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J. C. K. P. 1872

CANADIAN
PHARMACEUTICAL JOURNAL

PUBLISHED BY AUTHORITY OF THE

ONTARIO COLLEGE OF PHARMACY.

EDITED BY

E. B. SHUTTLEWORTH,

Lecturer on Practical Pharmacy, Medical Department, Victoria University.

VOLUME V.—1871-72.

Published by the Printing Committee:

W. ELLIOT.

G. HODGETTS.

H. MILLER.

TORONTO, CANADA:

THE MONETARY TIMES PRINTING ESTABLISHMENT, 60 CHURCH ST.

1872.

*List of persons who are entitled to carry
on the business of an Apothecary or
Chemist and Druggist, in the Province
of Ontario, on the 15th day of June,
1872.*

PUBLISHED IN ACCORDANCE WITH THE PHARMACY
ACT, SEC. 15.

HENRY J. ROSE,

REGISTRAR.

Aberdein, Dr., Chippawa	Cameron, Duncan, Cayuga
Adamson, Mrs. E., Oil Springs	Carpenter, E. R., Collingwood
Aldridge, Geo., Bay City, Mich	Carter, H., Bond Head
Auston, John, Brighton	Casselmann, C. T., Winchester
Aylsworth, Jas., Tamworth	Case, Jno., Toronto
Barker, W. T., Trenton	Caton, Allen, Newburgh
Baines, L., Prescott	Chandler, Jr., E., Strathroy
Bell, A. W., Newboro	Chandler, E. Belleville
Birks, Geo., Prescott	Chapman, N., Warkworth
Bowman, W. H., Berlin	Chapman, Jno., Chatham
Browne, Dr. J., Ottawa	Chapman, C. A., Picton
Buck, A. C., Caledonia	Chidley, Geo., Clinton
Burgar, J. H., Welland	Coad, Jas., Woodstock
Borland, E. B., Orono	Collver, Dr. A. J., Otterville
Bosworth, N. A., Stratford	Combe, Jas. H., Clinton
Bain, T. B., Tilsonburg	Coombs, Jos., Smith's Falls
Barclay, M. F., Wardsville	Coombs, Jno. S., Perth
Barker, Robert, Brighton	Coombs, R. McL., Perth
Barr, Jno. A., Hamilton	Copland, Thos., Hamilton
Beaton, D. J., Stayner	Corbett, W. J., Avening
Berry, G. W., Lucknow	Coulter, W., Peterboro'
Bickle, J. W., Hamilton	Crouter, Geo. W. Wallaceburg
Bower, A. P., Lakefield	Cull, J. Walker, Mitchell
Bray, W. T., Wingham	Cullingford, John, Cobourg
Bray, Wm., Petrolea	Cumming, Geo., Rosemont
Branscombe, H. W., Picton	Craig, J. W., Brantford
Breakenridge, D. A., Morrisburg	Dale, H., Petrolia
Brierley, R., Hamilton	Dale, Jno. B., Wyoming
Brodie, Wm. F., Ancaster	Davidson, F. R., Ottawa
Brendon, F., Brantford	Davidson, H., Walkerton
Burnell, C. R., Belleville	Davids, Joseph, Toronto
Butterfield, Jno. A., Norwood	Davy, N. W., Pakenham
Brydon, W., Toronto	Dawson, C., Warkworth
Byrne, Jas., Whitby	Deacon, Jos., Bradford
Caldwell, O. B., Ingersoll	Denham, Geo., Petrolea
Canniff, Byron M., Belleville	Denant, R. E., Delta
Callard, John, Sparta	Dilworth, Joseph, Toronto
Calder, A. D., Dundas	Doan, D. W., Aurora

Dumbrille, Jno., Maitland
 Dutton, John, Stratford
 Dyas, W. J., Strathroy
 Dyas, J. J., Strathroy
 Eastwood, Alf., Schomberg
 Eastman, D. W., Smithville
 Eby, M. F., Port Elgin
 Eccles, Daniel, Parkhill
 Eldon, Robt., Kintore
 Elliot, R. W., Toronto
 Elliot, Wm., Toronto
 Evans, W. J., Montreal
 Evcrest, G. M., Arkona
 Farrell, P., Ridgetown
 Farrell, J., Lucan
 Fead, S. G. M., Stouffville
 Fead, Wm., Stouffville
 Ferguson, D. C., Belleville
 Fenwick, E. J., Kingston.
 Fitch, J. D., Grimsby
 Fitzgerald, J. W., Fenelon Falls
 Fleming, W. F., Ottawa
 Fothergill, R., Newcastle
 Fraleigh, S., St. Marys
 Frood, Thos., Clifford
 Fullarton, Wm. B., Napanee
 Gamsby, L. A., Orono
 Garlick, J. A., Mitchell
 Garvey, Jas. M. Delhi
 Geary, T. J., Strathroy
 Geen, Alb. L., Belleville
 Gilbert, Wm., Mansfield
 Gissing, A. W., Princeton
 Gordon, W. D., Kingston
 Grant, J. R., Ainleyville
 Gray, H. R., Montreal
 Green, W. A., Walkerton
 Gregory, Emund, Lindsay
 Greaves, J., Collingwood
 Gundry, L. J., Aylmer
 Halson, Rob., Wellington Square
 Harding, A. O., Prescott
 Hall, R. H. Rondeau
 Hampton, H. M., Toronto
 Harding, T. J. B., Brockville
 Harris, Edwin, Toronto
 Harkness, G. W., Albion
 Hildreth, A. R., Paisley
 Harvard, A., Toronto
 Henderson, Dr., Ailsa Craig
 Hewitt, W., Vittoria
 Hewson, G. H., Smithville
 Hey, Thos., Ailsa Craig
 Hilborn, W. R., Hawksville
 Higginbotham, J., Bowmanville
 Hoag, A. N., Thamesville
 Hodgetts, G., Toronto.
 Hodgson, R. H., Brampton.
 Holden, S., Markham
 Holliday, D., Perth
 Hooper, C. E., Toronto
 Hopkins, D. W., Dundas
 Hopkins, Jno. F., Dundas
 Howard, S. W., Orangeville
 Howarth, J. L., Toronto
 Huffman, J. C., Napanee
 Huffman, T. A., Napanee
 Hunter, W., Toronto
 Hutton, Dr. J., Forest
 Inglis, W. M., Brockville
 Jackes, Baldwin, Toronto
 Jackson, G. E., Egmondville
 Jackson, T. G., Wingham
 Jackes, Price, Toronto
 Jefferis, B. G., Beaverton
 Jenkins, J. W., Toronto
 Johnston, Wm., Smiths Falls
 Jordan, F., Goderich
 Joseph, R. F., Toronto
 Kane, Mary Ann, Amherstburg
 Kempt, A. W., Peterboro
 Kelly, P. D., Alliston
 King, J. Geo., Kingston
 Kilborn, H., Newboro
 Knowles, H. A., Toronto
 Land, Abel, Drummondville
 Lander, John C., Yorkville
 Lamb, J. P., Farmersville
 Lally, Thos. P., Smithville
 Law, R. E., Richmond Hill
 Leadbeater, J., Otterville
 Lee, J. R., Toronto
 Lewis, Isaac T., Toronto
 Lewis, J., Montreal
 Lewis, Robt. L., Montreal
 Livingstone, jr., Jno., Listowel
 Livingstone, W. W., Simcoe
 Lloyd, W. A., Pembroke
 Love, J. A., Stanton
 Love, N. C., Toronto
 Lowe, Jno., Amherstburg
 Lutz, W. H., Woodstock
 Lyman, B., Toronto
 Lyman, H., Montreal
 Lyon, W. M., Springfield
 Margach, J. L., Duffin's Cree k
 Matheson, A., Toronto
 Matthews, E., Waterford

- Meldrum, H., Hillsburg
 Meacham, J. B., Dundas
 Melville, T. R., Prescott
 Miller, Hugh, Toronto
 Miller, Henry, Galt
 Mitchell, W. J., Toronto
 Moffatt, R. J., Meaford
 Mole, C., Strathroy
 Moore, Lyman, Hamilton
 Monkman, Geo., Barrie
 Morris, Edwin, Bowmanville
 Morrow, G. E., Brampton
 Mussen, H., Allensburg
 Musselman, C., Hagersville
 Munro, L. C., Fergus
 Mundy, Mark, Hamilton
 Muir, Andrew, Ainleyville
 McBain, J. R., Almonte
 McBride, Jno., Port Dover
 McDonald, D., Vankleek Hill
 McIntosh, Ed. D. S., Strathroy
 McIntyre, J. P., Arnprior
 McKinnon, D., Point Edward
 McKee, Jno., Welland
 McLean, Jno., St. Marys
 McLaren, Dr., Normanton
 McLaren, W. P., Watford,
 Mills, Jas., Jarvis
 McLean, D., Port Stanley
 McMahan, Isaiah, Clarksburg
 Nasmyth, J. H., Stratford
 Nevills, Jno. E., Ailsa Craig
 Nespel, C., Preston
 Newman, R. C., Toronto
 Niblett, W. C., Dundas
 Ockenden, J. K., Manilla
 Owen, R., Toronto
 O'Connor, T. J., Toronto
 Oddy, Henry, Woodstock
 Patton, R. M. M., Chatham
 Parish, T. A., Wallacetown
 Paterson, James, Wiarton
 Parker, E. H., Kingston
 Passmore, C. J., Glenallan
 *Patterson, M., Almonte
 Pearce, C. W., Oakville
 Perry, R. H., Fergus
 Perry, R. E., Napanee
 Perry, J. J., Napanee
 Phillips, Robert, Fergus
 Phillips, E. E., Selkirk
 Potter, Richard J., Parkhill
 Powell, G. A., Wroxeter
 Poyntz, T. G., Orangeville
 Preston, W. H., Ludington, Mich.
 Price, Aaron, Aylmer
 Priddy, R. S., Windsor
 Puddicombe, R. W., London
 Radley, jr., S. D., Chatham
 Reynolds, Ed., Brockville
 Revell, Robt., Woostock
 Richardson, M., Flesherton
 Richardson, Alb. G., Hamilton
 Riggins, C. E., Beamsville
 Robinson, Robert, Toronto
 Robinson, W. H., London
 Robinson, W. S., Yorkville
 Rolls, Dr. Jas. F., Brighton
 Roberts, Jno., Ottawa
 Roper, John, Caledonia
 Rose, D. E., Tamworth
 Rose, H. J., Toronto
 Ross, Dr. A. M., Toronto
 Ross, Walter, Collingwood
 Rutherford, And., Hamilton
 Rushmer, Wm., Aylmer
 Ruston, Thos., Georgetown
 Saunders, Wm., London
 Sanders, W. B., Stayner
 Sawyer, Merrick, Belleville
 Savage, J. Y., Elmira
 Stickney, L. P., Uxbridge
 Scoon, Jno., Parkhill
 Schofield, H., Belleville
 Scott, Thos., Woodstock
 Scott & White's, Branch
 Scott, G. L., Paris
 Seatter, Jno., Seaforth
 Serviss, Gordon, Iroquois
 Shapter, John T., Toronto
 Sidey, Jno., Bewdley
 Smith, S. H., St. Catharines
 Smith, R. J., Plattsville
 Smith, S. W. B., Whitby
 Snell, S. J., Orangeville
 Stark, Robt., Woodstock
 Stark, W. G., Hamilton
 Steward, Wm. R., Toronto
 Stewart, Jno., Alliston
 Stephens, A., Mitchell
 Stevenson, T., Orangeville
 Stott, C., Bowmanville
 Stott, D., Bowmanville
 Stork, C., Brampton
 Stork, E. T., Brampton
 Stratford, W. H., Brantford
 Strong, R. S., Galt
 Switzer, W. H., Dresden

Tapscott, S., Brantford	Walker, J. A., Calcutonia
Taylor, Edward B., Toronto	Wait, Jno. T., Arnprior
Taylor, Thos. W., Clifton	Waugh, G. J., Stratford
Taylor, W., Harriston	Watson, Henry, Milton
Thompson, D., Toronto	Weeks, A. D., Uxbridge
Thomas, E. P., Forest	Whitehead, R., Cannington
Thornton, J. M., Dundas	White, Jas., Woodstock
Thornton, W. O., Dundas	Whitfield, A. M., Holbrook
Tidey, John A., Norwich	Wilson, C. G., Madoc
Tibbetts, W. F., Port Dover	Wilson, Archdale, Hamilton
Tomlinson, W. A., Prince Albert	Wildren, Isaac, Vienna
Tolen, Géo., Barrie	Wilson, M., Madoc
Trott, S. W., Collingwood	Wilson, R., Cobourg
Trickey, A. T., Lyn	Wilson, D. G., Wingham
Tripp, Dr. M., Ingersoll	Williamson, Wm., Stayner
Tully, J. D., Peterboro	Williams, Jas., Brockville
Turner, Allan, Brockville	Wightman, Robert, Owen Sound
Turner, jr., Allan, Brockville	Wood, R., Erin
Urquhart, G. C., Paisley	Wood, J. O., Toronto
Veitch, W. M., Plattsville	Wood, R. S., Oakville
Vicars, B. S. G., Ottawa	Woods, Jno., Barrie
Wadams, W. E., Decatur, Ill	Wright, J. P., Kincardine
Wade, Robt., Barrie	Wright, J., Toronto
Wade, Jas., Port Stanley	Wyllie, Jno., Ayr
Wade, Mary Anne, Port Stanley	Zoellner, H. T., Waterloo
Watts, F. W., Clinton	Zoellner, H. A., Waterloo
Watts, W. R., Clinton	Zoellner, Paul, Tavistock
Walford, J. H., Renfrew,	Zoellner, Chas., Tavistock

LIST OF ASSOCIATES, ONTARIO COLLEGE OF PHARMACY.

