed for about fifteen minutes.

Persulphate of Ammonia is being used for removing pyro stains from the tingers, and was originally recommended for that purpose by Liesegang in the German Amateur Photographer. It is prepared by the electrolysis of a satur ated solution of sulphate of ammonia. Crystals of the persulphate form at the anode, the formula for which Hugh Marshall gives as AmSO_. The per.

2s a "hypo" eliminator. It is curious to note that the potash salt is only slightly soluble in water.

Dry-plates, says a writer in The Optic$i a n$, should not be stored at the top of a room lit by gas, as warm, impure air has a distinctly bad effect on them. Damp, again, is liable to set up bacterial decomposition, a dry-plate in a moist atmosphere being an almost ideal culture-plate. Heat exercises not only a deleterious effect on plates, but, by acting on the packing.

## The Vital Parts

 of a Camera $\qquad$
are the lens and the adjustments, bo'h of which must be as accurate as a chronometer.

Our Improved '99 Model

is by far the most perfect yet produced, and combines in an unusual degree the essentials necessaly for the best results. It is fitted with our new model "Wizard" Shutter and our Ingroved Rectilinear l.ens. Sec it at your dealers.

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Our new litio pamphitet will tell you why these we the best ou why these we the bes peiasible to your stock. Floragraph (Aristotype) Wizard Ferro (Bluo Print)
New Illustrated Catalogue sent free if you mention Canadian Daugatst.
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 Buy from the Actual Manafacturers.
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All cases of suspected substitution called to our attention will be investigated, andupon incriminatimgevidence, the substitutor will be reported to every physician and druggist in the surrounding territory.
Honest Pharmacy Must Have Honest Competition.

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CISTOR.FLUID
For the hais.
DENTAL PEARLINE
An excellent antlseptie tooth wash.
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For burning in diphtheritic easen
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An excellent antiseptic dentifice.

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

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Pharmaceutical Chemist
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A NEW LINE FOR CANADIAN AND ENGLISH CHEMISTS

# YEAST TABLETS. <br> for families in town and country 

A PURE © NADIAN MANUFACTURE
Recommended by all Druggists for Purity, Keeping Propertics and Economy. Sample Box, conraining 3 doz. five-cent packages, Sy.
papers and box, give rise to emanations which sooner or later find their way through the purer inner wrappings and attack the plates.

Another developer, for the suggestion of which we are also indebted to MM. Lumicire and Seyeweta, of Lyons, is the following, which is very valuable for copying of line subjects, such as black and white drawings, engravings, etc. Fior ordinary i.ndscape work it is almost too clean in its action, giving negatives so full of contrast that one cannot obtain
circumstances of ordinary contact. By the use of his combination solution for fixing and toning, and which, in addition, completes the photograph with greater effect, a considerable degree of economy is assured, and what is of immense importance in general photographic manipulation consists in the fact that the employment of the dangerously poisonous sulphocyanide of ammonium becomes unnecessary by the application of has combination solution. The great active principle of the solution-as composed of appropriate proportions, varying for
and then allowing it to cool, the above. named ingredients are incorporated with the fuid thus treated in sequisite proportions. 'The muxture is now agitated, and, alter allowing it to subside or clear. the insoluble sediment is filtered off, and the solution is now complete for its intended functions. The prints treated with it are absolutely permanem, whereas those treated with other existing solutions will fade in probably less than two jears. Another of its great properties is that the whate of the solution, once prepared, can be entirely used up without adding


Scene Near Toronto.
good prints from them. The chemical action.that goes on here is practically the same as with acctone:

| Iydroqu <br> Sodium sut <br> Formalde |
| :---: |
|  |  |
|  |  |
|  |  |

A Novel Toning and Fining Process is que to A. E. Wade, who claims that it both improves the appearance or finish of photographic prints and their - resisting capacity to time, in being cx. posed to vitiating atnospheric conditions in storage, etc, and under various other
specific purposes, of chloride of gold, nitrate of lead, nitrate of potash, hyposulphite of soda, flowers of sulphur, and quicklime respectively-is secured by the employment of ordinary water treated by the following special process, viz, the water while in a boiling condition is saturated, or acted upon till saturated, with smoke obtained by the burning of ordinary bituminous coal, or the smoke may be obtained from anthracite or other carbonaceous fucl. After passing the smoke through the boibiaig mater unill it becemes thoroughly saturated with it,
to its strength, and at the same time the solution thus prepared will remain fit for use at any time diring a number of years. Pinally, one of its valuable qualities consists in the fact that no previous washing of the prints is required in using it, and besides, it absorbs silver from the paper, which, where previnus washing is necessary, would produce a waste, whereas in this process it will help to enrich the solution and to considerably improve the tonc of the piclure treated with A. - Bri/ish fournal of Phofoyraphy.

## Optical Department

In charge of W. F., Hasman. N. I\%. Principal of the Oinical Iustitute of Canata.


Correspondents should note that for an intelligent answer to be given to their inquiries it is necessary in every case to give the following information relative to their patient: (1) Sex, (2) age, (3) occupation, (4) near point of distinct vision for small type with each ege alone, (5) how their eyes trouble them, i.c., their asthenopic symptoms, (6) vision of each cye at twenty feet alone without glasses, (7) best vision obtainable with glasses, naming correction.

Example.-J.S., male; age, 15 ; bookkecper; can read small type to within five inches of each eye; complains of much headache through the day and evening; eyes feel sore and water a good deal, look red and inflamed, etc., etc.

The above example is taken to illustrate about how we desire inquiries to be made.
1.A.C.-I have an old gentleman aged 70, a cabinetmaker, who wants glasses to work with so that be can see his work plainly at from $=01030$ inches-
 him a pair that was just the thing for 30 inches, but they were misty at 20 inches. Then I gave him a pair lor 20 inches, and they were misty at 30 inches. Then I tried a pair that made everything plain at 25 inches, but they were not satisfactory. I would be glad for any sugges. tion which would enable me to fit the old gentleman so that he might continue his avocation, lor otherwise he is hale and hearty, and appears able to carn a good day's pay for many a year yet.

Answer.-It appears to us that a bifocal for working in would solve the problen. The upper segment for 30 inches and the lower segment for 20 inches. Between these two points he would have sutio ciently good vision to enable him to do his work.

