

**CIHM  
Microfiche  
Series  
(Monographs)**

**ICMH  
Collection de  
microfiches  
(monographies)**



**Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques**

**© 1998**



The copy filmed here has been reproduced thanks to the generosity of:

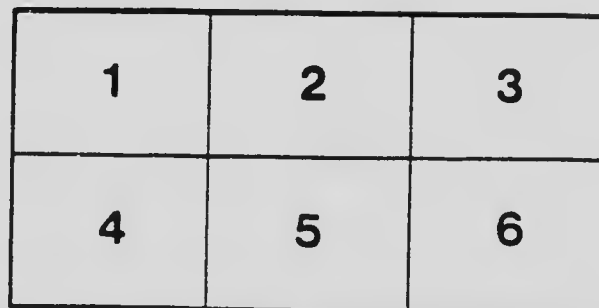
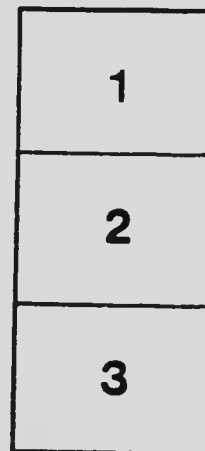
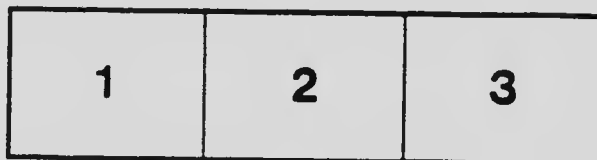
National Library of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol  $\rightarrow$  (meaning "CONTINUED"), or the symbol  $\nabla$  (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

Bibliothèque nationale du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole  $\rightarrow$  signifie "A SUIVRE", le symbole  $\nabla$  signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.



O. H. M. S.

*W. J. Gerald*

*Deputy Minister.*

---

LABORATORY  
OF THE  
INLAND REVENUE DEPARTMENT  
OTTAWA, CANADA

---

BULLETIN No. 179

---

TINCTURE OF GINGER (TINCTURA ZINGIBERIS)

---

# LABORATORY

OF THE

## INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 179.

### TINCTURE OF GINGER    LACTURA ZINGIBERIS

OTTAWA, March 30, 1909.

WM. HINSWORTH, Esq.,  
Acting Deputy Minister of Inland Revenue.

SIR,—I beg to hand you a report upon 75 samples purchased of tincture of ginger during the month of January of this year. All the inspectoral districts of Canada are represented.

This report has regard solely to the strength of the alcohol used in these preparations, which were obtained in drug shops, and should conform to the requirements of the pharmacopœias.

The British pharmacopœia demands the employment of 90 per cent. spirit; the United States pharmacopœia demands alcohol of 94·9 per cent.; both percentages have regard to volume.

It will be seen that sixty-one (61) samples constituting above 80 per cent. of the collection, contain alcohol of above 80 per cent. strength in the finished product. These may be looked upon as essentially complying with pharmacopœal requirements, allowing for volatilization of alcohol in opening bottles in dispensing.

The remaining fourteen (14) samples are as follows:—

District.	Number.	Alcohol.
Prince Edward Island .....	{ 31455	77·20
	{ 31456	71·94
Quebec .....	{ 36813	76·22
	{ 36814	72·64
	{ 36815	76·50
St. Hyacinthe .....	{ 943	70·40
	{ 22907	74·82
Ottawa .....	{ 22908	72·52
	{ 22909	49·96
Kingston .....	{ 39440	*59·72
Toronto .....	{ 36171	66·30
	{ 37562	†63·92
	{ 37564	75·24
Vancouver .....	{ 37565	†43·78

\* Sold as essence.    † made from fld extract of ginger.

As pointed out in Bulletin 110 (Oct. 1909), alcoholic preparations of ginger are known as Tinctures, Essences and Extracts. The tincture is the only one of these which is recognised officially by the British pharmacopœia. The United States pharmacopœia (8th revision) describes a fluid extract of ginger, made with alcohol of the same strength as that contained in the tincture, while the quantity of ginger used is five times as much as in the preparation of the tincture. It is possible that a satisfactory tincture might be made from this fluid extract, by dilution with alcohol; but the pharmacopœia does not authorize preparation of the tincture in this way; and it is not to be taken as proved that a tincture so made could properly be substituted for the official tincture. Under no circumstances could the use of a weaker alcohol in dilution be justified.

Essence of ginger is not a pharmacopœal preparation; and should not be dispensed. As a mode of supplying ginger for culinary purposes, the essences have a proper place in the grocery trade.

It will be seen that one of the samples low in alcohol (No. 39440) is sold as an essence of ginger, and should not have been accepted by our inspector. Two others (Nos. 22909 and 36171) contain less than 70 per cent. alcohol, and cannot by any reasonable interpretation be looked upon as coming up to pharmacopœal requirements. Numbers 37562 and 37565 are stated to be made from the Fluid Extract. Even were such a method of preparing the tincture allowable, the samples in question have been made by dilution with an alcohol much below the strength required by the pharmacopœia. They must be regarded as adulterated under the Act.