Berry, J. G., Chicago	Kellock, D., Perth
Blackader, D. R., Brantford	Kellock, James F., Perth
Blogg, John R., Toronto	Lucas, D. F., Gananoque
Bowden, H. K., Prescott	Mackid, John, Goderich
Cherry, James L., Woodstock	Massey, Geo., Toronto
Chisholm, W. A., Erin	Matheson, Geo., Toronto
Connor, H. E., Aurora	McArthur, D., "in
Cottrell, G. W., London	McGinness, W. R., Arnprior
Duncan, James, Blenheim	McLennan, K. A. S., Trenton
Dutton, John W., Stratford	Nichol, A. S., Perth
Frazer, Thos. B., Napanee	Parks, Joseph, Tamworth
Hall, John, Woodstock	Smith, W. G., Guelph
Holden, W. J., Prince Arthur's Landing	Scarff, C. E., Woodstock
Howard, T. A., Montreal	Thornton, James M., Perth
Jordan, William, Goderich	Vandusen, C. Jr., Glencoe

CANADIAN
PHARMACEUTICAL JOURNAL

VOL. V, No. 1. TORONTO, AUGUST, 1871. WHOLE No. XL.

Transactions of the College.

ADJOURNED MONTHLY MEETING.

The adjourned Monthly Meeting was held on Monday, July 3rd at the Mechanics' Institute, the President in the chair.

The Chairman explained that the present meeting was called to receive the report of the auditors appointed at the last meeting to examine the books and accounts of the Society, so as to wind up financial matters connected with the old Pharmaceutical Society, as the new council would have control of money matters after the present date. From the report of the Auditors about to be read the members would see that the funds on hand showed an excess over liabilities; and out of this amount he thought there ought to be some appropriation made to the officers of the Society who had performed a great deal of work during the past four years, if only as a recognition of their services. He would mention the two secretaries, a former corresponding secretary, and the treasurer.

The Treasurer, in a few remarks, declined any appropriation for his services—he would give them gratuitously.

Mr. Miller moved that the corresponding and recording secretaries be paid the sum of one hundred dollars each, and the former cor-

responding secretary, Mr. Henderson, the sum of twenty-five dollars, as a recognition of their services in connection with the Canadian Pharmaceutical Society during the past four years.

The motion was seconded by Mr. Hunter in a few remarks, and carried.

Mr. Watson then read the following :

STATEMENT OF ACCOUNTS OF CANADIAN PHARMACEUTICAL SOCIETY,
FROM ITS ORGANIZATION UNTIL JULY 30TH, 1871.

RECEIPTS.

Membership Fees Account :

For amount deposited with Treasurer till 1st September, 1869		\$986 00	
" " 24th June, 1871		1334 50	
		<u> </u>	2,320 50

Pharmaceutical Journal :

For Subscriptions per J. M. Trout, from 19th May, 1868 till 1st April, 1869	\$102 88		
" Advertising	506 80		
" Total Receipts for 11 months ending April 1st, 1869	<u> </u>	609 68	
" Subscriptions E. B. Shuttleworth, year ending April 1st, 1870	78 76		
" Advertising "	376 32		
Total "	<u> </u>	455 08	
" Subscriptions E. B. Shuttleworth, for 15 months, ending July 1st, 1871.	56 25		
" Advertising " "	402 54		
Total " "	<u> </u>	458 79	1,523 50

DISBURSEMENTS.

Pharmaceutical Journal :

Printing Account, paid Robertson & Cook, per W. H. Dunspaugh, till 1st April, 1869	81 00		
" per J. M. Trout, on account Journal	381 00		
	<u> </u>	462 00	

Expense Account for 12 months ending
April 1st, 1869

" Salary, J. M. Trout	300 00		
" Postage	34 39		
" Commission, Duffin, \$33 90, Sundries, \$8 89	42 79		
" Exchanges per J. M. Trout	13 18		
	<u> </u>	390 36	

Total till 1st April, 1869 ...		<u> </u>	852 36
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Transactions of the College.

Printing account for Year ending 1st April, 1870.

Per W. H. Dunspaugh, Treas.	39 75		
" " " " "	37 50	77 25	
" E. B. Shuttleworth		382 50	
Expense Account, Postage	61 74		
" " Stationery ...	81		
		62 55	
" " Salary		500 00	
Total for Year ending 1st April, 1870			1,022 30

Printing Account for 15 months ending 30th June, 1871:

Paid per W. H. Dunspaugh, Treasurer	75 00		
" E. B. Shuttleworth, till 30th June	436 50		
Expenses Account, Postage ...	73 00		
" Engraving...	2 00		
" Stationery...	1 85		
" Exchanges...	4 50		
" Salary	500 00		
" Also 3 months	125 00		
" Printing acct	47 00		
" E. B. S. Office acct....	25 00		
		778 35	
Total till 30th June, 1871 ...			1,289 85

Expense Account:

For Sundry Printing, paid per W. H.

Dunspaugh, Feb. 1	39 35		
" " 4	6 85		
" Circulars, Envelopes &c., Trout	50 00		
" Billheads, &c., E. B. Shuttleworth	8 00		
" Disbursements per W. H. Dunspaugh, Feb. 1	205 64		
" " 4	47 53		
" " 6	13 10		

Balance in hands of Treasurer

370 57
308 97
<u>3,844 05</u>

JAMES WATSON, }
JOHN T. SHAPTER, } AUDITORS.

ASSETS.

Sundry Debtors for Advertising account	292 88	
W. H. Dunspaugh, Treasurer	308 97	
		601 85

LIABILITIES.

Appropriation for Recording Secretary, Mr. Rose	100 00
" Corresponding " Mr. Brydon ...	100 00
" Former " Mr. Henderson	25 00
" Auditors, Shapter & Watson	100 00

The adoption of report was then moved and seconded, and, after remarks, was carried.

An appropriation of fifty dollars to each of the auditors, Mr. Watson and Mr. Shapter, was, on motion of Mr. Loye, made and carried.

The Chairman said that these appropriations would be made, subject to the approval of the Council, of which he had no doubt.

The Chairman being requested to leave the chair to Mr. Shuttleworth, a vote of thanks to that officer of the Society was, on motion of Mr. R. W. Elliott, carried, and in acknowledging the compliment the President said that the present position of the druggists of Ontario, as an incorporated body, was owing, no doubt, to the efficiency of the officers and members of the Society, but more particularly to the exertions of the Legislation Committee, who deserved the best thanks of the Society,

After concluding remarks by members the meeting adjourned.

H. J. ROSE,
Secretary.

MINUTES OF THE MEETING OF THE COUNCIL.

The first regular meeting of the Council of the Ontario College of Pharmacy was held in the Mechanics' Institute, on Wednesday July 5th, at 2 o'clock, p.m. The following gentlemen were present:—Messrs. William Elliot, H. Miller, W. H. Dunspaugh, George Hodgetts, and H. J. Rose, Toronto; J. W. Bickle, Hamilton; W. Saunders, London; F. Jordan, Goderich; C. Stork, Brampton; G. Brent, Port Hope; E. Gregory, Lindsay, C. W. Kempt, Peterboro; T. Matchett, Omeme; and J. Roberts, Ottawa.

The Registrar opened the proceedings by calling on the gentlemen present to elect a Chairman and Secretary, when Mr. Bickle was unanimously voted to the chair, and the Registrar requested to act as Secretary.

Letters of apology were handed in from Messrs. J. Brown, Ottawa; J. Hawkes, Brockville; S. J. Parker, Owen Sound; and C. Holden, Belleville.

The Chairman said, that the first business before the Council was the election of officers, the only ones named in the Act being

President and Vice-President. Mr. Elliot was unanimously elected President, and Messrs. Miller, Bickle and Saunders, were nominated for the office of Vice-President. Mr. Saunders said, that he thought it would be well to have more than one Vice-President, but as the Act only named a Vice-President, it was doubtful whether more than one should be appointed. Mr. Matchett thought that only one should be elected; Mr. Saunders then withdrew his name, and Mr. Bickle said, that though he would advocate the distribution of offices amongst others besides Toronto members of the Council, still, in view of the exertions of the Toronto members in obtaining the Pharmacy Act, he would withdraw his name, so as to make Mr. Miller's election unanimous.

Mr. Elliot then took the chair, and after thanking the members for the honor conferred upon him, and the appreciation shown of the labours of the old society, said, that in order to expedite business it would be best to distribute the labour among Committees; when the following committees were finally appointed:—

BY-LAWS.

President and Messrs. Bickle, Matchett, Gregory and Jordan.

EXAMINATIONS, &c.

Messrs. Saunders, Hodgetts and Roberts.

REGISTRATIONS AND FINANCE.

Messrs. Stork, Miller & Rose.

EDUCATION, &c.

Messrs. Dunspaugh, Kempt and Brent.

The meeting then adjourned until 7 o'clock, to enable the Committees to report.

Upon re-assembling after the adjournment, Mr. Stork presented the following :

REPORT OF THE COMMITTEE ON FINANCE AND REGISTRATION:

The Committee appointed to examine the books of the Registrar, and sundry communications, beg leave to report as follows :

1st.—That they examined the Registrar's Books, and find them in a most satisfactory condition, showing on the 30th of June,

The amount received for Registration Fees to be \$2165.00.

The Disbursements including the Poison Books 185.55.

Showing a balance in the hands of the Registrar of 1,979.45.

2nd.—The application of W. H. Tibbs, of the city of Buffalo, U. S.,—your Committee have no doubt as to his qualifications, but cannot recommend that he be accepted for Registration as an exception to the general rule laid down.

3rd.—The communication of Duncan McDonald,—your Committee would recommend that his name be added to the Registered list on the payment of the stipulated fee.

4th.—The complaints against the Registration of C. Dawson, and N. Chapman, of Warkworth, were examined, and in the opinion of your Committee the Registration should be confirmed,

5th.—The objection made against the Registration of Gordon Serviss—your Committee cannot entertain, and beg to recommend the name of Serviss be sustained.

6th.—The objections against the Registration of Robert Templeton,—your Committee cannot recommend the Council to take any action in the matter, Mr. Templeton having filed the necessary declarations of qualifications with the Registrar.

All of which is respectfully submitted,

CHRISTOPHER STORK, Chairman.

Mr. Stork explained the different cases brought up in the report. Clause 2 being read Mr. Saunders recommended the application of Mr. Tibbs for registration, as he could testify to the ability of the applicant.

The Registrar said that he had received a number of applications for registration from parties who, like the one under consideration, produced testimonials of the highest character, as to ability, &c., but he had declined them; as the Act specified only such as had served the stipulated time before the passing of the Act. After further discussion the clause was adopted.

On discussion of Clause 6, Mr. Stork said that the declaration sent stated that the applicant had served $2\frac{1}{2}$ years as apprentice, and $1\frac{1}{2}$ as assistant, at the time of the passing of the Act, while the appellant stated that such was not the case, and the question was, whether the Council should take any action in the matter, the Committee having decided not to do so. After discussion the clause was carried and the report adopted.

Mr. Saunders read the following :

REPORT OF COMMITTEE ON EXAMINATIONS.

Your Committee on examinations beg to report as follows :

We would recommend that the following order be adopted in reference to the subjects on which candidates are to be examined.