He would, of course, require another pair for reading with a shonter focal dis. tance, as $=0$ inches would be 200 great a distance for reading ordinatily. At $; 0$ a
person has lost all their accommodation, and for clear vision of any object at a finite distance it is evident the glass would have to do all the work, as it could receive no aid from the acc. lior the reading pair we would suggest the + glass, wheh gave him most distinct V. at the distance he prefers to read, which will likely be about 12 inches or 1.3 inches. In fact in an old presbyope without any acc. it is necessary that he should have as many pairs of glasses as there are places which he desires to see clearly at. When an optician is confronted with one of these cases, he must rake up his knowledge of the acc. of the eye, and remember how much acc. is present at any given age, and how much, if any, is present that he can use with benefit. There is no class of cases which calls for so much exercise of common sense, based on opical knowledge, as these, and shows once more that presbyopia is really the most difficult get apparently the easiest to fit. I have found inestimable value and help from l'rnces Rule, made by Hardy \& Co., of Chicago, and sold by the Montreal Optical Co., in overcoming the difficulies in fitting presbyopes, and I advise every opician to invest $\$ 1.50$ in the same, which, if they do, they will thank me for the suggestion. It is easily un jerstood by anyone, but, like any other instrument, requies sufficient examination to become familiar with its use, and to get from it its best aid. I have ioseatedly in these solumns written at leugh on presbyopia, because, if there is one subject which an optician is weak on, it is the correction of "old sight," and yet the merest novice in optics thinks that he is an expert in fitung presbyopes because he can so easily satisfy the customer at the time of sale, but after a day or two of use of the glasses how often does your presbyopic customer return with some complant, and you try another pair, and so on, until perhaps you strike the lucky number.

This should not be, and to avoid it the first cssential for any optician is to thoroughly understand the acc. and apply this knowledge in evciy case, for no two cases are alike.

Iodol Collodion.-A solution of one part iodol in nine parts collodion is sug. gested for erysipelas and other comulaints.

## Examination in Optics.

At the first examination held by The Spectuche Matiers' Compan; of England, for diplomas held reccutly, the following were the questions set at the written ex. mination:

1. How would you determine the focal length of a simple biconvex lens with faces of equal curvature? Give all the praclical methods you know of.
2. In what way is the position of the principal focus of a lens dependent upon the choice of the curvatures ${ }^{2}$ Illustate your answer by reference to the positions of the front and back foci of plano-convex lens of +20 D . Does it matter which surface you turn towards the source of light as regards definition ?
3. Are two lenses, say for example, a $\div 3 \mathrm{DS}$ and $\mathrm{a}+5 \mathrm{DS}$ (placed to gether behind one another in a trial frame), exactly equivalent to a single lens (in this case $a+8, D S$ ) whose power is numerically equal to the sum of their separate powers? If not, why not?
4, What proofs are there that the human eye is not achromatic? What kind of combination of lenses would be required to correct its chromatic aberration?
4. A person requires, for the K eye only,-6 DS for distance and -3 DS for reading, but only wants one pair of spectacles. State the various ways in which this can be managed. Which method do you prefer?
5. A prescription is given you as follows. -3 DC axis horizontal $0 \div 1.5$ DC axis vertical R and 1 . . State the different methods of working such a lens and give reason for your choice of curves.
6. What are pebble lenses? State the relative advantages of pebbles over glass, or zize zersa. How can you distinguish between them?
7. An emmetrope, aged 60 , has had his lens removed for cataract. What glass would you give for reading, and what for distant wsion? Could he sce cleariy with either glass at a metre?
8. A boy aged in has vision $=\#$, but with a concave lens of 1.2 , he has vision. $=$ =. What tests would yeu employ to ascertain the nature of his defect?
9. An oculist has prescribed for a man aged 60, for distant sight,

$$
\mathrm{E}-\mathrm{i.5DS}
$$

## Canadian Ophithalmic College

L. G. AMSDEN, principal.



## New Year's Announcement

The unrivalled success of our classes and students during the past year phaces the Camadian Ophathathic Collese
 Comtinem.

We are already receiving applications for our New Year's class, which opens on

- . January 16th, 1899

Intending students should apply at once.

## ©OHEN BROS. Toronto, Ont.

## The 6 ptical Institute of Canada <br> 

Next Class in OPTICS and REFRACTION commences on January foth, 8899.

A Diploma from this Optical Institute is always an evidence of the ability of its possessor to intelligently and satisfactorily fit spectacles, and sturenivare , welcome to teman unal they have mantered the suliject.

The record of our students is that in frum one to two months they make enough protits to gay for all their time and expenses white at the Institute.

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## BEST COURSE IN OPTICS IN CANADA.


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##  \%urface... <br> Counts for a great deal in <br> Tloilet $\mathbb{P}$ apers <br> and customers are asking for EDDY'S make. <br> We can stock you up in full; we make over 20 brands- $\$ 5$ to $\$ 16$ per case. <br>  <br> THE E. B. EDDY. Co. HAM1TED <br> HULI <br> MUNTREAI, <br> FORONFO <br> 



Often in the morning there comes a fecling of weariness, indescribable ; not exactly ill, nor fit to work, but too near well to remain idle. A Ripans Tabule taken at night, before retiring, or just after dinner, has been known to drive away that weariness for months.



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Rye and Mralt Whiskies
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## EY

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 HAMILTON-Archdale Wiben A Ca J. Wiser A Ca LONDON-Loajoa Dreg Ca Jas A. Kenoedy A Ca WINNIPEG-Martin, Bole \& Wram Ca. WEW WESTEINSTER-D. S. Curt ACA
Victoria and vancouver--Langley $\&$ Hender-QUEBEC.-W. Brunet et Cie.
ST. JOHN-Canadian Drus Co. S. MreDiarmid \& Co PRESCOTT.-T. W. Chamiterlain \& Co. mONTREAL-HiHuden, Huber \& Co.

## PATENTS

Caveats, Tratie Mitrks, DesigitFreents, Cojyrights, Eitc. Correspondence Solicited.
John A Paul, LeDroit Buidding, Washington; $0 . C$.


A handeomely illantrated menkly. Ingmest cir. cilatlon of anyacjentincijournit Terma, so a



$$
\mathrm{I} \frac{-4 \mathrm{DS}}{-0.75} \mathrm{DC} \text { axis } 45 .
$$

He requires glasses for about 15 or 16 in. reading distance; write the formula.
11. A youth, aged 12 , sees best with - 14 D S R and L. Would yougive him this correction on jour own responsi bility, and if not, state your reasons?
12. A boy, aged 10 , has vision $=\frac{70}{40}$, and with-2.5 DS he sees $\frac{\tilde{y}}{\mathbf{y}} \mathrm{O}$, but on testing his P.P. is found to be at $1=\mathrm{c} . \mathrm{m}$. What is probably his defect, and give your reason ?
13. What do you understand by the terms "Amplitude of Accommodation," and " Range of Accommodation"? Illustrate these terms in the case of an emmetrope aged 20 , a myone of ${ }_{3}$ DS aged 20 , and of a hype:metrope of 3 DS of the same age. Where would the l'P. be situated in each case?
14. Explain the importance of having spectacie lenses correctly centred. What would (roughly speaking) be the effect on a costomer haying his spectacle lenses of - io D S, each decentred $+\mathrm{m} . \mathrm{m}$. in wards, supposing that he had binocular vision?