I beg to recommend the publication of this report as Bulletin No. 179.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,  
*Chief Analyst.*

ginger  
a are

prepara-  
ments

; the  
have

f the  
These  
owing

cohol.

20  
94  
22  
64  
50  
40  
82  
52  
96  
72  
30  
92  
24  
78







BULLETIN No. 179—TINCTURE OF GINGER.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address <sup>96</sup> of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS.					Remarks and Opinion of the Chief Analyst.
				Quantity.	Cent.			Sp. Gr. of Sample.	Sp. Gr. of Dilute to equal Vol.	Difference.	Moist p.c. by Weight.	Moist p.c. by Volume.	

DISTRICT OF MONTREAL—J. J. COSTIGAN, INSPECTOR.

Jan. 6	Tincture of Ginger	32576	J. J. Wenfield, 458 St. Lawrence St., Montreal.	4 oz.	45	Nat. Drug & Chem. Co.	0.8300	0.8270	0.0030	86.36	92.04		
" 8	"	32577	A. Goyette, 141 St. Catherine St., Montreal.	4 "	35	Lyman, Knox & Co., Montreal.	0.8284	0.8247	0.0037	88.27	92.74		
" 14	"	32578	Dr. J. A. Clement, Lachine, P. Q.	4 "	45	Not known.	0.8550	0.8555	0.0004	77.08	83.06		
" 14	"	32579	E. A. Ranson, Lachine, P. Q.	4 "	45	Vendor.	0.8591	0.8582	0.0009	75.95	82.10		
" 22	"	32580	G. H. Christie, Lachine, P. Q.	4 "	30	Lyman, Sons & Co., Montreal.	0.8336	0.8362	0.0026	75.95	82.10		

DISTRICT OF OTTAWA—J. A. RICKEY, INSPECTOR.

Jan. 12	Tincture of Ginger	22906	W. J. Hughes, Carleton Place.	4 oz.	40	Vendor	0.8328	0.8326	0.0002	86.19	90.44		
" 12	"	22907	D. H. McIntosh, M. D., Carleton Place.	4 "	40	"	0.8400	0.8717	0.0023	67.67	74.82	Doubtful.	
" 18	"	22908	The Standard Drug Co., Ottawa.	4 "	35	Vendors	0.8849	0.8806	0.0043	65.17	72.52	"	
" 18	"	22909	W. F. Garland, Ottawa.	4 "	35	Vendor	0.9259	0.9337	0.0002	41.95	49.46	Adulterated.	
" 20	"	22910	Hull Medical Hall, Hull.	4 "	40	Vendors	0.8340	0.8337	0.0003	85.77	90.08		

DISTRICT OF KINGSTON—JAS HOGAN, INSPECTOR.

8	Tincture of Ginger	39436 W. W. Gibson, Kingston.....	4 oz	40	Vendor	0 8319	0 8287	0 0042	57 09	91 54
11	"	39437 D. Blocker, Belleville.....	4 "	50	"	0 8309	0 8287	0 0042	8 48	92 16
11	"	39438 A. L. Glen, Belleville.....	4 "	30	"	0 8361	0 8549	0 0042	77 33	83 26
11	"	39439 W. J. B. Davison, Port Hope.....	4 "	28	"	0 8407	0 8384	0 0053	85 12	89 58
12	Essence of Ginger.	39440 McDermid & Jury, Peterboro. 4 "	4 "	40	"	0 9211	0 9138	0 0073	51 88	159 72

Collected by mistake.

DISTRICT OF TORONTO—H. J. DAGER, INSPECTOR.

1900.	Jan.	7	Tincture of Ginger	36171 The Broadway Drng Co., 4 oz... Toronto	35	Lyman Bros., Ltd. Toronto.	0 9040	0 8689	0 0051	58 55	66 39	Adulterated.
"	12	"	"	36172 Hawley, et al., Hamilton.....	4 "	35	Vendors	0 8287	0 8287	0 0020	88 48	92 16
"	12	"	"	36173 R. C. Reynolds, Hamilton.....	4 "	30	"	0 8314	0 8287	0 0027	87 69	91 00
"	15	"	"	36174 F. W. Jeffs, St. Catherine.....	4 "	40	Lyman Bros., Ltd. Toronto.	0 8462	0 8457	0 0005	81 08	86 38
"	19	"	"	36175 W. H. Lee Toronto.....	4 "	40	Vendor	0 8275	0 8275	0 0000	88 16	91 30

DISTRICT OF LONDON—T. K. LOD, INSPECTOR.

Jan.	11	Spirit of Ginger...	30567 W. A. McConnell, Clinton	4 oz	40	Nat. Chem. Co., London.	0 8484	0 8442	0 0042	81 68	86 88
"	12	Tincture of Ginger	30571 W. B. Barley, Mitchell	4 "	40	W. B. Barley, Mitchell, Chel.	0 8423	0 8414	0 0009	82 77	87 74
"	16	"	30586 Borgadus & Co., Guelph	4 "	40	Vendors	0 8504	0 8501	0 0007	79 28	84 90
"	16	"	30587 J. B. Broadfoot, Guelph	4 "	40	J. B. Stuttleworth, Toronto.	0 8287	0 8279	0 0008	88 00	91 78
"	16	"	30589 J. D. McKee, Guelph	4 "	40	Lyman Bros., To- ronto.	0 8549	0 8541	0 0008	77 67	81 58

†Orby's Essence.