1st.—*Materia Medica*—10 Questions—This department to include the recognition of some of the roots, barks, &c. in common use.

2nd.—*Pharmacy*—10 Questions—Including the recognition of some of the more important preparations.

3rd.—*Reading of Prescriptions*—We would suggest five, differing in form and character, with and without abbreviations ; candidates to write them out in English and copy one or more in Latin as written.

4th.—*Botany*—10 Questions—Chiefly of a rudimentary character, and also recognition of some of our commonest indigenous medicinal plants.

5th.—*Chemistry*—10 Questions—Which we think should, in the first examination, be of an elementary sort and relate to operations familiar in every well-conducted Drug store.

We would recommend that the questions on which candidates are to be examined, be written on separate slips of paper, and that the answers be also written without opportunity being given of consulting books or other aid.

That these questions be looked over by the several examiners, separately, and their opinion of the value of such be indicated by numbers, the sum of which at their highest shall be 100. If 60 be given the candidate shall pass, but if less than 50 he shall be rejected, while if between 50 and 60 he shall be eligible for re-examination if desired ; but, if on second examination the combined numbers do not reach 60, he shall be rejected.

That the time allowed for answering each series of ten questions be one hour, unless in cases where the examiners deem such time insufficient, when it may be extended to two hours if thought necessary.

That the Board of Examiners consist of three members, and the following names are suggested : Messrs. E. B. Shuttleworth and Hugh Miller, of Toronto, and William Saunders, of London, and in case one of these examiners should at any time be unavoidably absent, a provisional examiner may be selected by the other two from among the other members of the Council.

That the fees to be paid by candidates in presenting themselves for examination be four dollars.

We would suggest that the following text books be used by students preparing themselves for examination. On *Materia Medica and Pharmacy*, the *British Pharmacopœia and United States Dispensatory*; Botany, *Gray's Lessons in Botany*; Chemistry, *Attfield's or Fownes' Chemistry*.

WM. SAUNDERS, Chairman.

After discussion the report was, on motion of Mr. Bickle, adopted.

Mr. Dunsbaugh, on behalf of the Committee on Education, said that they had prepared no written report, as the means at the disposal of the Council would not warrant the adoption of anything like lectures, or other means of education, and it was doubtful whether the act warranted the application of the funds of the College towards the expenses of publishing the Journal. Mr. Gregory said that the Journal was the only means at command for educational purposes, and the best efforts of the Council should be put forth to make it as efficient to that end as possible. Mr. Miller, as one of the parliamentary committee, said that the fact of the furnishing of a Journal to members and associates free, had been a great point in their favor in getting the Act passed, and he had since seen Mr. Blake, who gave his opinion that the Council decidedly had the power to apply funds for that purpose. After other remarks by members, it was decided to leave the question for the present and take up the report of the Committee on By-laws.

The Chairman on reading the report said the time at the disposal of the Committee had been too short for the proper consideration of this important question, but it would be for a future council to make any alterations or additions found desirable.

The clauses of the report were discussed seriatim and amended, and it was

Moved by Mr. Bickle, seconded by Mr. Matchett,—That the following be adopted as the

By-Laws of the Ontario College of Pharmacy, adopted at the meeting of the Council of said College, July 5th, 1871.

I.—The officers of the College shall consist of a President, Vice-President, Registrar, who shall act as Secretary, a Treasurer, and two Auditors.

II.—It shall be the duty of the President, when present, to take the chair at any meeting of the College, or of the Council. He shall regulate the order thereof,—shall decide as to what question is in order, but an appeal may be made from his decisions to the members present, and he shall receive and put motions, which must be in writing, except motions for adjournment. In his absence the Vice-President shall take the chair, and in the absence of both, the members present may appoint one of their number to act in their place.

III.—The Registrar shall be required to furnish his own bond of six hundred dollars, and two securities of three hundred dollars each for the proper disposal of the monies coming into his hands. It shall be his duty to pay over all monies in his hands to the Treasurer once a week at least. He shall keep a record of all proceedings, attend to all correspondence, and in all respects act as Secretary, and do all that the Act requires from the Registrar. The remuneration he shall receive shall be four hundred dollars per annum, the first year to date from the first day of March, of this year, 1871.

IV.—It shall be the duty of the Treasurer to take charge of all monies belonging to the College, and in disbursing them; all orders presented for payment must be signed by the Secretary, and countersigned by the President, or in his absence by the Vice-President. All monies received by him shall be deposited in a chartered Bank, in the name of the Ontario College of Pharmacy, and shall be withdrawn only on order (or cheque) of the Treasurer, countersigned by the President, or in his absence by the Vice-President. He shall be required to give his own bond for two thousand dollars, and bonds of two securities of one thousand dollars each. His compensation shall be one hundred dollars per annum, to date from the 1st of July.

V.—The President shall have charge of all bonds and securities given for the proper discharge of official duties. And it shall be the duty of the President and Vice-President to ascertain the safety of the securities.

VI.—The auditors shall be appointed from members of the Council, who shall examine all accounts connected with the College, and all books belonging to the Registrar and Treasurer, and report on them at the meetings of the Council in February and August, of each year.

VII.—The Registrar and the Treasurer shall be required to present full and detailed accounts, duly audited, at the meetings of the Council in February and August of every year.

VIII.—The members and associates of the College may hold monthly meetings in the city of Toronto, on the first Friday of the month, at 8 o'clock, p. m., for the purpose of discussing scientific matters connected with the objects of the College. Notice of holding such meetings shall be posted at the stores of H. Miller, Lyman Brothers and Co., Elliot and Co., and H. J. Rose, all of Toronto. Notice shall be given also in the Journal. Members may invite friends to the meetings.

IX.—Should the President deem it advisable to call at any time a meeting of the Council, he may do so by giving two weeks' notice of said meeting to the members of said Council. And should any five members of the Council desire a meeting, the President, or in his absence the Vice-President, shall, on being notified in writing, call such meeting, giving such notice as before stated. At all meetings of the Council five shall constitute a quorum. The objects of the meeting to be given in the notices.

X.—All meetings of the College and of the Council shall be held in the city of Toronto, and at such place in the city as the President may appoint.

XI.—The mode of election for the Council shall be as follows:—One month previous to the election every member of the College entitled to vote shall have the power of sending to the Registrar a nomination of not more than thirteen names, who must be members in full standing, such nomination to be received by the Registrar not later than fifteen days previous to the election. The Registrar shall then send the names of those nominated to each member of the College entitled to vote, who shall designate his choice, not exceeding thirteen persons, on a voting paper prepared by the said Registrar; and such paper must be mailed, so as to be received by the Registrar not later than noon on the day of election.

XII.—The mode of election of officers of the Council may be by ballot or open vote, as the Council at each election may decide; provided, however, that if three members request a ballot, it shall be held in that way.

XIII.—The remuneration of members of the Council at their semi-annual and other meetings shall be as follows:—

For every mile of travel, coming and returning..... 4c.

For every day or part of a day while in Session.....\$2. 00

To be paid by the Treasurer on certificate of the President or Vice-President and Secretary.

XIV.—The remuneration of examiners shall be for each of them, 4 cents per mile travelling expenses. \$5. 00 for each Session.

XV.—The fee which shall be charged to associates or others who may present themselves for examination shall be four dollars, payable as mentioned in section 13 of the Pharmacy Act, but in case of the rejection of the candidate, no fee shall be charged for the next examination.

XVI.—At the meetings of the Council the following shall be the order of business:—

1.—After the chair has been taken, the minutes of previous meeting shall be read, and if approved, certified by the chairman.

2.—Business arising out of the minutes to be attended to.

3.—Reports of Committees shall be received and considered.

4.—Auditors' reports shall be received.

5.—Communications shall be read and considered.

6.—New business may be brought forward.

XVII.—All meetings of the Council shall be open to the members and associates of the College, but none but members of the Council may take part in the proceedings.

XVIII.—Should any member of the Council desire that any by-law be amended or repealed, or desire any new by-law to be added, he must give notice to that effect at a meeting of the Council, and at the next meeting of the Council it shall be the duty of the chairman to bring the matter up for discussion; or, any three members of the Council agreeing to desire such amendment, repeal, or addition, they may give notice of the same to the Registrar one month before the next meeting of Council, and it shall then be the duty of the Registrar to notify all the members of the Council of such intention, stating the proposed alteration or addition; such notification to be mailed to each member at least two weeks before the date of assembly of Council. Carried.

The Chairman said, that as this Council was assuming control of matters connected with the carrying out of the Act, there should

be some resolution adopted, assuming the assets and liabilities of the Pharmaceutical Society. From the report of the auditors appointed at the last meeting there was a balance of assets of \$601 85, while appropriations, for which the sanction of the Council would be asked, were made of some \$325, leaving a balance of \$275 85., comprised principally of advertising accounts not quite due, but all good assets.

Mr. Saunders then moved, seconded by Mr. Bickle,

Whereas the Canadian Pharmaceutical Society has performed all the preliminary labour, and has been at the expense of getting an Act of the Legislature of Ontario, by which the "Ontario College of Pharmacy" has been brought into existence; therefore this Council of the said College of Pharmacy agrees to take over and adopt the assets and debts of said Pharmaceutical Society. The balance sheet of which shows a balance in its favor of \$276,85.

And also further it adopts as its own, a resolution of said Pharmaceutical Society which decided that all those members of said Society who have paid the annual fee of membership of \$4.00 of said society since the first of January last, (1871), should have such sum of \$4.00 applied as their registration fee under the Act constituting said College of Pharmacy. Carried.

Meeting adjourned till 9:30 a.m. the following day.

SECOND DAY'S SESSION.

Council met at 9:30 a.m. when the president took the chair, and called on the Secretary to read the report of the preliminary meeting of the Council held in April.

The minutes, as reported in the Journal, were read, and the Chairman said that he had been advised that the proceedings of the meeting should be confirmed by resolution; he would move, seconded by Mr. Saunders.

Whereas, it became necessary in order to the carrying out of some of the provisions of the Pharmacy Act of 1871, to call a special meeting of the Council, which meeting was held in Toronto on the 26th of April, 1871.

Be it therefore resolved by this Council, that all the acts done at that meeting, especially the ordering and making a Seal for the Ontario College of Pharmacy, be hereby confirmed and adopted at this meeting of the Council. And such Acts and Seal are hereby adopted. Carried.

The Secretary said that there were a number of applications for By-laws, and also for the report of the subjects of examination, and thought it would be advisable to have a few copies printed while the report of the present meeting was in type. After discussion the Secretary was instructed to have 300 copies printed in a portable form.

Mr. W. Saunders moved, Mr. C. Brent seconded,

That candidates for examination send to the Registrar, along with their application, evidence of having served as an apprentice or assistant at least three and a-half years in the Drug business. Carried.

The chairman said that there were some more matters connected with the By-laws adopted which should be proceeded with before going into general motions; one was, deciding what Bank should be the depositary for funds.

Mr. Bickle moved, Mr. Stork seconded,

That the Bank of Commerce be the authorized Bank of deposit. Carried.

The question of the power of the Lieut.-Governor in Council to reject any By-laws adopted by the Council, was discussed, and the Secretary was instructed to forward a copy of the minutes of this meeting to the Hon. Provincial Secretary.

The chairman said another item of business was the election of Treasurer and Auditors, mentioned in the By-laws.

Mr. Dunsbaugh was elected Treasurer, and Messrs. Bickle and Brent, Auditors.

Mr. Matchett said that those gentlemen who had attended the preliminary meeting of the Council should be remunerated on the same scale as mentioned in the By-laws.

Moved by Mr. Matchett, seconded by Mr. Roberts,

That the members who attended the preliminary meeting of Council in April last, receive pay on the same scale as provided by By-law now passed. Carried.

Mr. Miller read the Report of the Printing Committee appointed at the preliminary meeting of the Council.

REPORT OF PRINTING COMMITTEE

Your Committee beg to report, that having made preliminary enquiries, it was found that the expense of printing 1,000 copies of the

Act, and the Poison Books, would be no greater than for 500, and therefore determined on the larger number. If the smaller number had been ordered, the rate per copy would have been greater, and it would have been impossible to get any considerable amount for advertising.

Tenders having been invited, that of Mr. James Cook, of the "Express" was found to be lowest, and he has carried out his contract promptly, and to the entire satisfaction of the Committee.

A statement of receipts and disbursements on this account is appended, showing a total expenditure of \$536.25, of which \$86.25 remains unpaid.

