

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1998

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming are checked below.

- Coloured covers / Couverture de couleur
- Covers damaged / Couverture endommagée
- Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- Cover title missing / Le titre de couverture manque
- Coloured maps / Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- Bound with other material / Relié avec d'autres documents
- Only edition available / Seule édition disponible
- Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.
- Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from filming / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments / Commentaires supplémentaires:

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed / Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies / Qualité inégale de l'impression
- Includes supplementary material / Comprend du matériel supplémentaire
- Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image / Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.
- Opposing pages with varying colouration or discolourations are filmed twice to ensure the best possible image / Les pages s'opposant ayant des colorations variables ou des décolorations sont filmées deux fois afin d'obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below /
Ce document est filmé au taux de réduction indiqué ci-dessous.

	10x		14x		18x		22x		26x		30x	
									✓			
	12x			16x		20x		24x		28x		32x

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

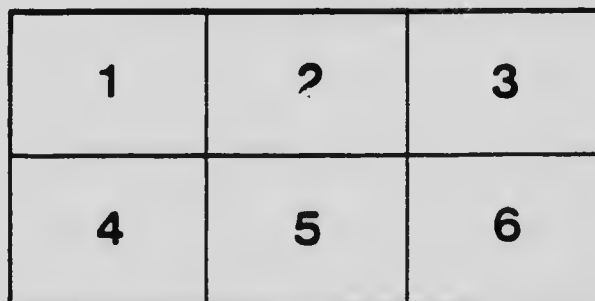
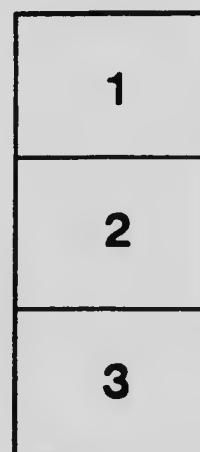
National Library of Canada

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 ∇ (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:

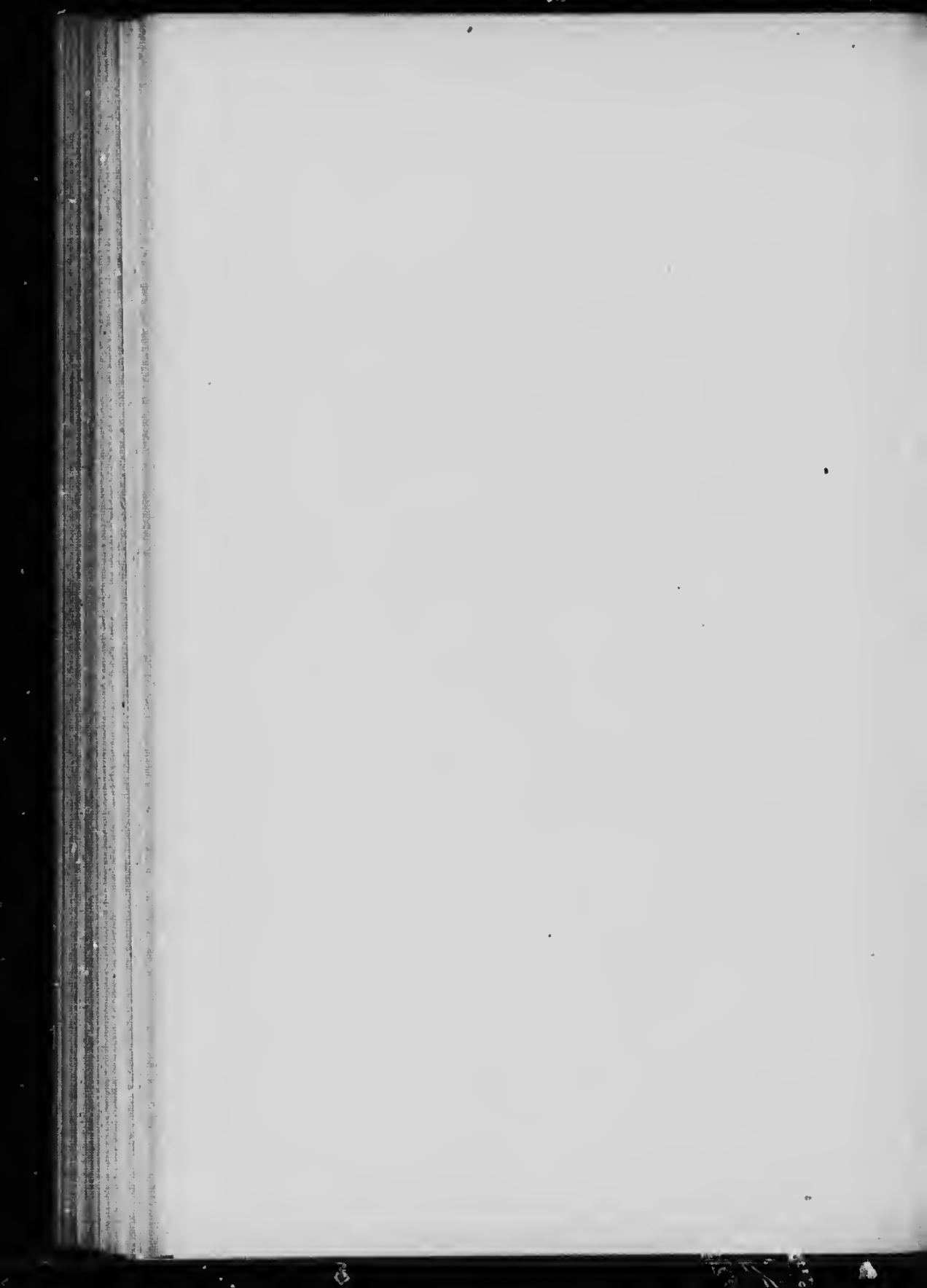
Bibliothèque nationale du Canada

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 ∇ 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.



LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

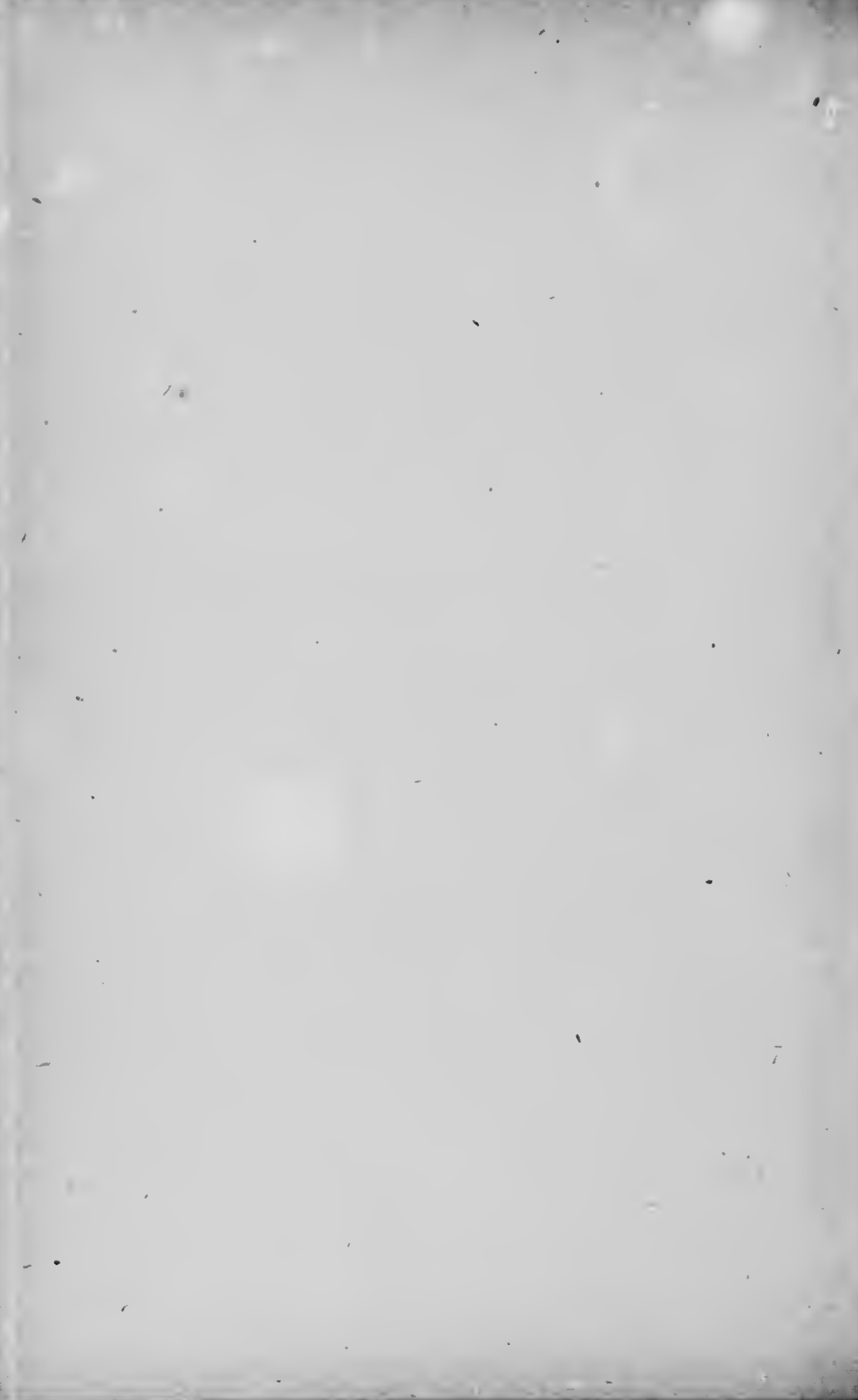
OTTAWA, CANADA

BULLETIN No. 364

MALT VINEGAR



Faint, illegible text visible along the left edge of the page, possibly bleed-through from the reverse side.



NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. MCGILL,
Chief Analyst.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 364

MALT VINEGAR

OTTAWA, February 13, 1917.

J. U. VINCENT, Esq., K.C.,
Deputy Minister of Inland Revenue.

SIR,—I beg to hand you a report concerning 185 samples of Vinegar, the great majority of which were sold as Malt Vinegars.

The report consists of two parts. The first part (twenty-two samples) represents a special collection made in Vancouver and Victoria, in February, March and April of last year. This collection was made consequent upon specific complaint (see L-138506) to the effect that vinegar was being offered in British Columbia, as Malt Vinegar, which was in reality not Malt Vinegar, but a fraudulent imitation of the article. An examination of this report proves conclusively that the complaint was well founded, only 11 of the 22 samples being genuine.

Further investigation, however, showed that in several instances, the apparent fraud was due to incorrect reading of our standards for Vinegar, as published in G. 1096, dated December 29, 1913. The standards referred to provide for the sale of Blended Vinegar, which is defined as a mixture of two or more varieties of Vinegar. Most of the samples found to be illegal, were labelled in a manner to indicate that they were blended; but while the amount of Malt Vinegar in the blend was very small, the words Malt Vinegar were most conspicuous on the label, with the result of deceiving the purchaser into the belief that he was buying a genuine Malt Vinegar or at least an article which contained a large proportion of Malt Vinegar.

Since a comprehensive inspection of the article was proposed for June, July and August of 1916, it was considered reasonable to permit the offence, as above described, to be passed over with a formal warning.

The remainder of this report deals with 163 samples purchased in June, July and August of last year. Inspectors were carefully instructed to purchase Malt Vinegar only; and in most instances this instruction was observed. In the case of Mr. Inspector Audet, five samples (5353, 5356, 5359, 5361 and 5364) are invoiced simply as Vinegars. None of these samples are Malt Vinegars, and if sold as such, are adulterated under the Act. Mr. Inspector Audet has since explained (see his letter of March 1, 1917), that he demanded malt vinegar in every instance.

The subjoined synopsis gives the general results of this examination.

COLLECTION OF FEBRUARY, MARCH AND APRIL, 1916.

Found genuine Malt Vinegars	11 samples.
Found not to be Malt Vinegars, but sold under names which implied Malt Vinegar either entirely or as a blend	11 "
	—
	22 "

COLLECTION OF JUNE TO AUGUST, 1916.

Found genuine Malt Vinegars	97 samples.
“ adulterated under the Act	31 “
“ slightly below standard and passed	35 “

Standards for Vinegar have been legalized since December 19, 1913; and Circular G. 1096 embodying these standards was published on December 29, 1913. Bulletin No. 313, which contains a detailed report of two hundred and forty-five samples of Vinegar, was published in May, 1915. I mention these facts to justify the conclusion that vendors of the article have been fully warned in the matter, and cannot reasonably urge any excuse for selling as Malt Vinegar an article which does not comply with legal requirements.