## Acquired Hypermetropia <br> B) W. BOHME, NEW ORLEINS, 1 a <br> Wsitten for The Opticat Journal. <br> (Continued from pase 2 tio.)

Now let us see where Donders made a mistake. He was the first who insisted on the absolute necesstit of separatung the two factors, refraction and accommoda. fion, and bromoted the following theory upon those premises. He first cuefines the normal eye, which is free from any organic refractive defects; its gradual decline manifests only the defict of accommodation, called presb; opia. He then outlines the crrors of refraction: 1 . Mfyopia, caused by excessive refraction. 2. Hypermetropin, by deficient refraction. 3. Astigmafism, by an inequality of refrestive power in the different meridians of the ejebail. According to his theory, therefore. presbyopia is confined to the existent state of accommodation, and as the emmetropic or normal eye is free from any originai refractive defects all plases of the declining accommodation have to be counted as marifestations of the commencing or, later on, advanced presbjopia. But Donders did not stop at this simple deduction, he abrupils turns
around and states that this is only true as far as the near point is concerned. He says, "the far point also begins in the normal eje to recede somewhat about the age of fifty, so that the eye becomes slightly hypermetropic," and the proof of his arbutrary assertion is that distant vision is now improved by consex ghases.

How much more simple it would be to limit the presbyopia of a normal eye to the decline of accommodation, thus forming the first division of general eye defects, which later on would possibly be combined with the symptoms of second sight, or with the unavoidable asthenopia. All other defects, either single or mixed, would then fortn the second grand division, i.e., the organic errors of refraction, which in the length of time will be combined also with the first division in the different somplicated errors, contrary to presbyopia, which cannot contract any defects of the second division.

Donders' theory was readily accepted by many distinguished writers, who called it acquired hypermetropia, to discriminate it from the true, origin alone. Recemly some writers have, accidentally or purposely, ignored this quite unnecessary distinction between the near and far point of a pres byopic eye. The defenders of this theory may claim that the normal eje loses ail power of accommodation at the age of $\sigma_{5}$ years, and that such an eye should then be counted among those suffering from a stationary refractive defect; but Donders, himseli, admits that distant vision has to be corrected very often at the age of filty, when, according to his diagram of accommodation, the eye s:ill enjoys some remaining power of $i t$.

The total decline of accommodation at the age of 65 years can be considered only as an exception, and not as a rule. because every practitioner knows that many of his customers require stronger glasses, after that age, than they were using up to tien, thus clearly showing that they had yet to lose some part of their accommodation, which would have been impossible if Donders' theory was correct.

I think there is no good reason to call the final development of presbyobia by any specific name, especially not by the name of "acquired hypermetropia." If hypermetropia is an error of refraction, and presbyopia the decline of accommodation, we should not mix them up and confuse the s:udent with a "thousand and one" ophthalmic terms without necessity. "If our text-books were judicoonsly corrected and purified of all vague theories, it would not take a life time to master all the difficulties of one specific branch, but would also allow the student to devole part of his time to the general study of science, besides being an expert in his orn particular profession."

## Amongst Our Advertisers.

Smith's Triangle Baby Food, advertised by Messrs. Archdale Wilson \& Co., of Hamitton, has been thoroughly tested, and has proved an unqualified success. It contains everything necessary for the successful raising of children, and in this respect is far superior to many of the foods on the market, most of which are lacking in one quality or another.

Triangle Food is put up in very hand some one-pound triangle cans, and re tails at 25 cents.

Increase of business has forced the Hamilton stationery firm of Bumtin, Gil lies \& Co. to enlarge their premises. As there was no room to spread out, they had to add an additional storey to their building. This space was very much needed, but the firm expect now to be able to carry on their fast increasing business with more convenience than in the past.

## Goms of Fine Art.

Tuti Fru'ti gum and gems of fine ant seem to be a happy combination. The idams $\&$ Sons Co. have recened an m . portation of gems from the French masterpieces which they are giving out as prem. ums to the retailer who handles their chew mg gums. The one they are showing in our advertising columbs this month is entitled "The letrothal." The Adams people are putting out some handsome printed matter, showing illustrations of the whole set of six subjects, which is well worth sending for.

## Optical Instruction.

The Canadian Ophthatmic College, whose announcement appears elsewhere in this issue, have just completed a most successful year. Their graduates, both in point of numbers and efficiency, com pare favorably with similar mstitutons in the United States.

Messrs. Cohen Brothers claim for the college, as well as for their business, that it is a purely Canadian institution, and, with the improvements complete in the lecture-room now under way, predict still greater success for 1890

AIr. L. G. Amsden, who has been asso ciated with the college since its foundation, and whose repuation boih as a teacher and a pracitioner is sufficient guarantee of its standing, stial remains al
itshead, and students can count upon receiving the same conscientious instruc. tion that has been hitherto characteristic of the Canadian Ophthalmic College.

## Photorraphic Magazines.

The December numbers are of especial interest in most cases, and the fact that photography is now, not merely a summer vocation, but is equally adapted to all seasons, lends an additional zest to the enjojment of the holiday season, and encourages the work of indoor photography in this climate.
the photogran.
"The Holy Shroud of Turin" is repro. duced in two supplements to the Christ. mas number of The Photosram. The larger supplement is 20 in . by $5^{1 / 2} \mathrm{in}$., and is intended for iraming. The Holy. Sbroud has been preserved for centuries in Turin, is now in the Chapel Royal of Tuin Cathedral, and is believed to be the veritable shroud in which the body of Christ, after the descent from the cross, was wrapped by Joseph of Arimathea. When solemnly exposed on May $25^{\text {th }}$ last, the shroud was photographed by Signor Secondo Pia, a lawger of 'Turin, who was surprised to find the negative show a distinct face and figure, which have been described by the Paris Univers as follows: "Nothing is more attractive than the countenance, truly divine, striking in its beauty and sweciness, its majesty and love, even in death."