There has been received \$450.00, and 693 copies of poison books remain on hand, the property of the College.

All of which is respectfully submitted.

HUGH MILLER,
Chairman.

RECEIPTS.

From Advertisers.....	\$221.00
“ Registrar for 100 Copies.....	53.00
“ “ Advanced.....	76.00
“ Elliot and Co. for 100 Copies.....	50.00
“ Lyman Bros. & Co. for 62 do.....	31.00
“ H. Miller 6 do.....	3.00
“ J. C. Holden 10 do.....	5.00
“ Allen Turner 10 do.....	5.00
“ J. Winer & Co 12 do.....	6.00
	<hr/>
	\$450.00

EXPENDITURE.

Paid James Cook at sundry times.....	\$450.00
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ASSETS.

Poison Books.....	1,000 Copies.
Less to Registrar 100 do.	
“ Elliot & Co. 62 do.	
“ Lyman Brothers & Co. 62 do.....	
“ J. C. Holden 10 do.....	
“ H. Miller 6 do.....	
“ Allen Turner 10 do.	
“ J. Winer & Co. 12 do.....	
“ Sundry Advertising 7 do.	307
	<hr/>
Now on Hand.....	693

LIABILITIES.

To James Cook, Balance of Contract.....	\$50.00
“ College for Advance.....	76.00
“ J. Cook for Printing, Advertisements Extra.....	30.00
“ “ for Wrapping.....	6.25
	<hr/>
	\$162.25

The Secretary said that with regard to the certificates, the members had seen those already sent out, while the ones for qualified assistants were similar, with the necessary alteration in wording. Although the design, &c., might not come up to the ideas of some, still, after receiving several outlines and designs they had fixed upon the one used, as they had no authority to offer a premium for the best design, which would doubtless have been the best means for that end. The object in having a border such as the one adopted, was that the renewal, to be issued every year according to the Act, might be printed on circular seals of the College and placed round the border, if the future council so decided, instead of issuing a fresh certificate annually; this being the idea adopted at the preliminary meeting. He thought that for those who passed the examination an entirely different certificate should be got up.

Mr. Saunders said that an examination of the Poison Book disclosed quite a number of inaccuracies, while the first page was a mixture of Latin and English, which would be quite unworthy of an educational institution to issue. After further remarks by other members,

Mr. Saunders moved, Mr. Roberts seconded,

That the Registrar, Mr. Hodgetts, and the mover, be a committee to correct the inaccuracies in the poison books published, and publish a list of errata, to be sent to those who had obtained copies, and inserted in those on hand, with power to cause the first eight pages to be reprinted, if they deem it advisable. Carried.

The question of appointing a delegate to the meeting of the American Pharmaceutical Association, was brought up, and after discussion, in view of the expenses connected with the first year's operations of the College, it was decided to leave the matter for the next session.

Mr. Gregory moved, Mr. Kempt seconded,

That in case Mr. Saunders or any other member of the College attended the meeting of the Am. Pharmaceutical Association, they be requested to act as representative of the O. J. P. Carried.

Mr. Bickle introduced the question of the registration of partners. He said that by the action taken at the preliminary meeting of the Council, each partner was required to register, while by the Act only certain persons after the present date could register, and cases might arise where a qualified druggist going into business required a partner with capital, and unless such cases were provided for the Act might be found oppressive. The subject was fully discussed and

Mr. Saunders moved, Mr. Dunspaugh seconded,

That in cases of Partnership every firm must have one qualified partner who shall be registered under the Act, the other partners not duly qualified to register, may be privileged to carry on business as partner, by paying to the registrar an annual fee of four dollars without enjoying any of the other privileges of membership.

The Chairman said that the consideration of the Journal should be taken up, and after remarks on the benefit of such a periodical as a medium of instruction, the ability with which it has been edited and a general discussion of its financial position, it was

Moved by Mr. Matchett, seconded by Mr. Saunders,

That the Committee who have conducted the Journal hitherto, be requested to continue the publication thereof for nine months, and they be authorized to receive from the society funds to carry out the same.—Carried.

Moved by Mr. Saunders, seconded by Mr. Gregory,

That Mr. Shuttleworth be requested to continue to act as Editor until 1st of April, 1872, with the assistance of the Printing Committee.

Moved by Mr. Saunders, seconded by Mr. Dunspaugh,

That a vote of thanks be tendered to Mr. Shuttleworth, for the able and satisfactory manner in which he has conducted the Journal during his term of office.

The Chairman said that business of importance compelled him to ask permission to retire; he congratulated the members of the Council on the good feeling which had prevailed at this, their first regular meeting, and on the amount of work which had been done, and hoped that further business would be done as satisfactorily. After a vote

thanks and its acknowledgement, the Vice-president, Mr. Miller, took the chair.

Mr. Gregory said there was a matter connected with the Journal which ought to receive the attention of the Council, namely: the questions which had been published for the benefit of students, and prizes awarded; he wished to know the opinion of the members as to the desirability of making an appropriation for the purpose. It was suggested to make a classification of the questions suitable for one or more different classes of associates, but, upon discussion, and in view of the comparatively small number of those benefited by the prizes, it was thought best to leave it in the hands of the Printing Committee.

Moved by Mr. Roberts, seconded by Mr. Kempt,

That Mr. Saunders' name be added to the Printing Committee. Carried.

The consideration of the best means of enforcing the Act was discussed, but nothing was adopted further than the desirability of every member of the Council doing his utmost to see that the Act was enforced in the section which he represented.

After closing remarks by the Chairman the meeting adjourned.

H. J. ROSE. Secretary.

REGISTRAR'S NOTICE.

Any one who, having sent the fee for registration, has not received the certificate, or who has sent any letter remaining unanswered, will please communicate with me on the subject. The delay in getting the certificates printed, caused a pressure of business at the time of the meeting of the Council, and will, I hope, be accepted in excuse for omissions.

The attention of druggists in business at the time of the passing of the Act, is called to the 11th clause in the By-laws. Nominations of members of the Council should be sent in during the present month.

HENRY J. ROSE, Registrar.

EXAMINATION FOR PHARMACEUTICAL CHEMISTS.

The first semi-annual examination, in accordance with the provisions of the new Act, was held on Wednesday, the 2nd inst., at the Mechanics' Institute, Toronto.

The Board of Examiners appointed by the Council held a meeting on the evening previous, at which it was concluded that the several branches of study should be allotted to the examiners as follows :

Materia Medica and Botany, - MR. SAUNDERS.

Chemistry and Pharmacy, - - MR. SHUTTLEWORTH.

Reading of Prescriptions, - - MR. MILLER. .

On each of the first four subjects ten questions were proposed, the value of each question to be 2.5, making a total of 100 for the series of forty questions. Five prescriptions in Latin were also proposed to be translated into English, and two prescriptions containing erroneous doses were to be corrected. In addition to this, a number of specimens of indigenous and also of foreign origin were subjected for recognition.

Five candidates presented themselves for examination, three of whom were successful in obtaining certificates of competency "Pharmaceutical Chemists."

The names of these gentlemen, and also the total number of marks obtained, are as follows :—

	Mat. Med.	Chemistry.	Pharmacy.	Botany.	Total
T. A. HOWARD, Cobourg.....	20.5	18.5	11.0	24.0	74.0
G. MATTHEWS, Paris	20.0	16.0	14.5	14.0	74.5
J. J. HALL, Woodstock.....	20.5	20.0	16.0	14.0	70.5

 THE POISON BOOKS.

We are directed by the Registrar to state that, having made the necessary corrections, directed by the Council, in regard to the Poison Books, he will forward a list of errata, together with a new edition of the first two pages, to all those who require them.

Original and Selected Papers.

PREPARATION OF DILUTED PHOSPHORIC ACID.

BY E. B. SHUTTLEWORTH.

The officinal process for diluted phosphoric acid is a troublesome and dangerous one. The use of closed glass vessels, when operation on an explosive substance like phosphorus, is attended with considerable risk, not only to the apparatus, but the person and property of the operator. The apparatus is unnecessarily complicated, involving the employment of a retort and Liebig's condenser, while the advantage gained on the score of economy of acid is so trivial as to be practically unworthy of consideration.

A much better process is that of the *United States Pharmacopœia*. In this the diluted nitric acid is placed in a porcelain capsule; the phosphorus is added and the whole covered by an inverted glass funnel, of such dimensions that its rim rests on the inside of the capsule, near the surface of the liquid. A gentle heat is applied, and, if necessary, the action moderated by the addition of a little distilled water, which can be readily applied without in any way disturbing the operation. After the phosphorus has disappeared, the funnel is removed, and the concentration of the acid is effected in the same capsule, by a further application of heat.

As far as the apparatus is concerned, it will readily be seen that the present process is much more simple; the danger of explosion and injury is almost impossible; most of the nitric acid is condensed, and trickles down the funnel into the capsule, while the manipulation is simpler, and the operation can be carried to completion in the vessel in which it was commenced.

In both processes, however, the nitric acid is used in a very dilute solution. According to the experience of the writer this occasions a waste of acid and is attended with no advantage. The action of the dilute acid on the phosphorus is very feeble, and, in operating on larger quantities—say ten pounds of phosphorus—eight or ten days are required for the solution. The acid need not be weaker than that of

sp. gr. 1.24. At this strength there is no danger of explosion or a too rapid action. After many and cautious trials I have now no hesitation in operating on the above-named quantity of phosphorus with a carboy of acid of the strength named, and by so doing the solution may be effected in from fifteen to twenty hours. Nothing at all approaching to an explosion has ever occurred, but the precaution is always taken to have a quantity of distilled water near hand, so that it can be at once added if, by the concentration of the acid, the action becomes at all violent.

In driving off the excess of nitric acid, after the phosphorus has been dissolved, a considerable degree of heat will be required, and the greatest care should be taken that the acid has become quite cool before adding the water for dilution. If this is neglected, and the water is added to the hot acid, an explosion is inevitable, owing to the rapid change of the water into the gaseous form. Indeed it would be much less dangerous to pour water into a ladleful of melted lead.

For this, as well as all other operations, in which solutions of acids or alkali are employed, the use of enamelled iron vessels must be avoided, nothing but porcelain, or at least wedgewood, should be used. In this connection the writer would protest against the use of enamelled vessels for any of the purposes of pharmacy in which acid, or alkali proof material is required. I have never yet met with a vessel of this kind that was at all reliable, being either of a material readily acted on, or pierced with minute holes, exposing the underlying iron and, consequently, contaminating everything with the metal.

ON SOME MEDICINAL PLANTS OF CANADIAN GROWTH.*

BY W. SAUNDERS, LONDON.

Having become somewhat debilitated by close application to business, I purchased two years since a farm, with the intention of planting it with fruits of various sorts, and growing as well as the varieties of foreign and indigenous medicinal plants as should be found suitable to the soil and climate. The personal supervision is requisite to begin and carry out successfully an undertaking

* From the Proceedings of the American Pharmaceutical Association, 1870.

is sort would, I knew, oblige me to be away much from the
 op, and exchange its closer atmosphere and sedentary occupations
 for the more active employments and purer air of the country.
 I believe, as a class, we pharmacutists are fond of our profession,
 and there are charms as well as ties about it which seem to draw
 us into long hours of steady application, and it requires a con-
 siderable effort to break away from these influences, and unless one
 is obliged to do so, good resolutions are often set aside to suit
 occasion and convenience. My undertaking may not, at present,
 be regarded as a paying one; but there will surely be a large sum
 in place to the credit side on account of improved health and
 increasing vigor, more than sufficient, I think, to balance any
 losses which may arise, and in this way at least I can recommend
 it to my fellow pharmacists as a profitable enterprise.

This being the second season only for the new business, it is
 impossible to present any very full or complete details as to the
 success and profits attending the growth of the various medicinal
 articles, for besides the time being too short, the seasons have both
 been very unfavorable. We have had such excessive rains that
 the ground has been almost saturated with water during a great
 part of the growing period; still I hope that the few results I am
 able to communicate will not prove uninteresting.

The first and one of the greatest difficulties was the procuring
 of suitable seeds, fresh and good; there is so little demand for
 such that they are sometimes old and almost worthless before they
 come into the purchaser's hands, so that very few of them will
 germinate. Some of the needed articles were found among the
 best dealers of New York and Boston, others were obtained from
 the establishment of Vilmorin, Paris, France.

ATROPA BELLADONNA.