The characteristic constants of Malt Vinegar comprise a minimum content of solids (1.80 per cent) and a minimum content of mineral solids, or ash (0.20 per cent). Phosphates are characteristic of the ash of Malt Vinegar; and it will be found on examination of this report, that the amount of phosphoric acid is seldom less than about 40 to 50 milligrammes per 100cc. of Vinegar. In many cases it reaches a much higher number. Spirit Vinegar, on the other hand, contains but little ash, and the phosphoric acid content is trifling, or nil.

A considerable number of samples yield results which prove conclusively that malt has been employed in their manufacture. This industry is a new one in Canada, and it is fair to assume that failure to produce a perfectly satisfactory malt vinegar is rather due to inexperience than to any desire to put out a surrogate article. Being convinced of the essential truth of this assumption, I have ventured to pass all samples which give evidence of having been made from malt, even although such samples fail to reach the standard of a normal malt vinegar; and I would respectfully ask you to justify my interpretation, for this occasion. Of course it must be understood that such concession can form no precedent for future decisions; and that it is granted in recognition of the fact that honest efforts are being made by Canadian manufacturers to produce a malt vinegar which shall fully meet legal requirements.

When Acetic Acid is employed in the manufacture or fortification of a Vinegar, traces of formic acid are almost invariably found in a distillate from such Vinegar. Mr. Rowat, of this staff has done a considerable amount of research work, at my request, for the purpose of establishing the following points:—

1. Do genuine Malt Vinegars yield a distillate which could be mistaken to contain formic acid?
2. If a genuine Malt Vinegar, not responding to the test for formic acid, be fortified by addition of commercial, refined acetic acid, will it then give the formic acid reaction?
3. If it does so, is the intensity of the reaction proportional to the amount of acetic acid added?

Mr. Rowat's work clearly shows that genuine Malt Vinegars give no reaction for formic acid when treated by the method of W. G. Man and Burwell (Allen, Com. O. Analysis, 4th Edn. Vol. 1, page 521); that addition of commercial acetic acid, containing traces of formic acid, is readily detected; and that the depth of colour with fuchsin, is approximately proportional to the amount of acetic acid added.

I would respectfully recommend publication of this report as Bulletin No. 364.

I have the honour to be, Sir,
Your obedient servant

W. J.
Analyst.

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. (Is not an expression of opinion.)
				Quantity.	Cents.	Manufacturer.	Furnisher.	

DISTRICT OF VANCOUVER—

1916.								
Feb. 18	Vinegar	55490	Vancouver Pickle Co., 22 Water st., Van- couver, B.C.	3 bots.	45	B. C. Vinegar Works, Van- couver, B.C.	.....	Distill'd Malt Vinegar.
" 18	"	55497	B. C. Vinegar Works, 1365 Powell st., Van- couver, B.C.	3 "	60	Vendors .....	.....	Pure Canadian Vinegar.
" 18	"	55498	" " "	3 "	45	" .....	.....	Mackenzie's Pure Spirit Malt Vinegar.
" 18	"	55499	" " "	3 "	45	" .....	.....	Pure Canadian Vinegar. Spe- cial.
" 18	"	55500	" " "	3 "	75	Holbrook & Co., England.	.....	"Sunset" Brand. Pur Malt Vine Bott- led by Vendors.
Mar. 13	"	55501	Quality Mfg. Co., 358 Broadway W., Van- couver, B.C.	3 "	25	B. C. Vinegar Works, Van- couver, B.C.	.....	"Brown Bottle Spirit Malt. ...
" 14	"	55502	Hobson Mfg. Co., Van- couver, B.C.	3 "	45	"	.....
" 14	"	55503	" " "	3 "	75	H. J. Heinz Co., Pittsburgh.	.....	"Golden West" Pure Malt Vin- egar.
" 30	"	55504	Crown Mfg. Co., 2749 Main st., Vancouver, B.C.	3 "	45	Unknown.....	.....	"Coronet" Brand. Brown Vinegar.
" 30	"	55505	" " "	3 "	75	H. J. Heinz, Pittsburgh.	.....	"Crown" Brand. Pure Malt Vin- egar.
April 4	"	55506	David Spencer, Ltd., Vancouver, B.C.	3 "	75	Kelly, Douglas & Co., Vancouver, B.C.	.....	"Nabob" Brand. Pure Malt Vin- egar.
" 4	"	55507	Powell's Market, 58 Hasting st., E., Van- couver, B.C.	3 "	15	Pure Fruit Mfg. Co., Vancouver, B.C.	.....	Pure Fruit Vin- egar. Blended.
" 4	"	55520	Anderson & Beney, Nel- son and Hornby sts., Vancouver, B.C.	3 "	45	Rex Mfg. Co., Vancouver.	.....	"Rex" Brand. Spirit Malt Vinegar.