The large reproduction in The Photo. gram shows the shroud as it appears, with the distinct impress of the front and of the back of the body. The smaller (fullpage) reproduction shows the face and front of the body as it would appear on Signor Pia's negative.
"Hand-Camera Work in Winter" is shown, by Paul Martin, to be both possible and enjoyable. His article is illus. trated with eight examples.

The Christmas number is the same price as the ordinary monthly issues of The Phologram, viz.: Threepence, post free fivepence, from Dawbarn \& Ward, Limited, 6 Farringdon Avenue, London, E.C.

THE PHOTO-BEACON.
Amongst the features in this magazine are the "Child Picture Competition" and its results; "Photography in Queer Places," with phologravures of scenes amongst the Moki Indians; "Practical

Hints," by Lambert; "Photography for "Teachers and Students," etc. The Beacon is the official organ of the Vive International Stereoscopic Society. The Photo- Beacon Co., Chicugo. \$1 per annum.

## Books and Magazines.

In the Christnas number of The American MonthlyRectese of Revicius some of the most noteworthy of the famous paintings of the life of Christ by J. James Tissot are reproduced. Clifton Harby Levy writes on Tissot'slife and method in painting, and Ernest Knauff contributes a criticism of the portraits from an artist's point of view. The collection is now on exhibition in New York and will be shown in several of the leading American cities before Mr. Tissot returns to France. It is beyond question the most important series of representations of Christ made in modern times.

Every Thursday the Year Round.
In more than half a million homes The Youth's Companion comes every week, the welcome guest of young and old -read with equal interest by every member of the houschold. The best of fiction, poctry, sketches of travel, instructive articles, comments on current events and selected miscellany and anecdotes fill its columns from week to week and from year to year. The publishers promise that the volume for 1899 will surpass all former ones in variety, interest and value. Among the two hundred distinguished contributors already engaged are Hon. John D. Long, Secretary of the Navy, Edward Everett Hale, Henry M. Stanley, Sarah Orne Tewctt, W. D. Howells, Poultnes Bigelow, Herbert E. Hamblen, Hon. Carl Schurz, Rt. Hon. James Bryce, John Burroughs, Robert Barr, Thomas Nelson Page, Bret Harte, Wil.liam Black, Alfred Austin, Andrew Lang and Dr. William A. Hammond. All subscribers to the 1899 volume will receive The Companion's new Calendar, exquisitely colored, witha border of stamp. ed gold. The paper will be given free also from the time subscription is received until January est, i Sg9, then a full year to January 1st, 1900. A handsome illustrated announcement and sample copies will be sent free to anyone addressing

The Youth's Companion,
21 Columbus Ave.,
Boston, Mass.

## Sheldon's Nowspaper.

The Rev. Charles M. Sheldon's books, now so universally read, make it plain that that writer's hopes of the regeneration of the world lie in gelting individuals more and more to do their daily tasks on Christian principles no matter what the sacrifice involved. In the best known of his books, "In His Steps," he clearly looks to the newspaper, cariied on upon Christian principles, as largely the hope of the "coming kingdom." In looking about him for a newspaper upon his model, he seems to have hit The Afontreal Witness, to which he has addressed a letter, part of which we quote:
"I have read the Witness with much interest. I cannot say that I know of any daily paper in the United States that is conducted on such high Christiau principles. I wish I did, for if ever we needed such a paper in our country we need it now.
"Let me express to you my apprecia-
WANTS, FOR SALE, ETC.

## WANTED.

SITUATION WANTED by O. C. P. graduate Medal. $S$ live 97 ; also Opician. it Refere:ness. Address. $H$ Stanley Monkmar, 1'har. B., care of Queen's Hotel, Vic 10ri:s. B. C.

## Cule Wolicit wour drade

We offer a well-assorted stock of
Drugs
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JAMES A. KENKEDY \& CO.,
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## 录溝漈

## OUR LINE

this season surpasses any previously shown in variety and style of packages．

We would appreciate your order．If for any reason our Representatives overlook calling，please advise and we will ar－ range to have you see our line if possible．


## CANADIAN DRUGGIST PRICES CURRENT

| The quotations given represent average prices for quantities usually purchased by Retail Dealers． Larger parcels may be obtained at lower figures， but quantities smaller than those named will command an advance． |  |  |
| :---: | :---: | :---: |
| Alchiol | \＄475 | \＄500 |
| Melhyl． | 190 | 20 |
| Atsismice，lb | 13 | 15 |
| l＇owdered， 1 l | 15 | 37 |
| Aloin， 02. | 40 | 45 |
| Anodyse，liofiman＇s lot．，His．．． | 50 | 55 |
| Arrowroot，Mermuda，lb．． | 40 | 45 |
| St．Vincent，lb． | 15 | 15 |
| Balsam，Fir，lb． | 45 | 50 |
| Copaiba，It | 70 | 55 |
| I＇cru，lb．． | 325 | 350 |
| Tolu，can or less， | 70 | 75 |
| Bark，Barherry，lb | 22 | 25 |
| Bayberry，lb | 15 | 15 |
| Huckthorn，Ib | 15 | 17 |
| Canclla， 16. | 15 | 17 |
| Cascara Sagrada | 25 | 30 |
| Casarilla，select，lb | is | 20 |
| Cassia，in mats，ib． | 25 | 2 S |
| Cinchona，sed，16． | 60 | 65 |
| Powdered，Ib | 65 | 70 |
| Yellow， 1 l ． | 35 | 40 |
| Pale，lb． | 40 | 45 |
| Elm，selected ${ }_{1}$ lb．．．．．．．．．． | 15 | 20 |
| Ground， 16. | 17 | 20 |
| Powdered， 16 | 20 | 2S |
| Memlock，crushed，lb．．．．．．．． | 15 | 20 |
| Oak，white，crushed lb．．．．．．．． | 15 | 17 |
| Orange peel，bitter， 16. | 15 | 16 |
| Prickly ash，lb．．．．．．．．．．．．．． | 35 | 40 |
| Sassafras，16．．．．．．．．．．．．．．．．．． | 15 | 16 |
| Sonp（quillaya），1b．．．．．．．．．． | 13 | 15 |
| Wild chersy， 16. | 13 | 15 |
| Bends，Calabar， | 45 | 50 |
| Tonka，Ib．．．．．．．．．．．．．．．．．．．．． | 130 | 275 |
| Vanilla，lb．．．．．．．．．．．．．．．．．．．． | $8 \infty$ | 1500 |
| Berries，Cublb，sifted，lb．．．．．． | 20 | 25 |
| Juniper lb powdered，lb．． | 25 | $30^{\circ}$ |
| Juniper，lb，．．．．．．．．．．．．．．．．．． | 7 | 10 |
| Ground，If ．．．．．．．．．．．．．．．． | 12 | 14 |
| Prickly ash，I6．．．．．．．．．．．．．．．． | 40 | 45 |
| Buds，Balm of Gilead，Ib．．．．．．．． | 55 | 60 |
| Cassia，Ib | 25 | 30 |
| Buttek，Cacao，lb．．．．．．．．．．．．．．． | 60 | 65 |
| CxMphor，ib．． | 55 | 65 |
| Cantharides，Rlessian， 16 |  |  |
| Poridered，1b．．．．．．．．．．．．．．． | 150 | 160 |
| Capsicum，lb．．．．．．．．．．．．．．．．．．．．． | 25 | 30 |