Two ounces of seed was planted late in May, in drills, $2\frac{1}{2}$ feet
 apart, and covering $\frac{1}{16}$ th of an acre of ground, with the intention
 of transplanting it into rows, at suitable distances, the following
 season. The plants came up moderately thick, and attained a fair
 growth before the close of the summer; in one or two instances
 flowers appeared on them late in September. The outer leaves
 were partially stripped before severe frost came, carefully leaving
 the crowns uninjured. The product yielded 11 lbs., when dry.
 Thinking that the plants were sufficiently vigorous and well estab-
 lished to withstand the cold of winter, they were not in any way
 protected. The season proved too severe for them, the following
 spring showing every plant dead, with its roots quite rotten.

From the herb gathered in the fall some preparations were made
 —fluid extracts and solid extracts, watery and alcoholic. On com-
 parison with similar preparations from like quantities, and made

with equal care from a fair sample of the imported herb, the following results were noted:—

1 lb. of herb of Canadian growth yielded of solid aqueous extract, 2 oz. 7 drs. 23 grs.	1 lb. of imported herb yielded of solid aqueous extract, 3 oz. 5 drs. 10 grs.
Solid alcoholic extract, 1 oz. 5 drs. 25 grs.	Solid alcoholic extract, 2 oz. 2 drs. 30 grs.

Showing a difference of yield in favor of the imported herb of 5 drachms 47 grains aqueous extract, and 5 drachms and 5 grains alcoholic extract.

The fluid extract made from the herb of Canadian growth has the narcotic odor of the plant in a higher degree than that from the imported herb; the odor is so strong in the former case that it approaches pungency. It has been used in a few cases in practice, and as far as I have been able to ascertain, has acted fully as well as that made from the foreign plant.

The solid aqueous extracts closely resemble each other in odor, although I am inclined to regard that from the Canadian plant as strongest.

The alcoholic extracts differ in odor very materially; that from the herb of Canadian growth is much heavier and more powerful than the other. I have had no opportunity of having these latter articles tested in medical practice.

HYOSCYAMUS NIGER.

One ounce of seed in this instance was planted at the same time and in the same manner as that of the Belladonna, occupying a space of less than 1-20th of an acre. The plants came up thin, a large proportion of the seed failing to germinate. Ten pounds of leaves were gathered about the 1st of October. Some of the plants belonged to the annual variety, others to the biennial; most of the latter, in this instance, stood the winter well, and sprouted out vigorously on the opening of spring, but requiring to use the land where they were established for other purposes, they were transplanted. The place selected for their removal was rather low, and the wet season proved very unfavorable for their establishment; hence during the summer the larger part of the plants died; the few survivors were left for seed.

This plant has become naturalized, and is now growing wild in many parts of Canada, so that there is little doubt but that its culture, if desirable, might be made successful. A series of preparations have been made, in this case, similar to those made from belladonna, with results as follows:—

1 lb. of herb of Canadian growth yielded of solid aqueous extract, 2 oz. 6 drs. 4 grs.	1 lb. of imported herb yielded of solid aqueous extract, 3 oz. 4 drs. 44 grs.
Solid alcoholic extract, 1 oz. 3 drs.	Solid alcoholic extract, 2 oz. 2 drs. 50 grs.

Showing a difference of yield also in favor of the imported herb

fol. of 6 drachms 40 grains aqueous extract, and 7 drachms 50 grains alcoholic extract.

The odor of the fluid extracts seems exactly alike; that from the aqueous extracts is also similar, although the advantage seems to rest with the Canadian article; while the alcoholic extracts again differ materially, the foreign article having the weaker odor.

The culture of *Digitalis Purpurea* has not been attended with much success. A good quantity (2 oz.) of seed has been sown; but either the seed has been worthless, or it has been sown too deep, so that very few plants have appeared. Some of those grown last year survived the winter without protection, but many of them died. Seed sown this year has also come up very sparingly.

Dill was tried last season without success, the plants grew well and flowered, but the season proved too short for the seed to mature.

Besides, it was almost destroyed by the attacks of a small caterpillar, which affects nearly all the umbelliferous plants with us.

This is the progeny of a pretty little moth called *Depressaria Ontarella*. This little creature feeds on the unopened flowers, drawing the various portions of the umbel together with threads of silk, and on disfiguring and destroying them. Had the seed ripened, three-fourths of the crop would probably have been lost from this cause.

Fenugreek was also tried. It came up very thick, and did well; its peculiar odor perfumed the air for some distance around the patch during the latter part of the season, but the seeds, which formed well in their long pods, did not ripen sufficiently to be of any value. Better success attended the growth of Coriander and Caraway. One-eighth of an acre of Coriander, with half a pound of seed, yielded 110 lbs.; and one-fifteenth of an acre of Caraway, with half a pound of seed, 106 lbs., the Corianders maturing their seed the same season that they were planted; the Caraways not maturing till the second year.

Many other of the common herbs have been successfully grown, including Wormwood, Sage, Hyssop, Thyme, Rue, Horehound, Rosemary, Summer Savory, Poke-root, and Elecampane. Seeds of

Leptandra and *Glycyrrhiza* germinated well, but the growth of both has been weak.

A quarter of a pound of Dandelion seed has been sown this season on about three-fourths of an acre of ground. The plants have made very good growth, the roots having already attained about half an inch or more in diameter, and will probably acquire the sufficient to give a profitable yield before the close of the season.

The following includes most of the complete failures, that is, when the seed did not germinate at all: *Arnica montana*, *Veratrum album*, *Gentiana lutea*, *Aconitum Napellus*, *Angelica*, *Solanum macarum*, *Colchicum autumnale*, *Bryonia alba*, and *Polygala hederifolia*.

ON CUNDURANGO.*

BY THOMAS ANTISELL, M. D.

In the month of March of this year, M. Flores, Minister of Ecuador at Washington, forwarded a box containing a vegetable medicament which he had received from his government for presentation to the State Department, and requested that some analyses and experiments might be made with it, to test its medicinal value. The samples of the drug were stated to have grown in the province of Loja, Ecuador, and extracts from the official journal accompanied the parcel, showing that great medicinal virtues were attributed to the wood and bark of the tree known as *Cundurango*. The extracts were testimonials from Doctors Cæsares and Eguigureu of that province, as to its great value in cancer, fungus hæmatodes and constitutional syphilis. These statements were supported by a letter from Mr. Rumsey Wing, our minister resident at Ecuador, to Hon. H. Fish, Secretary of State, testifying to the medicinal virtues of the plant as admitted by the natives of Loja, in which he mentions that a decoction of the fruit is known to be a poison, and that the parts of the plants used medicinally are the barks and leaves.

During the month of April a sample of the plant (small branches) were received at this department, from Hon. Mr. Fish, with the request to have an analysis made and reported to him for the benefit of the Ecuador government. Meanwhile the plant itself had been tried, in the form of a decoction, upon some patients in this city affected with cancer, and with apparent considerable relief to the sufferers.

About one pound and a quarter in weight were received for analysis.

The sample consisted of stem and branches of apparently a shrub but was unaccompanied by leaf or root, so that the botanical characters of the plant could not be determined.

The stem is woody and covered by a greenish or ash grey bark, the former tint being due to the lichens on its surface; the branches are from a half inch to a little over an inch in diameter, averaging about the thickness of the finger; the woody fibre is straw colored and brittle, breaking with a sharp fracture; it is almost tasteless, having a slightly aromatic and bitter flavor when chewed.

The bark contains whatever medicinal virtues are in the plant; of grey color, slightly ribbed or fluted longitudinally from unequal contraction while drying on the branch; increasing in thickness in proportion to the diameter of the woody stem, in the thicker branches constituting more than half the weight of the whole, in the thinner somewhat less than half; readily separable from the stem by pounding or bruising, when it comes off in clean longitudinal pieces.

* From the American Journal of Pharmacy.

brittle in the transverse fracture; of a warm, aromatic, camphor and bitter taste, resembling the cascarilla of the old collections. Under the lens it is readily resolvable into three layers: 1st, the inner layer or cambium of reticular woody tissue, having granules of starch and particles of resin imbedded. 2d, a middle layer of woody fibre and dotted ducts; resinous particles also in this layer; and 3d the cuticular or outer layer of cells of a brownish color, and containing coloring matter and tannic acid.

The usual methods of filtration from digestion in the usual solvents, as gasoline boiling at 110°, ether, alcohol, carbon disulphide and water &c., were adopted.

1. Ratio of bark to wood

Bark	49·72	}	Mean of three experiments.
Wood	50·28		
<hr style="width: 50%; margin: 0 auto;"/>			
100·			

2. 100 parts of bark yield

Moisture at 100° C.	8·
Mineral salts (ash)	12·
Vegetable substance	80·
<hr style="width: 50%; margin: 0 auto;"/>	
100·	

3. This vegetable matter was separable into the following:

Fatty matter soluble in ether and partially in strong alcohol	7
Yellow resin soluble in alcohol	27
Gum and glucose from starch	5
Tannin, yellow and brown coloring matters (extractive)	12·6
Cellulose, lignin, &c.	63·5
<hr style="width: 50%; margin: 0 auto;"/>	
80·	

No crystalline alkaloid or active principle was separable by the usual methods of proximate analysis. A plan similar to that used for cinchona alkaloids and also that by precipitation with diacetate of lead was tried. By distillation no volatile oil or acid was obtained.

Whatever medicinal virtues the plant may possess must reside either in the yellow resin or in the extractive; the former is soluble in alcohol and the latter in water; in the watery decoction some of the resin is diffused, but the greater portion of the resin is not extracted by the water. The therapeutic position of the plant, judged from analysis, might be among the aromatic bitters.

SPIRITUS AMMONIÆ AROMATICUS, ITS PREPARATION AND COMPOSITION.*

BY WILLIAM MARTINDALE, F.C.S.

The attention of the trade having been called to this preparation by a medical contemporary, in an article in which it complains that samples purchased at several chemists were notably deficient in ammonia and spirit,—by way of testing the correctness of its results, I have been led to perform the following experiments :

(1.) Having powdered 8 oz. of carbonate of ammonia, dissolve it in 16 oz. of water by means of 4 fluid ounces of strong solution of ammonia, sp. gr. 0·891. This will form a clear solution, but on the addition of 6 pints of rectified spirit, and the essential oils, such a precipitation takes place of ammonia salts that it forms a complete magma of the whole fluid. The product of the Pharmacopœia process would resemble this, if it contained all ammonia, carbonic acid, and spirit ordered to be used. (2.) Let the experiment be repeated, using 2 pints of water in place of 16 oz., making a solution of the carbonate in the water and strong solution of ammonia, as before, first. It will now be found, that on the addition of the spirit, a bright and clear mixture is formed; but when the fluid has been allowed to stand, a quantity of minute acicular prisms, crystals of normal ammonium carbonate (?), will have deposited. And again (3), let the Pharmacopœia quantities be taken, *i.e.* the same as above, but using 3 pints of water. Having dissolved the essential oils in the spirit previous to the addition of the solution of ammonia salts, it will be found that a milky, opaque mixture is formed, due to the separation of the oils,—the spirit not being then strong enough to hold them in solution,—but there will be no crystalline deposit at ordinary temperatures. On proceeding to distil the mixture, in the first portion of the distillate there is always a more or less quantity of crystalline formation noticed in the receiver, but that, as the process is continued, is redissolved. Having obtained the required quantity,—7 pints of distillate,—upon examination of what remains in the still, upwards of two pints of fluid, that will still be found to contain a quantity of ammonia, in fact an equal volume of it, will be found to contain about one-third as much as there is in the distillate. And if, especially on a large scale, the process be not carefully conducted, this liquid, on cooling, may sometimes contain a quantity of mixed salts of ammonia, not held in solution. It is, in fact, found to be impossible to have the distillate to contain more than about 1·7 per cent. of ammonia without its being deficient in carbonic acid. To quote Dr. Divers:—"By following the directions in the British Pharmacopœia, to use solution of ammonia and commercial

carbonate instead of pearlsh and sal-ammoniac, the formation of a spirit containing excess of ammonia is favored, but to only a small extent. The spirit thus obtained is, of course, equally liable, if too strong in alcohol, to decompose into a basic solution and half-acid or acid carbonate, as I ascertained by preparing it." He previously states that it not unfrequently proves to contain much less carbonate than it is intended to contain.

DETECTION OF TURMERIC IN POWDERED RHUBARB AND YELLOW MUSTARD.*

BY J. M. MAISCH.