BULLETIN No. 179—TINCTURE OF GINGER.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS.					Remarks and Opinion of the Chief Analyst.
				Quantity.	Cents.			Sp. Gr. of Sample.	Sp. Gr. of Distillate to equal Vol.	Difference.	Alcohol p.c. by Weight.	Alcohol p.c. by Volume.	

DISTRICT OF WINDSOR—JNO. TALBOT, INSPECTOR.

Jan. 7	Tincture of Ginger	34757	R. T. Geary, Sarnia	4 oz.	30	Vendor	.....	0.8233	0.8190	0.0043	91.36	94.26		
" 8	"	34745	J. McRobie, Petrolia	4 "	40	"	.....	0.8694	0.8594	0.0100	75.41	81.64		
" 8	"	34746	J. E. Platt, London	6 "	60	Not known	.....	0.8338	0.8329	0.0009	86.08	90.32		
" 11	"	34749	R. N. Thurrell, Ingersoll	3 "	25	Vendor	.....	0.8272	0.8267	0.0005	88.48	92.16		
" 11	"	34752	J. G. Gayfer, Ingersoll	4 "	35	"	.....	0.8397	0.8329	0.0068	86.08	90.32		

DISTRICT OF MANITOBA—A. C. LARIVIERE, INSPECTOR.

Jan. 12	Tincture of Ginger	35831	Vreoman & McCullough, Winnipeg.	4 oz.	25	Not known	.....	0.8723	0.8601	0.0122	75.09	81.34		
" 12	"	35832	The Clarendon Pharmacy, Winnipeg.	4 "	35	Davis & Lawrence (s. Montreal.	.....	0.8584	0.8555	0.0029	77.08	83.06		
" 13	"	35833	Higginbotham & Son, Virden.	4 "	20	Vendors	.....	0.8382	0.8377	0.0005	84.20	88.86		
" 14	"	35834	F. Woodhull & Co., Hartney	4 "	45	"	.....	0.8336	0.8329	0.0009	86.08	90.32		
" 21	"	35835	Brooking's Drug Store, Winnipeg.	4 "	30	"	.....	0.8340	0.8340	0.0000	85.62	89.96		

DISTRICT OF CALGARY—R. W. FLETCHER, INSPECTOR.

Jan. 15	Tincture of Ginger	35387	Oliver Bros., Calgary	4 oz.	25	Vendors	0.8287	0.8287	0.0000	87.69	91.55
" 29	"	35388	J. H. Lives, Edmonton	4 "	25	Park, Davis & Co., Walkerville.	0.8532	0.8501	0.0011	79.28	84.90
" 29	"	35389	E. M. Carpenter, Edmonton	4 "	40	Vendor.	0.8280	0.8280	0.0000	87.96	91.75
" 29	"	35390	Alconquin Pharmacy, Edmonton.	4 "	30	John Wyeth & Bros. Extract, Philadelphia	0.8253	0.8220	0.0033	90.29	93.50
" 29	"	35391	Edmonton Drug Co., Edmonton.	4 "	50	Edmonton Drug Co., Edmonton.	0.9253	0.8207	0.0056	90.75	93.82

DISTRICT OF VANCOUVER—J. F. POWER, INSPECTOR.

Jan. 29	Tincture of Ginger	37501	C. Muddell, Vancouver	4 oz.	50	Lyman & Sons, Montreal.	0.8640	0.8621	0.0019	74.18	80.54
" 29	"	37502	Knowlton Drug Store, Vancouver.	4 "	50	Vendor.	0.9060	0.9045	0.0055	56.09	63.92
" 29	"	37503	Central Drug Store, Vancouver	4 "	50	"	0.8203	0.8287	0.0006	87.69	91.54
" 29	"	37504	Owl Drug Store, Vancouver	4 "	40	Not known.	0.8785	0.8736	0.0019	68.13	75.24
" 29	"	37505	McDuffee Bros. & Co., Vancouver.	4 "	40	Vendors.	0.9675	0.9457	0.0118	36.72	43.78

DISTRICT OF VICTORIA—D. OSULLIVAN, INSPECTOR.

Jan. 27	Tincture of Ginger	39284	W. Jackson & Co., Victoria	4 oz.	35	Bass Bros. & Simpson, London, Eng.	0.8287	0.8283	0.0004	87.85	91.66
" 27	"	39285	W. S. Terry, Victoria	4 "	40	Vendor.	0.8514	0.8491	0.0023	79.68	85.24
" 27	"	39286	D. E. Campbell, Victoria	4 "	35	"	0.8479	0.8471	0.0008	80.50	85.90
" 27	"	39287	F. J. Williams, Victoria	4 "	50	"	0.8438	0.8426	0.0012	82.31	87.38
" 27	"	39288	Geo. A. Fraser, Victoria	4 "	40	"	0.8280	0.8247	0.0033	88.27	92.74

136  
12