Corrected to December 8th， 1898.
The quotations given represent average prices for
C
150 160

| Prepared，1b | － |
| :---: | :---: |
| Cinacoal，Animal，powd．，16．．． | $4 \quad 5$ |
| Willow，powdered，ib． | 2025 |
| Ciove， 1 b ． | 1720 |

？owdered，
Cochinibal，S．
Collomon，lb． ..... 40
75
Canharidal， $\mathrm{lb} . .$. ..... 250
Confrecric：，Senna，ib50
40
30
Creosotes，Wood，Ib．
Crenasol．（Jevhs） 4.02 ..... doz．Cuttlefisit Bone，ib25
Dentrink，b．．．．．．．．
DOVER＇s Pownek， ..... 150
Encot，Spanish，75
90 Ergotin，Kcith＇s，oz． ..... 200
ExTRACT I．OGWOOD，bulk，Ib．．14Flowers，Amica，14
Calendala，1b．． ..... 55
25
Camomile，Koman， ib ． German，40
20
Ender，lic．．．ib ..... $1 \stackrel{12}{c}$
Rosemary，ib．200
Safiron，American，ll ..... 65
105
Griatine，Cooper＇s，lb． ..... 75French，white，ib$\begin{array}{r}125 \\ \\ \hline\end{array}$35
Gliveeki： ..... $1 \infty$
Powdered，ib． ..... 125110
$1 \quad 35$
Gum dlors，Cape，IU．Barbadocs， 16Socotrine，ib．30
Asiccitila，ib Arabic，1st，（b）loic，Ist，（b）．
Sifted sorte， 1670
50
Sorts， 16BenzoinCatechu，Blach，ibGamle：ge，powdered， 1Guaiac， 16Powdered，ib5
20
50


Powdered，lb 15 30 Carmine，No．4o，oz．．．．．．．．．．．． 40
$20 \quad 0$教

－ino Iruc，

Powdere

Opium lbed，lb．．．．．．．．．．．．． 55
pinm，ㄴ．．．．．．．．．．．．．．．．．．．．．．． 500
Scammony，pure liesin，lb．．．．．．． 6
Shellac，lt．
Spruce，trin il
Ttagacanh，nake，ist，li．．．．．．． 30 30
Prwdered，lb．．．．．．．．．．．．．．．．．． 10
Sorts， 16.
Thus，llb．．．．．．．
itrkn，Nlihen，
Mittermort， $\mathrm{b}^{\text {b }}$ ．
Buadock，Ib．．．
$=75$
250
+50
$10 \quad 50$
30
160
So
100
210
Honesel，or．，Ib．
Catnij，or．，Ib．
Chiretin，
Coltsfort， 16.
Coltsfort， $16 . . . . .$.
Feverfew，oz．，ib．
5

Grindelia robusta，ib．
525
67
1300

Horchound，oz．，lb．．．
Jaborandi，lb．．．．
Lemon Balu，Jh．．．．．．．
I．iveruort，German，ib．
Loobelia，oz．，lb．．．．．．．．
Motherwort，oz，Ib
lallin 20
Pennyroyal，oz，if ．．．．．．．．．．．．．．．．．．is
Ieppermin，oz．，1b．．．．．．．．．． 21
late，02． 1 b
Sage，oz．，ib $\qquad$
Speamint，11）
Thyme，oz．，Ib
Tansy，om，ll ．
Wormwood，oz．
Jerla Santa，lb．
llncky 1 b
liors，fresh，lh．．．
Indign，Madras，ib．
Instict lowinek，H．
Isingl．nss，Imrazil，lb．
Russian，true ll ．．．．．．．．．．．．$=\infty$
，Kif，Aconitc，H．
13ay，lb．
．．．．．．．．．．．．．．．．．．．．．．
Beilatonna， 11 h
Shoth， 16
Coc．，1b．
Digitalis，Ib
Eucalyptus，It
lijoscyamus
Matico，lb．．．．．．．．．．．．．．．．．．．．．．．． 70