Rhubarb root which has been attacked by insects, or deteriorated in consequence of dampness and heat, is by some dealers sent to the mills and ground together with some sound rhubarb, or, if the color is not sufficiently bright, turmeric is added, and the powdered rhubarb finds its way afterwards into the hands of the unsuspecting as a prime article. The fraud may be detected in a few minutes in the following manner :

A small quantity of the suspected rhubarb is agitated for a minute or two with strong alcohol, and then filtered. Chrysophanic acid being sparingly soluble in this menstruum, the brown yellow color of the filtrate is due to the resinous principles of rhubarb mainly; if adulterated with turmeric, the tincture will be of a brighter yellow shade. A strong solution of borax produces in both tinctures a deep red brown color. If now pure muriatic acid be added in large excess, the tincture of pure rhubarb will instantly assume a light yellow color, while the tincture of the adulterated powder will change merely to a lighter shade of brown red. The test is a very delicate one, and is based on the liberation of boracic acid, which imparts to curcumin a color similar to that produced by alkalies, while all the soluble principles of rhubarb yield pale yellow solutions in acid liquids.

The same test, applied in the same manner, is also applicable to ground mustard seed. The seeds of *sinapis alba* yield a powder of yellow gray color, entirely distinct from the color of yellow mustard met with in the market. Agitated with alcohol and filtered, a turbid solution is obtained, which assumes a bright yellow on the addition of the borax solution, and becomes colorless or whitish again on being supersaturated with muriatic acid. If the mustard be colored with turmeric, the filtrate has a yellow tint, becomes

brown red with borax, and retains the color on the addition of muriatic acid. All the so-called yellow mustard of our commerce which I have had occasion to examine, whether ground in England or in the United States, contains turmeric. This practice ought to be discountenanced; for, under the yellow color imparted by curcuma, adulteration of mustard may be carried on to an almost indefinite extent, if *strength* be supplied by the addition of a little capsicum.

ON DISGUIISING THE BITTER TASTE OF THE CINCHONA ALKALOIDS.

The following useful hints are extracted from an interesting paper by Dr. Purnell, of Maryland, which appeared in the *American Journal of Pharmacy*:

“Ext. glycyrrhizæ alone (better with a little tannic acid) answers a good purpose with many patients, but a large proportion is usually required (5 grs. may be used for each grain of quinia sulphate or 2 grains of cinchonia sulphate), and I find the taste of the extract is more often objected to than that of some other things that may be used—hence the importance of a knowledge, if possible, of a variety of substances to be employed to destroy the bitterness.

Tannic acid used in large proportion with quinia sulphate—less for cinchonia sulphate or the alkaloid quinia—conceals the bitterness, and the fact may be well known to the profession generally, or the majority; but it is probably not generally known that a slightly bitter taste of tannate of quinia—more properly a minute portion of precipitated quinine—will be perceived, though not until about a half minute after swallowing the mixture. The same is perceived, to some extent, in the case of any other combination by which the bitterness of quinia or cinchonia is disguised, but is probably more distinct with the tannic acid mixture; to prevent this it is only necessary to rinse the mouth with water, or with cold tea, which is better.

In the first place, however, it is important to know whether the medical properties of a remedy are at all impaired by the substance used to disguise its taste; and there is evidence that there are many practitioners who would be unwilling to depend upon quinia sulphate combined with tannic acid in large proportion as an antiperiodic.

Quinia in the form of tannate in solution (or rather, in mixture), I have used for several years (in over a thousand cases), and believe

to be in no case less, oftentimes more, efficient as an antiperiodic than sulphate of quinia alone.

Without the aid of any other substance eight grains of tannic acid will be required to entirely cover the taste of ten grains of quinia sulphate; it is better, however, to use less in combination with aromatics unless an astringent be indicated. But the roughness of tannic acid is unpleasant to many persons. To prevent this, add sugar in abundance and a little aromatic. But if sick stomach should be present much sugar cannot be retained or will be refused (true at least in the majority of cases), and this will be a trouble; and if to the same person the taste of tannic acid should be very unpleasant, there will be another trouble, and the difficulty will be increased. Now in this case, as well as the case of a patient who for any other reason objects both to sweet medicine and tannic acid, if, while employing but little sugar, we use rather less tannic acid and a large instead of a small quantity of aromatic, and dilute the dose sufficiently—though unnecessary to dilute very largely—we will generally succeed. Though in regard to quinia sulphate directly, a small quantity of aromatic, however used, can accomplish nothing, and the effect of a large quantity, when applied alone, is too trivial to make it useful, the same (large quantity) will nevertheless assist much in disguising it, provided a certain proportion of tannic acid be present.

Some persons who sweeten quinine, expecting by this means to somewhat diminish the bitter taste, only add to the trouble, for the bitterness is increased by the addition of sugar without any other substance, or at least is not lessened in the slightest degree, and is caused to be perceived for a much longer time for the reason probably that it imparts an adhesive property to the solution, which, consequently, remains longer on the organs of taste and penetrates.

Cinchona, though containing the alkaloids and not usually requiring tannic acid—a fact readily accounted for from the presence of cinchotannic acid—will be sufficiently disguised by the use of sugar, cinnamon and orange. *Tr. cinchonæ comp.*, already containing *urantii cort.*, will require only sugar and cinnamon. For *tr. genianæ comp.* tannic acid and sugar may be used, though the addition of *syr. sarsaparilla comp.* or *ext. sars. fl. co.* will greatly improve it, or either of the last two named with an aromatic alone can be employed. A palatable and efficient elixir of cinchona may be found in Parish's Pharmacy.

Coffee (if a good article) in strong decoction, or prepared by displacement or in powder, while it adds to the antiperiodic effect, disguises the taste of a large proportion of the sulphates of quinia and cinchonia and like bitters, as well as some other remedies, not impairing the medical properties, and though not new it seems not to be generally known. It is, perhaps, generally known to have been much used to conceal the taste of senna and magnesia-sulphate, and

in regard to quinia, Waring mentions the fact on page 229, Practical Therapeutics. He says, "Coffee is of importance as a means of disguising the taste of nauseous medicines; particularly quinine, senna and epsom salts." It is to be remembered, however, that a weak preparation will not do.

℞ Coffee $\frac{1}{2}$ teacupful, Water Oiss.

Use no milk with it unless a very small quantity only is desired to flavor; with or without sugar, according to taste.

In relation to this subject there is an important fact to be borne in mind. The quinia or cinchonia sulphate should be put in the coffee in form of powder. If dissolved first with an acid a decided bitterness will be perceived. So, in case of anything employed to conceal the taste of quinia sulphate and like bitters, use the bitter in powder, avoiding an acid, or (with a few exceptions) any perfect solution.

Cocoa or chocolate, if the quinia sulphate is not in large proportion, conceals the taste to a great extent, provided it be used of a sufficient strength, as in the solid or semi-fluid state. For cinchonia sulphate it will do better, since the taste of this substance is not so difficult to cover.

A decoction—five minutes boiling—of a certain strength (a weak preparation will not answer) of a mixture of green and black teas, (I have not succeeded so well with either alone, yet there can be no reason why one will not do), after standing with the leaves for eight hours, disguises the taste of quinia and cinchonia sulphates, though not in so large proportions as coffee. For this purpose:

℞ Theæ V. gr. xxv—Theæ n. gr. xxxiv, Aq. f̄ij.

YLANG-YLANG.—The essence of *Ihlang-Ihlang* is distilled from the flowers of the *Unona odoratissima*, a large tree which grows in the Philippine Islands, the Straits of Malacca, and the Indian Archipelago. *Ihlang-Ihlang* (improperly spelt *Ylang-Ylang* by the Spanish residents) is the native *Tagal* name this tree bears in the Philippine Islands. The Malays call it *Kanonga*, and it is found described under that name in the works of Rumphius, an eminent botanist of the seventeenth century, who says that the smell of the flowers is so powerful that it scents the air for miles around. The flowers are flocculent and drooping, and of a greenish-yellow color. They were first distilled by a chemist at Manilla, and yielded an essence of an exquisite odor, somewhat partaking of the jasmine and lilac, but still having a flavor *sui generis*. This essence is now largely manufactured, and used by the leading perfumers, either pure or in compounds. It is made principally in Manila and Singapore. The former is the finest, and costs, when pure, about £2 per ounce.—E. RIMMEL.—*London Pharmaceutical Journal*.

Editorial.

As intimated in the July number there has been some delay in the issue of this Journal. The new type in which the present number appears, although ordered nearly a month ago, did not come to hand till after our date of issue. We hope the patience of our readers has not proved like our own, which at one time was certainly nearly exhausted. However, now a commencement has been made, and we shall endeavour to issue the Journal punctually, on the first of each month.

OUR SECOND SERIES.

We are sure that our readers will recognize and appreciate the important changes which have been made in the arrangement and appearance of this Journal. Not only has the shape of the sheet been altered to a more convenient and readable form, but the number of pages has been tripled, and, making every allowance for the reduction in the size of the page, the bulk of matter is largely increased. The adoption of the more modern, though "old style" type—an entire set of which has been purchased expressly for our use—renders the typographical appearance of the paper much more pleasing.

Having thus been enabled to commence a new series under such favorable circumstances, we hope, by closer attention to our editorial duties, to keep a more faithful record of the progress of pharmaceutical science; and by the assistance of our friends, to make the Journal of increased value by the publication of a larger amount of original matter. To this end we solicit the co-operation of members of the College, who, it is hoped, will do their utmost to assist us.

TO ADVERTISERS.

We beg to call attention to the fact that this Journal is not only the best, but the only medium of reaching the Drug trade of Ontario. It is received by *every druggist in the Province*, and in other parts of Canada has an extensive circulation. Our rates will be found on the inside page of cover.

It will be noticed that the rate for insertion of advertisements of *assistants or situations wanted*, has been reduced to the nominal sum of twenty-five cents each. We believe the Journal will serve a useful purpose in this particular.

 THE MEETING OF THE COUNCIL.

The minutes of the meeting of the Council, to which a large amount of space is devoted in the present number, will, we are sure, be read with much interest. The meeting was very well attended, only four of the members being absent, and the amount of business disposed of shows that no time was lost in useless discussion. Nor can the charge of undue haste be urged, as a perusal of the minutes will show; the ground was thoroughly and carefully gone over, and though it is quite possible that further experience with the working of the college may develop unforeseen, or unanticipated subjects for consideration, yet, taking everything into account we have every reason to congratulate the Council on the completeness of their labors, and the success of this, their first meeting.

We do not think it necessary to give a summary of the proceedings, or to make any remarks on their nature, as we know that the minutes will be carefully read by every member of the college, and such points as may require elucidation or discussion, will, in due time, present themselves.

 THE COMING ELECTION.

Members of the College are reminded of the election of the Council, which will take place on the first Wednesday in October next. It will be necessary for nominations to be made and for

warded to the Registrar, at least fifteen days before that date. Nominations may be made by any member in good standing. We would recommend those who take an interest in the matter to send their selection of thirteen names without delay, so that a list of the nominees may be published in the next Journal, which will be issued on the first of next month.

Editorial Summary.

SOLUBILITY OF CAMPHOR.—It is stated by R. Rother, in the *Pharmacist*, that camphor is more soluble in cold water than in that of a high temperature; and that *aqua camphora*, made with water, at high temperatures, deposits camphor in weighable quantities which can be placed on the shop shelves. To make the solution free from separated camphor, lukewarm water is recommended; or water which has been allowed to attain the temperature of the apartment in which the preparation is to be kept.

APPARATUS FOR DIVIDING POWDERS.—The *Scientific American* describes an invention for this purpose which consists of a board or plate of any kind or substance best suited for the purpose, having any required number of holes or pockets of uniform size and shape made through or in it, and each hole provided with a movable bottom or piston arranged for shifting quickly to vary the depth of the pocket, all the said bottoms or pistons being arranged so as to move equally in relation to the plate or holes therein. In using this instrument the mass of powder is placed on the table and scraped over the holes so as to fill as many as the number of divisions required. If it fails to fill as many holes as the said divisions require, the pistons are raised or the plate lowered, as the case may be, by which the powder in the filled pockets will be raised above the surface, so that some of it may be scraped into the holes not filled, which being done, and the requisite number of holes filled, the division is completed. The pistons are then raised to the level with the table and the powder raised up in separate piles, to be scraped away separately. The pistons are shifted downwards, and the operation of dividing the powders is carried on in like manner, if the pistons are too high at first.

SUPPOSED TOXICAL EFFECTS OF CHLORAL HYDRATE.—Dr. N. R. Smith, (*Boston Medical and Surgical Journal*) gives details of two cases in which chloral was administered for a length of time, apparently resulting in a singular affection of the fingers, attended with desquamation of the cuticle and ulceration, especially about the borders of the nails. In one of the cases, the local affection was overcome by the application of local remedies, but, some three weeks after, the patient was seized with an acute affection of the bronchial tubes, attended with an *extremely feeble* action of the heart, and, in three days, died. The other case presented the same symptoms in regard to the affection of the fingers, and was followed by serious illness, in which the same feeble action of the heart was observed. This patient, however, recovered. The writer alludes to two other cases of a similar nature, and concludes that chloral, when given in small doses, and continuously, for some time, induces a form of toxæmia similar to that caused by ergot of rye; and that the transformation of chloral into chloroform, as believed to take place in the blood, exerts an injurious action on the heart.

Answers to Correspondents.

A Student, Walkerton.—A very good elementary work on Botany is that recommended by the Council—*Gray's Lessons*. It may be procured from any of our booksellers. The price is two dollars.

R. Halson.—We do not think that *fly paper* could be correctly included amongst the compounds of arsenic, as designated by the Act. *Ol. Amygdal: Amar:* is not specified, nor are the compounds of hydrocyanic acid, so that there is no legal restriction on the sale of such articles. The acids—sulphuric, nitric, and hydrochloric, should always be labelled “poison,” but there is no legal restriction regarding these substances; nor could a druggist be held legally responsible in case of accident, even in case no poison label was attached.

A Toronto Apprentice says that the books recommended in the poison book as text books, cannot be readily procured from our booksellers, and wishes to know what books we should advise to be

ndied. We refer "Apprentice" to the report of the committee education, which appears in this number. The Council have selected several works to be used as text books, and as the list published in the poison book was published without authority, it will now be superseded.

A Correspondent—*Malcolm*—sends the following communication :

With regard to annual subscription required of Druggists for registration: Is it really requisite that the rate be kept inviolate, since our incorporation has become an established fact? For several years past, or since the organization of the Society, I have paid the same annual amount, thinking it necessary that a fund should be created to meet any exigency which could possibly occur until incorporation was accomplished, and would then be reduced to a moderate assessment. I do not wish to be thought avaricious, but am well aware that many druggists share these opinions.

We who are far distant from Toronto cannot of course be either interested in, or benefited by lectures, essays, experiments, or meetings of the Society to the same extent as those whom circumstances will permit to participate in them, and become benefitted by ocular demonstration, or indeed to renewed energy in researches, by one who has made some important name a speciality.

Neither do we wish to create a fund which may, some time in the future, be appropriated in a manner which may not be acceptable to the majority, nor shall we comply with any arrangement which may be made mutually beneficial to the majority of our tradesmen throughout Ontario.

Will druggists, since being incorporated, be authorised to dispose of stores of all kinds for medical use?

What steps are necessary, or who shall enter complaints against parties violating the law by opening and keeping drug stores without first coming within its requirements?"

We answer the questions in the order in which they occur. In regard to the annual fee of four dollars, we do not think the amount at all too large. The expenses absolutely necessary to keep up the records of the College, as appointed by law, are considerable; and, so far as the disposal of any surplus is concerned, there is the large expense of education yet untitled. The expenses of keeping up this journal must also be met, in part, from this fund, for it will readily be conceded by all that the giving away of some eight hundred copies a month, of a Journal of forty-eight pages, cannot be carried on as an operation of profit. If those members who receive the Journal, gratuitously, were each to pay the regular subscription price, the income derived would equal the total yearly receipts of the college. It must also be remembered that the country members comprise the majority of the Council, so that there is no fear of any injustice being done in respect to the appropriation of a fund to the disadvantage of outside members. In regard to

superior advantages being enjoyed by city members, we have yet to realize anything which can with any conscience be so accounted.

Druggists cannot dispose of liquors for medicinal use. A clause allowing them this privilege was at first inserted in the Act, but the committee of the Legislative Assembly would not hear of it for a moment, so the clause had to be expunged.

It is to the interest of all Registered Chemists to use their best endeavours to prevent infringements of the Act. With them, principally, the responsibility rests; although any person may lay information, as specified in the twenty-fifth section of the Act. It will be seen, by reference to the proceedings of the Council that the matter came up for discussion, and that every member of the Council was desired to do his utmost to see that the Act was enforced in the section of country which he represented. By this we should infer that the nearest member of the Council would be the proper party to confer with in any case of infringement.

Books and Pamphlets.

The Pharmacy Act Sale of Poisons Book, for registering Poisons sold in accordance with the Pharmacy Act of 1871. Published by authority of the Provisional Council of the Ontario College of Pharmacy.

Although this book has been issued under the auspices of the college, and as such would appear to claim our commendation and support, we feel that if either were extended we should not otherwise prove false to our own convictions, but forfeit all claim to the confidence of our readers. It is not our intention to particularize the many and flagrant errors with which the text is crowded, as we are sure these are already only too well known. We must, however, protest against the design of the book, which is a perfect fac-simile of a similar publication, issued by a druggist's label printer in England, varied only by the introduction of a liberal allowance of errors and mis-statements, which, it would seem, have been added with a view of giving originality to the undertaking.

The matter was brought up at the Council meeting, and the strongest disapprobation expressed by the members at the careful manner in which the work allotted to the committee had been performed. It was also resolved that the gentlemen who composed the committee should correct their own errors—an undertaking which cannot fail to be mutually beneficial to all concerned—and that a

of errata, together with a new issue of the first two pages, should be published and attached to the books.

As some misapprehension exists as to the authorship of this book, it is only justice for us to state that the committee appointed by the State Society had nothing whatever to do with the matter, as their place was taken by the committee selected by the Provisional Council.

Report of an Inquiry in regard to the Prevalence and Ravages of the Colorado Potato Beetle. Hunter, Rose & Co., Toronto.

This report is addressed to the Commissioner of Agriculture, and embodies the result of the researches of Messrs. W. Saunders and E. B. Read, of London, who, in obedience to instructions received from the Department, have thoroughly investigated the subject. It may be interesting to note that amongst the various substances experimented with in order to destroy the insect and its larva, Paris green was found the only effectual remedy. A mixture of one part, by weight, with ten parts of flour, is especially recommended. This should be dusted lightly on the vines early in the morning, when the dew is on the foliage.

The report is full of practical information, and, considering the limited time in which it had to be made, is exceedingly thorough and comprehensive.

The Medical World, New York.

A new monthly journal, edited by Reuben A. Vance, M.D., and devoted to the interests of the medical profession.

Annual Announcement of the Medical Department of the University of Buffalo, Session of 1871-72, with Catalogue of Graduates.

Constitution, By-Laws and Code of Ethics of the Columbian Pharmaceutical Association. Washington. 1871.

Selections.

TO PRESERVE MUCILAGE FROM MOULDINESS.—Instead of carbolic acid, corrosive sublimate, &c., the Polyt. Notizbl. recommends to add a minute quantity of sulphate of quinia, and suggests that it might also be useful for ink.—*Ph. Cent. Halle, 1871, 182, in An. Jour. Pharmacy.*

BUSINESS MEMORANDA.

Mr. W. J. Macartney, who for the past five years has been connected with the pharmacy of Mr. John E. Brown, of Thorold, has commenced business, on his own account in that place.

A new business has been commenced at Uxbridge by Mr. L. P. Stickney, who for many years, acted in the capacity of assistant to Mr. Brumell, of this city, and was, latterly, connected with the establishment of Mr. Brydon.

Mr. R. Whitehead, of Toronto, has purchased the business of Mr. Everest at Cannington.

Dr. Anderson has commenced a new business at Ayr.

TRADE REPORT.

Business during the month has kept up well, buyers being numerous, although not wanting heavy lots. We have also to note several new beginners, whose orders have tended to keep the wholesale houses busy.

The demand for Quinine has been very extensive from all sections of the country, while, unfortunately, stocks have been wanting entirely.

The changes in our quotations are but few, the most noticeable being Iodine, and the Iodides, which are very much advanced, with every probability of a further rise. Oil Lemon is also greatly advanced, and stocks held could be sold readily at an advance of fifty cents on our quotation.

Naval Stores are in steady demand at greatly advanced prices. Spirits Turpentine, owing to short crop and large European demand, commands a high figure, which is likely to be maintained.

Rad. Senega has fallen considerably, while Cardamon seeds are somewhat easier, being quoted at \$3.50 to \$3.75. Seal Oil is held at lower rates, but Rosin has advanced to \$4.40 for strained, and \$9 to \$10 for clear.

WHOLESALE PRICES. CURRENT.—AUGUST, 1871.

DRUGS, MEDICINES, &c.	\$ c.	@	\$ c.
Acid, Acetic, fort.	0 12	@	0 14
" Benzoic, pure.	0 25		0 35
" Citric	0 86		0 90
" Muriatic	0 04		0 06
" Nitric	0 11½		0 15
" Oxalic	0 24		0 30
" Sulphuric	0 03½		0 07
" Tartaric, pulv.	0 40		0 42
Ammon, carb. casks	0 19		0 20
" " jars	0 19		0 20
" " Liquor, 880.	0 18		0 25
" " Muriate.	0 12½		0 15
" " Nitrate	0 45		0 60
Ether, Acetic	0 45		0 50
" " Nitrous	0 27		0 30
" " Sulphuric	0 45		0 50
Antim. Crude, pulv.	0 13		0 17
" " Tart	0 50		0 55
Alcohol, 95 per cent.	1 62		1 72
Arrowroot, Jamaica	0 19		0 22
" " Bermuda	0 45		0 65
Alum	0 02½		0 03½
Balsam, Canada	0 24		0 35
" " Copaiba	0 68		0 75
" " Peru	3 80		4 00
" " Tolu	1 00		1 20
Bark, Bayberry, pulv.	0 18		0 20
" " Canella	0 17		0 20
" " Peruvian, yel. pulv.	0 45		0 50
" " " red	1 40		1 80
" " Slippery Elm, g. b.	0 75		0 20
" " flour, packets.	0 28		0 32
" " Sassafras	0 12		0 15
Berries, Cubebs, ground.	0 20		0 25
" " Juniper	0 06		0 10
Beans, Tonquin	0 60		1 10
" " Vanilla	14 50		17 00
Bismuth, Alb	4 60		5 00
" " Carb.	4 60		5 00
Camphor, Crude	0 33		0 35
" " Refined	0 45		0 55
Cantharides	1 90		2 00
" " Powdered	2 10		2 25
Charcoal, Animal	0 04		0 06
" " Wood, powdered.	0 10		0 15
Chiretta	0 25		0 30
Chloroform	1 00		1 50
Cochineal, S. G.	0 80		0 90
" " Black	1 00		1 20
Colocynth, pulv.	0 50		0 60
Collodion	0 67		0 70
Elaterium	4 50		5 00
Ergot	0 55		0 65
Extract Belladonna	2 50		2 75
" " Colocynth, Co.	1 25		1 75
" " Gentian	0 50		0 60
" " Hemlock, Ang.	1 12		1 25
" " Henbane,	2 20		2 50
" " Jalap	5 00		5 50
" " Mandrake	1 75		2 00
" " Nux Vomica	0 60		0 70
" " Opium			Variable.
" " Rhubarb	7 50		—
" " Sarsap. Hon. Co.	1 00		1 20
" " " Jam. Co.	3 25		3 70
" " Taraxicum, Ang.	0 70		0 80
Flowers, Arnica	0 35		0 35
" " Chamomile	0 30		0 40
Gum, Aloes, Barb. extra.	0 70		0 80
" " " good	0 42		0 50
" " " Cape	0 12		0 20
" " " powdered	0 20		0 30
" " " Socot.	0 76		0 80
" " " pulv	0 90		1 00
" " Arabic, White	0 60		0 65
" " " powdered.	0 50		0 55
" " " sorts	0 28		0 30
" " " powdered	0 42		0 50
" " " com. Gcdda	0 13		0 16
" " Assafoetida	0 31		0 35
" " British or Dextrine	0 13		0 15
" " Benzoin	0 48		0 55
" " Catechu	0 12		0 15
" " " powdered.	0 25		0 30
" " Euphorb, pulv.	0 52		0 40
" " Gamboge	1 05		1 20
" " Guaiacum	0 38		0 87
" " Myrrh	0 48		0 60