| Semma, Alexandria, lb......... \$ | 25 \$ | 30 | Rhat:uy, Ib . . . . . . . . . . . . \$ | 20 |  | Astinbkvix, oz........... ..s |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tinnevelly, | 15 | 25 | Rhulart, It | 75 | 250 | Asplkamia | 135 | 1.10 |
| Sramoniun, | 20 | 25 | Sarsaparilla, | 40 | 45 | Avthreme, | 055 | - 65 |
| Uva Ursi, Ili | 15 | 18 | Cut, 11 | 50 | 55 | Akisiol., oz.. | : 85 | 200 |
| Lueches, Swedish, | 100 | 110 | Sencera, | 55 | 65 | dismasic, Donovan's sol., Ib..... | 25 | 30 |
| L, ${ }^{\text {conter, }}$, Solazzi. | 45 | 50 | Squill, it | 13 | 15 | Fonler's sol., 11. | 10 | 13 |
| Pignatelli. | 35 | 40 | Stillingia, ll | 22 | 25 | Iodide. | 50 | 55 |
|  | 30 | 25 | l'owdered, | 25 | 27 | White, | 6 |  |
| $V$ SS-Sticks, 6 to ilib, per ib. | 27 | 30 | Unicom, 1b | $3{ }^{5}$ | 40 | ATropris, Sulp, in to os. Soc., |  |  |
| " Purity, 100 sticks in box | 75 | 75 | Valerinn, Enghish, Ib. true. | 20 | 25 | 02. | 600 | 625 |
| $\because \quad$ Putity, zoos sticks in brox | 150 | 150 | Virginia, Snake, | 40 | 45 | Bismurn, Ammoniarcitate, oz | 40 | 5 |
| $\ddot{\prime \prime}$ Acme Pellets, 5 lb. tiols | $2 \infty$ | $2 \infty$ | Yellow Dock | 15 | 18 | Iodide, oz.................. | 55 |  |
| " L.ozenges, 5 ll . lins. | 20 | $2 \infty$ | Rum, Bay, | 250 | 275 | Salicylate, | 25 | 30 |
| " Tar, licorice, and Tol |  |  | 1:ssence, | 300 | 325 | Subcarbonate, | $\pm \infty$ |  |
| [ 5 li. tims..... | 200 | 200 | Saccimaris, oz............ | 125 | 150 | Sulnitrate | So |  |
| Lupunsi, oz. | 30 | 35 | Sekl, inise, italian, sifted, ll. . | 13 | 15 | Botax, lb. | 6 |  |
|  | 70 | sc | Star, lb. | 35 | 40 | Powdered, 1 | 7 |  |
| mace. Ib. | 20 | 125 | Burduck, 11. | 30 | 35 | Bromine, oz | 5 | 13 |
| Mansa, ll | 160 | 175 | Canary, bag or | 4 | 5 | Cadmium, Bronic | 0 | 25 |
| Moss, Iceland, |  | 1 c | Caraway, ib | 10 | 13 | lodicte, oz. | 45 | 50 |
| lrish, 1 b . | 12 | 13 | Cardanom, | 115 | 125 | Capprine, | 55 |  |
| Musk, Tonqui | 1600 | 5000 | Cclery. | 25 | 30 | Citrate, oz... | 35 | - |
| Nutgails. 16 | 21 | 25 | Colclicum | 50 | 60 | Catcius, Llypophosp | 150 | 0 |
| Powdered, 1 l | 25 | 30 | Coriander, | 10 | 12 | lodide, | 95 |  |
| Nummeg, lib | $\infty$ | 110 | Camin, 1 | 15 | 20 | Phosphate, p | 35 | S |
| Nux Vomica, il | 10 | 12 | Fennel, 16 | 15 | 17 | Sulphide, oz. | 5 |  |
| Powdered, 11 | 20 | 25 | Fenugrence powderes, ib | 7 | 9 | Curlun, Oxalat | 0 | 12 |
| Оаким, lb. | 12 | 15 | Flax, cie. ${ }^{\text {, }}$, | 31 | 4 | Cunsommse, oz. | 15 | 0 |
| Onitment, Merc., Ib. $1 / 2$ ind $1 / 2$. | 70 | 75 | Gruithe, |  | 5 | Ciliorat, Mydrute, | 25 |  |
| Citrine, 1 lb | 45 | 50 | 1 cmp , lb | 3! | 4 | Croten, | 75 |  |
| Pakaldenyde, | 9 | 22 | Mustard, white | 11 | 12 | Спи, окоговм, | 60 | go |
| Prepre, black, 1 l | 16 | 15 | Powdered, 11 | 15 | 20 | Cinchomise, sulphate | 25 | 30 |
| Powdered, 16 | 18 | 20 | Puppkin | 25 | 30 | Cisctiontrase, Suthe, o | 25 | +30 |
| P1TCu, black, lib | 3 | 4 | Quince, 16 | 65 | 70 | Сосans, Mur., oz. | 400 | $+50$ |
| Bergindj, true, 1 | 10 | 12 | kape, | 5 | 6 | Coinla, $\frac{1}{6}$ Oz | 75 |  |
| Plaster, Calcincd, | 125 | 325 | Strophanthis | 50 | 55 | Coniontos, 1 lb . | 65 | 0 |
| Adhesive, yd | 12 | 13 | Worn, 16 | 22 | 25 | Corper, Sulph., (Bluc Vitric) ib. | 6 |  |
| Belliadonma, I | 65 | 70 | Shiditz Mixpure. 1 | 25 | 30 | Iodids, oz | 65 | 70 |
| Galbanum Com | So | 85 | Soap, Castile, Monled, pare, li. | 10 | 12 | Compras, | 1 |  |
| Lead, 1 b | 25 | 30 | White, Conti's, | 15 | 16 | Diuskris, | 160 |  |
| Poprs lieads, der | 100 | 110 | lowdered, | 25 | 40 | Ether, Acctic, | 75 |  |
| Rosis, Common, | 21 | 3 | Green (Sapo Vi | 25 | 40 | Sulpharic, 11 | 40 | 50 |
| White, H1.. | 31 | 4 | Spru-acmith, | 60 | 65 | Exalinse, oz. | $\infty$ |  |
| Resorcin, white, | 25 | $\bigcirc$ | turimitine, | 75 | So | hyoscramme, | 25 | 30 |
| Rochalle Salt | 25 | 28 | Venice, ib | 10 | 12 | lomst, 11. | 50 | 5 ¢ |
| Roor, Aconite, 11 | 22 | 25 | Wax, White, 1 | 50 | 75 | lopoross, | 525 | 550 |
| Althea, cut, it | 30 | 35 | Jellow. | 40 | 45 | Ionol., oz |  |  |
| Belladonna, | 25 | 30 | Woob, Guaiar, rasp | 5 | 6 | IRON, by Ifydr | 80 |  |
| Blood, lb. | 18 | 25 | Quassia chips, ib. | 10 | 12 | Carionate, Pr | 15 |  |
| Biller, lb | 27 | $3{ }^{\circ}$ | Red Saunders, ground | 5 | 6 | Saccly, lb | 30 | 35 |
| Blackherry, 13. | 15 | 18 | Santa, ground, lb | 5 | 6 | Chloride | 45 |  |
| Burdock, crushe | 18 | 20 |  |  |  | Sol., ib. | 13 |  |
| Calanus, sliced, | 20 | 25 |  |  |  | Citrate, U.S.P., | 90 | - |
| Canada Snake, | 30 | 35 | Aciv, Acctic, | 12 | 13 | And Ammon | 70 | 5 |
| Cohosh, blact | 15 | 20 | Glacial, 1 b | 45 | 50 | And Quinine, 1 | 150 | ${ }^{\circ}$ |
| Colchicum, lb | 40 | 45 | Beazoic, Englisio | 20 | 25 | Quin. and Stry., | 15 | 30 |
| Columbo, ib | $=0$ | 22 | German, oz | 10 | 12 | And Sitychnine, |  |  |
| Yowdered, | 25 | 30 | Boracic, | 12 | 13 | Dialyzed, Solution, | 50 | 50 |
| Coltsfoot, 16. | 38 | 40 | Carbolic Crystals, $16 . . . . .$. | 30 | 35 | Ferrocyanide, lb. | 55 |  |
| Comfres, crushe | 20 | 25 | Calvert's No. 1, ib ......... | 210 | 215 | 1 H ppphasphites, oz | 25 | 35 |
| Curcuma, powdered, | 13 | 14 | No. 2, | 135 | 140 | Iodide, oz.. | 40 | 5 |
| Dandelion, Ib. | 20 | 22 | Citric, 16.. | 50 | 55 | Syrup, ib | 40 |  |
| Ececampane, | 35 | 20 |  | 10 | 12 | Lactate, oz........... ..... | 5 |  |
| Galangal, lb | 15 | 18 | Mjdrobromic, diluted, lb...... | 30 | 35 | Pernitrate, solution, 16... .... | 15 | ${ }^{6}$ |
| Gelseminu, lb | 22 | 25 | Uydrocyanic, diluted, oz. botties |  |  | Phosphate scales, | 125 |  |
| Gentian or Gen | 12 | 23 |  | 50 | 160 | Sulphate, pare, li............. |  |  |
| Ground, 1 lb | 13 | 14 | Lactic, concentratel, 0 | S | 10 | Exsiccated, lb | 8 | 10 |
| lowdered, | 13 | 15 | Muriatic, 1 b | 3 | 5 | And Potass. Tatrate, lib. | So | 5 |
| Ginger, Afric | 15 | 20 | Chem. pare | 15 | 20 |  | So |  |
| Po., 16 | 20 | 22 | Nitric, $16 .$. | 102 | 13 | Jries' Fivin, 25 c . bcules, per dor. |  |  |
| Jamaica, blehd, | 30 | 35 | Chem. jure | 25 | 30 | " 500. bgttles, per doz |  | 50 |
| Po., lib. | 35 | 35 | Oleic, purificd, | 75 | So | Lead, Actate, white | 3 |  |
| Ginseng, ib | +50 | 475 | Oxalic, ib | 12 | 13 | Cariomate, 16. | 7 |  |
| Golden Seal, | 75 | So | Phosphoric, | $\infty$ | 110 | Iodide, oz. | 35 |  |
| Gold Thread, ll . | 90 | 95 | Dilure, 1 | 13 | 17 | lied, ib. | 7 |  |
| Hellebore, white, fowd., it | 18 | 20 | Pyogallic, 02 | jo | 35 | Line, Chlorinated, bulk, |  |  |
| Indian Hemp | 15 | ${ }_{3}^{20}$ | Salicylic, white, ib. | 75 | So | In packages, lb,...... | 6 |  |
| Ppecac, ${ }^{\text {dom }}$ | 350 | 360 +00 | Sulphuric, carboj, Jotles, a | $2 \ddagger$ | $2 \frac{1}{5}$ | Litulum, Bronide, oz. . | 33 | 35 |
| Jalap, it | 375 |  | Chent | 15 | -5 | Carbonate, | 30 |  |
| Jatap, | 60 | 65 | Tannic, ib. | So | ${ }_{5}$ | Citrate, oz. | 25 |  |
| Kıvi. Sava, | 40 | 90 | Tartaric, powdered, Ib...... | 3 S | 40 | Iodide, oz.. | 50 | 5 |
| Licorice, 16 | 12 | 15 | Aгmıainid, ib............... | 65 | 10 | Salicylare, | 35 |  |
| Powdered, 1 l | 13 | 15 | A conitise, grain.......... .. |  | 5 | Mansesiun, Cal | 55 |  |
| Mandrake, th | 13 | 15 | Al.us. cryst. ib | 17 | 3 |  |  |  |
|  | 16 | 40 | Powdered, 1 l ............... | $1{ }^{3}$ | 12 |  | ${ }^{35}$ |  |
| Orris, Florentine, il | 30 | 35 | AMMONiA, Liguor, lb., SSo.... | 10 | 12 | Suph. (Epsom sait, m........ |  |  |
| Powdered, it . | 40 | 45 | Anmonium, brom | So | S5 | Manganuse, Black Oxide, lb.. | 5 |  |
| Pareira Brava, true, 11 | 40 | 45 | Carbonate, li | 4 | 15 | Mextuol, ${ }^{\text {az }}$ | 25 | 7 |
| Pink, llb. | 40 | 45 | lodide, oz.. ............... | 35 | 40 | Mercunx, ih.................. | 75 | 30 |
| Parsicy, ib. | 30 | 35 | Nitrate crystuls, lb............ | 40 | 45 | Ammon (White lirecip.). | 125 |  |
| Pleursey, 16 | 20 | 25 | Muriate, Ib............... ... | 12 | 16 | Chloride, Corsosive, lb..... | 90 |  |
| Proke, lb................... | 15 | 15 | Valerianate, oz............... | 55 16 | 15 | Calomel, |  |  |
| Queen of the Meadow, ........ | 15 | 20 | Amy., Nitrite, | 16 | 18 | With Chalk, | 50 |  |

tion of the Christian heroism and con sideration which make a paper like the IVitness a possibility. I have always believed it possible for a Christian daily to succeed. You have proved that it can. So much of the ideal newspaper in 'In His Steps' is therefore real.
"I pray that you may continue to be blessed in your work. I do not know a more glorious opportunity for building up the kingdom on earth than by means of Christian journalism. I ake the greatest pleasure in sending the copies of the Withess to newspaper friends of mine for their inspection.

> " Very cordially yours,
> "Cmarles M. Sheloon, "Topeka, Kansas."

## A Unlque Compliment.

Mr. Chas. Austin Bates, the American expert advertising writer and critic, whose articles on advertising appear regularly in these columms, in a letter to the Morris, Field, Rogers Piano Company, Listowel, criticizing a catalogue which they recently issued, pays an unusual indirect compliment to the Brown-Searle Printing Co., Toronto, who designed and printed it. Addressing the piano firm, he says: "Printing is one of the things which evidently is done well in Canada. Your piano book is a pleasing piece of work, the paper, printing, illustrations, cover and cover design are all that can be wished. It may not surprise you that I say this, because, possibly, -you have not noticed how very bad most of the catalogues are which are sent out by every kind of business. It is not one time in a hundred, in the course of these letters of criticism, that I have a chance to commend the mechanical part of the get up of a catalogue. In your case I can do so without reservation. Either you know something about printing yourself or you have chosen your printer wistly, and have permitted him to use his good judgment in getting out your book. As a rule this is avery unsafe thing to do. There are very few printers who use their good judgment, because good judgment is something they do not possess.
"In your book the effectiveness of the arrangement is hrought about by the simplicity and uniformity of the type-setting. I especially like the way in which your litule herald, shown upon the cover page, is carried through the book in different positions," etc., etc.