DRUGS, MEDICINES, &c.—Contd.	\$ c.	\$ c.
" Sang. Dracon.	0 60	0 70
" " Scammony, powdered.	5 60	—
" " " Virg. "	14 50	—
" " Shellac, Orange.	0 43	0 45
Gum, Shellac, liver.	0 38	0 40
" " Storax	0 65	0 75
" " Tragacanth, flake.	1 10	1 40
" " " common.	0 35	0 40
Galls	0 27	0 32
Gelatine, Cox's 6d.	1 10	1 20
Glycerine, common	0 26	0 30
" " Vienna	0 30	0 40
" " Prices	0 60	0 75
" " Honey, Canada, best.	0 17	0 20
" " " Lower Canada,	0 15	0 18
Iron, Carb. Precip.	0 20	0 25
" " " Sacchar.	0 40	0 55
" " Citrate Ammon.	1 10	1 20
" " " & Quinine, oz.	0 52	0 60
" " " & Strychine "	0 17	0 25
" " Sulphate, pure	0 08	0 10
Iodine, good.	6 25	—
" " Resublimed	6 75	—
Jalapin	1 40	1 60
Kreosote	1 60	1 70
Leaves, Buchu.	0 25	0 30
" " Foxglove	0 25	0 30
" " Henbane.	0 35	0 40
" " Senna, Alex	0 30	0 60
" " " E. I.	0 12½	0 20
" " " Tinneville	0 20	0 30
" " Uva Ursi	0 15	0 15
Lime, Carbolate.	5 50	—
" " Chloride	0 04½	0 06
" " Sulphate.	0 08	0 12½
Lead, Acetate	0 14	0 17
Leptandrin	0 60	—
Liq. Bismuth	0 50	0 75
Lye, Concentrated	1 50	2 00
Liquorice, Solazzi	0 46	0 48
" " Cassano	0 23	0 40
" " Other brands	0 14	0 25
Liquorice, Refined	0 35	0 45
Magnesia, Carb.	0 20	0 25
" " " 4 oz.	0 17	0 20
" " Calcined	0 65	0 75
" " Citrate.	0 40	0 50
Mercury	0 90	0 95
" " Bichlor	1 00	—
" " Chloride	1 25	—
" " C. Chalk	0 60	—
" " Nit. Oxyd	1 30	—
Morphia Acet	4 65	5 50
" " Mur.	4 65	5 50
" " Sulph	4 80	6 00
Musk, pure grain.	21 00	—
" " Canton	0 90	1 20
Oil, Amonds, sweet.	0 42	0 45
" " " bitter.	14 00	15 00
" " Aniseed.	3 60	4 00
" " Bergamot, super	5 00	5 25
" " Carraway	4 00	4 20
" " Cassia	2 00	2 20
Castor, E. I.	0 14	0 15
" " Crystal	0 22	0 25
" " Italian	0 26	0 28
" " Citronella	1 25	1 60
" " Cloves, Ang.	1 00	1 00
" " Cod Liver	1 35	1 50
" " Croton	1 50	2 10
" " Juniper Wood	0 80	1 00
" " " Berries	6 00	7 00
" " Lavand, Ang.	16 00	17 60
" " " Exotic.	1 40	1 60
" " Lemon, super	4 00	—
" " " ord.	2 60	—
" " Orange	2 70	3 00
" " Origanum	0 65	0 75
" " Peppermint Ang.	15 00	17 00
" " " Amer.	3 00	3 25
" " Rose, Virgin	7 75	8 00
" " " good	5 50	6 00
" " Sassafras	0 85	0 95
" " Wintergreen	6 50	7 00
" " Wormwood, purc.	5 80	6 50
Ointment, blue.	0 70	0 80
Opium, Turkey	6 00	6 25
" " pulv.	8 50	10 00

WHOLESALE PRICES CURRENT.—AUGUST, 1871.

DRUGS, MEDICINES, &c.—Cont'd	§ c.	§ c
Orange Peel, opt.	0 33	0 42
" " good.	0 12½	0 20
Pill, Blue, Mass.	0 75	0 80
Potash, Bi-chrom	0 17	0 18
" Bi-tart	0 27	0 28
" Carbonate.	0 14	0 20
" Chlorate.	0 45	0 50
" Nitrate	10 50	11 00
Potassium, Bromide	1 20	1 80
" Cyanide	0 60	0 70
" Iodide	5 90	6 00
" Sulphuret	0 25	0 35
Pepsin, Boudault's.	0z 1 50	—
" Houghton's.	doz. 8 00	9 00
" Morson's	oz. 0 85	1 10
Phosphorus	0 75	0 85
Podophyllin	0 50	0 60
Quinine, Pelletier's.	—	2 25
" Howard's	2 20	—
" " 100 oz. case.	2 15	—
" " 25 oz. tin.	2 10	—
Root, Colombo.	0 13	0 20
" Curcuma, grd	0 12½	0 17
" Dandelion	0 25	0 35
" Elecampane	0 14	0 17
" Gentian	0 10	0 12½
" " pulv.	0 15	0 20
" Hellebore, pulv.	0 20	0 25
" Ipecac.	2 20	2 30
" Jalap, Vera Cruz.	1 35	1 60
" Tampico	0 90	1 00
" Liquorice, select.	0-11	0 13
" " powdered	0 15	0 20
" Mandrake	0 20	0 25
" Orris	0 20	0 25
" Rhubarb, Turkey.	3 50	—
" " E. 1.	1 25	2 00
" " pulv	1 40	2 50
" " 2nd	1 30	1 50
" " French	0 75	—
" Sarsap., Hond	0 40	0 45
" " Jam	0 83	0 90
" Squills	0 10	0 15½
" Senega	0 80	0 90
" Spigelia	0 48	0 50
Sal., Epsom.	2 25	3 00
" Rochelle	0 26	0 35
" Soda	0 91½	0 03
Seed, Anise	0 16	0 30
" Canary	0 05	0 06
Cardamon	3 50	3 75
" Fenugreek, g'd.	0 08	0 10
" Hemp	0 06½	—
" Mustard, white.	0 14	0 16
Saffron, American	4 00	5 00
" Spanish	17 00	18 00
Santonine	9 50	10 00
Sago	0 07½	0 09
Silver, Nitrate.	Cash 14 50	16 50
Soap, Castile, mottled.	0 10	0 14
Soda Ash	0 03	0 04
" Bicarb. Newcastle	3 75	4 00
" " Howard's	0 14	0 16
" Caustic.	0 04	0 05
Spirits Ammon., arom.	0 25	0 35
Strychning Crystals	2 20	2 50
Sulphur, Precip	0 10	0 12½
" Sublimed	0 03½	0 05
" Roll	0 03	0 04½
Vinegar, Wine, pure.	0 55	0 60
Verdigris	0 35	0 40
Wax, White, pure.	0 80	0 90
Zinc Chloride.	0z 0 10	0 15
" Sulphate, pure.	0 10	0 15
" common.	0 06	0 10

DYESTUFFS.

Annatto	0 35	@ 0 60
Aniline, Magenta, cryst.	3 25	4 00
" " liquid	2 00	—
Argols, ground.	0 15	0 25
Blue Vitrol, pure.	0 03	0 10
Camwood	0 06	0 09
Conperas, Green.	0 01½	0 02½
Oudbear	0 16	0 25
Fustic, Cuban	0 02	0 04
Indigo, Bengal.	2 40	2 50
" Madras.	1 00	1 10
" Extract	0 28	0 35

DYESTUFFS—Continued.

Japonica	0 05	0 06½
Lacdye, powdered	0 33	0 38
Logwood.	0 02	0 03
Logwood, Camp	0 02	0 3½
" Extract	0 10	0 14
" " 1 lb. bxs.	0 14	—
" " ½ lb.	0 15	—
Madder, best Dutch.	0 16	0 17
" 2nd quality	0 15	0 16
Quercitron.	0 03	0 05
Sumac	0 06	0 08
Tin, Muriate.	0 10½	0 12½
Redwood.	0 05	0 06

SPICES.

Allspice	0 8½	@ 0 10
Cassia	0 38	0 40
Cloves	0 12½	0 15
Cayenne	0 18	0 25
Ginger, E. I.	0 12	0 14
" " Jam	0 20	0 30
Mace	1 35	1 40
Mustard, com	0 20	0 25
Nutmegs.	0 76	0 80
Pepper, Black	0 19	0 20
" White	0 26	0 28

PAINTS, DRY.

Black, Lamp, com	0 07	@ 0 08
" " refined.	0 25	0 30
Blue, Celestial	0 08	0 12
" Prussian	0 65	0 75
Brown, Vandyke	0 10	0 12½
Chalk, White	0 01	0 01½
Green, Brunswick	0 07	0 10
" Chrome.	0 16	0 25
" Paris	0 25	0 35
" Magnesia.	0 20	0 25
Litharge	0 06½	0 09
Pink, Rose	0 12½	0 15
Red Lead	0 06½	0 08
" Venetian	0 02½	0 03½
Sienna, B. & G.	0 10	0 15
Umber.	0 07	0 10
Vermillion, English	1 25	1 30
" American	0 25	0 35
Whiting	0 80	0 85
White Lead, dry, gen.	0 08	0 09
" " No. 1.	0 07	0 08
" " " No. 2.	0 05	0 07
Yellow Chrome.	0 12½	0 35
" Ochre	0 02½	0 03½
Zinc White, Star	0 10	0 12

COLORS, IN OIL.

Blue Paint.	0 12	@ 0 15
Fire Proof Paint.	0 06	0 08
Green, Paris.	0 30	0 37½
Red, Venetian.	0 07	0 10
Patent Dryers, 1 lb tins.	0 11	0 12
Putty	0 03½	0 04½
Yellow Ochre	0 08	0 12
White Lead, gen. 25 lb. tins.	2 30	—
" " No. 1	2 10	—
" " No. 2	1 90	—
" " No. 3	1 65	—
" " com	1 70	—
White Zinc, Snow	2 35	3 25

NAVAL STORES.

Black Pitch	3 10	@ 3 50
Rosin, Strained	4 20	4 40
" Clear, pale	9 00	10 00
Spirits Turpentine.	0 70	0 75
Tar Wood	4 50	4 75

OILS.

Cod	0 62	@ 0 65
Lard, extra	1 05	—
" No. 1.	0 95	1 00
" No. 2.	0 85	0 90
Linseed, Raw	0 77½	0 80
" Boiled	0 82½	0 85
Olive, Common	1 17	1 31
" Salad	1 80	2 50
" " Pints, cases	4 20	4 40
" " Quarts.	3 60	3 00
Seal Oil, Pale.	0 68	0 75
" " Straw	0 60	0 65
Sesame Salad.	1 30	1 35
Sperm, genuine.	1 90	2 00
Whale, refined.	0 75	0 80

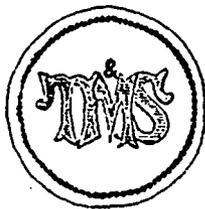
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including the following specialities:—

PEPSINE

The active digestive principle of the gastric juice; an agreeable and popular remedy for weak digestion. In Powder, Wine, Lozenges, and Globules.

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Supplied in bulk for *Dispensing Purposes*.

PANCREATINE,

In powder, containing the active principle obtained from the Pancreas, by which the digestion and assimilation of fat is effected.

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Chlorodyne,

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Saccharated Wheat Phosphates,

A valuable dietetic preparation for invalids and children, supplying the elements for the formation of Bone.

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PREPARATIONS OF PEPSINE.

Morson's Medicinal Pepsine, or Digestive Powder,

Contains the active digestive principle of the gastric juice of the stomach, purified and rendered permanent and palatable. Dose, 15 to 20 grains.

MORSON'S PEPSINA PORCI,

Or Pepsine obtained from the Stomach of the Pig, in a Pure and Palatable form

(NEUTRAL.)

This is a concentrated preparation of Pepsine, containing the digestive principle of the gastric juice in a very active state. Being *neutral*, it requires the addition of a little *Lactic* or *Hydrochloric* Acid to develop its digestive property. When administered, this property is imparted by the free acids of the stomach. Dose, 5 to 10 grains.

* * * These preparations of Pepsine are carefully examined and tested by Professor Redwood, and guaranteed by him to answer the tests indicated. Every Bottle containing the preparation named and bearing the trade-mark of T. Morson & Son, BUT NOT OTHERWISE, is sold with such guarantee.

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CONCENTRATED LYE,

ARTIFICIAL FRUIT ESSENCES,

CITRATE OF MAGNESIA,

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PAINTS, (Ground in Oil)—White Lead, of Various grades, Zinc White, Patent Dryers, Colors.

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SPECIAL QUOTATIONS FOR QUANTITIES,

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PRICE, \$7 00 PER DOZEN.

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(all sizes.)



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