T0 LIFI THE MORTGAGE

## A GREAT CHARITY'S APPEAL

## The Grand Work of Ontario's Sweetest Charity, The Hospital for Sick Children - Hampered by a Mortgage of $\$ 50,000$.

Qo loro abundantly is tes live abundantly. The Biblical story of the Good Sumaritan is a delineation of the greatost thing in the world-love.

The Hospital for Sick Children was built by those who were large in antorprise for the alloviation of the pain and suffering of helpless little chil. dren. The building is one of the beat equipred hospitals in the world. It is capables of accommonating 175 slck ohildron. To-day there are ovar 103 litto jutbents in the Ioxpital. all being nursed and troated. by skilful nikysicians and trained nursos.

The work has been carriod on daring the past year without stint. Ovor 5030 ctilidren were holjed back to houlth. Of these 6.33 pitients wero cared for in the cots. One-third of the patients came from places outside of Toronto.

Tho Hospital is a provincial institulion. Its serricos are freo to the chil. dren of parents who annot affard to phy the small fees charged. Somo of the mast difficult surgicil o.orations known have beon stilfully and success. fully performed at the Hospital. Snny a marent les had cause to bless the great charity, not ouls for saving thoir child's life, but for making haper what had othorwiso been a sorrossful difo. Children who bid been cripples for life but for the ministra. lions of the liospital will grow up strons and straight. and in tho gears to come thes, too. will bloss the work of the Hospital and return thanks in some langible manner.

In twanty-two somes the Hospital for Sick Children has beeu tha means of helpiag 30.00 ) sick childrea.

Thes is a grand institution - ono worthy of the sympathy and holp of averyons.

Though ror $\frac{0}{2}$ years the llospital has feen rloing this work. the workurs in the inst. cution have always buen bar: siss od hy delt-and hanpored for need of funde.
This yiar the mortgage of 850,000 falle due, and half thin imount of the mortgage must be mid off. Tho increase of patients during tho past yoal precluded any mesibility of saving singlo dollar towards this obsect. The trustoes of the llospital, in this critical emergency mako a strong appeal to the people of Ontario.

They ask the ajd of evergone who can spare a singlo dollar.
They have asked tho editor of thes papar to toll tho story of tho llospital to its readers, to tell thy story simply; to state tho urgoney of thuir nesd, and to aypeal to them for finnacinl aid. Thes need mones-not alons for the mortgage indebtedness, but to meet a dobt due the bank for money sulvanced to meet expenses incurrod fur medicine and food.
last yeur the scholars of Outarion Puhlic sehools contributed $81,1: 5$ to. wards tho permanent andowinent of a cot. They will complete their generous gifl chis verr. Toronto school chitdrungathered 31,397, nad thoy sny lhev will do mone this year. Tho sibhath Bchool children gave nearly an equal amount
They are doing their best to relicvo the pain of their comrades in distress And it is upon theso stannch littly friends of tho work that tho llospital relies for manintenance.
Thero nre :00 papers published in the province if the readers of this paper could contributo $\$ 100$ umongat them, that sum would maintain th cot for a your-and perhaps saro the lifo of somelrody's darlings.
you will find as you look back on life that the moments of joy, the moments that sou recolioct ofton. the muments whon you have renlly lived. arn thoss moments when gou have done things in a spirit of love and charity The Hospital for Sick Children. "the sweotest of all chrrities." appeals to gurs on behalf of the little ones who landuisli on beds of sickness They ask only for the dollars you ctn oasily sparc.
As munnory scans the past, boyond all tho transitory pleasuras of life. zhere stand forwird the hours when you hare done some act of kindness to those round about jou, perhans littla acts too trifling to speak of. yot netiona which have hrondented the joj in your life.
Vrom 130 places sulside of Toronto the little pitients came to the Fospiral this yoar. Purlaps it may bus your neighmor's child who will need the mother arm of the institution this yuar.
The future of the nosyitil is in the hands of its friends.
$\$ 25,000$ is neoded nt onco.
To five abundantly is to get abund:untly.
Renders of this payor may forward contributions to \%. lioss Rolvertan. chairman of the Hospical Trust. Toronto. Thnir wifts will be promptly acknowledged ty the Trcasurcr. and in the columns of the forento Evening Tologram.


## Drug Peports.

## Canadian Market Report.

There is every indication of a yood business being done during December. If the sleighing should continue until the holiday time it will mean many dollars tothe country.

The advance in price of Sulphonal has been confirmed. This article is now quoted at double the former price. Cable adivices announcing advance in Phenacetine was an error. There is little doubt in the minds of those best gualified to know that it will soon be higher. Camphor has been steadily advancing, and is quoted at 55 to $60 c$.; higher prices still will indoubtedly prevail. Iodine preparations have advanced about 6 c . per lb . on the London market, and bromide preparations 4 c . Fer lb . Cocaine will undoubtedly be higher presently. QuinineHigher prices looked for after the first of the year, if not before. Ergo:, cascara bark;, Vanilla beans, bismuth, mercurials, caffeine, borax, boracic acid, sulphate copper, and rad ipecac, are all tending
bigher. Paris green is already being sold for spring delivery on the basis of 13 c . in 100 lbs ., irons. Powdered hellebore can be bought now for spring delivery on the basis of $12 c$. in barrel lots. Napthaline balls for spring delivery on the basis of $3^{1 / 2} \mathrm{c}$. in barrel lots.

## Engllsh Market Reporl.

## London, Nov. 25, 1898.

The general tone of business is de cidedly good and prices are in many instances on the up-grade. Sulphonal has had a sensational jump of nearly 50 per cent. in value in consequence of manufacturers combining. Camphor is dearerand iodine and all iodides have advanced. Copper sulphate is also dearer. Ipscacuanha is firm at recent advance. Arsenic easier. Cascara is steady at higher rates. Quinine is very firm and an advance predicted. Ergot is much dearer. Permanganate of potash easier.

Pediculin, a German remeḍy for lice and other parasites, is composed of sixtyfive per cent. powdered chalk and thirtyfive per cent. of commercial naphtha.

## R. H. BUTT

## Fire and Accident Insurance Agent.

## 26 WELLINGTON ST. EAST.

 -PHONF 1854 TORONTO.
## Druggists

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[^0]:    - American Consular Report.

[^1]:    It will be a Pleasure for us to mail a sample to you. Note our Ads in the daily pavers