MALT VINEGAR.

Results of Analysis.

No. at 15.6° c.	As Acetic only.		Total Ash. Grams per 100 cc.	Water Soluble Ash. Grams per 100 cc.	Water Insoluble Ash. Grams per 100 cc.	Alkalinity of Water Soluble Ash. cc. N./10 Acid.	P.O. in Water Soluble Ash. Mg. per 100 cc.	F.O. in Water Insoluble Ash. Mg. per 100 cc.	Rotation 2 dm. at 20° c. Degree Verdet.	Ppt. by Barium Test for SO ₄ .	Ppt. by Silver Test for Cl.	Ppt. by Lead Acetate.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Per cent.	Grams per 100 cc.												

E. J. MORGAN, INSPECTOR.

1-0081	3.73	0.43	0.026	0.012	0.016	0.9	1.0	1.1	- 0.4	Nil ..	Nil ..	Nil ..	55496	Not malt vinegar. Sold as distilled malt vinegar.
1-0083	4.74	0.24	0.018	0.006	4.012	0.3	1.0	1.2	- 0.4	" ..	" ..	" ..	55497	Not malt vinegar. Sold as Canadian vinegar.
1-0093	4.00	0.47	0.000	0.024	0.026	0.3	5.6	7.6	- 1.6	Trace	Trace.	Trace	55498	Not malt vinegar. Sold as spirit malt vinegar.
1-0083	4.73	0.24	0.020	0.006	0.014	0.3	1.0	1.2	- 0.4	Nil ..	Nil ..	Nil ..	55499	Not malt vinegar. Sold as Canadian vinegar.
1-0194	4.22	3.04	0.250	0.140	0.310	1.1	3.6	62.8	+ 3.0	He'vy	Me- dium.	Cop- ious.	55500	Genuine.
1-0074	3.27	0.46	0.020	0.006	0.014	0.6	1.6	1.4	- 0.8	Nil ..	Nil ..	Nil ..	55501	Not malt vinegar. Sold as brown grain vinegar.
1-0086	2.84	0.40	0.020	0.006	0.012	0.7	1.0	1.4	- 0.8	" ..	" ..	" ..	55502	Not malt vinegar. Sold as spirit malt vinegar.
1-0151	3.83	2.26	0.256	0.068	0.188	1.0	12.2	80.0	+ 0.4	Me- dium.	Me- dium.	Cop- ious.	55503	Genuine.
1-0070	3.27	0.24	0.044	0.026	0.018	1.1	0.8	1.4	- 0.4	Trace	Trace.	Trace	55504	Not malt vinegar. Sold as brown vinegar.
1-0174	3.22	1.94	0.210	0.054	0.156	1.0	6.0	44.8	+ 0.2	Me- dium.	Me- dium.	Cop- ious	55505	Genuine.
1-0154	3.93	2.70	0.260	0.062	0.196	1.1	6.0	82.4	+ 0.4	"	Cop- ious.	"	55506	
1-0062	2.47	0.51	0.016	0.004	0.012	0.3	0.4	1.2	- 0.4	Nil ..	Nil ..	Nil ..	55507	Not malt vinegar. Sold as fruit vine- gar, blend.
1-0077	3.49	0.44	0.010	0.006	0.004	0.4	0.7	1.4	- 0.3	" ..	" ..	" ..	55520	Not malt vinegar. Sold as spirit malt vinegar.

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. (Is not an expression of opinion.)
				Quantity.	Cents.	Manufacturer.	Furnisher.	

DISTRICT OF VICTORIA—

1916.								
Feb. 21	Malt Vinegar	66652	Windsor Grocery, 817 Govt. st., Victoria, B.C.	3 bota.	1.05	Crosse & Blackwell, London, Eng.		
" 22	"	66656	Dixi H. Ross & Co., 1317 Govt. st., Victoria, B.C.	3 "	90	Holbrook & Co., London, Eng.		
" 22	"	66667	The West End Grocery, 1002 Govt. st., Victoria, B.C.	3 "	1.00	H. J. Heinz Co., Pittsburgh.		
" 24	"	66670	H. O. Kirkham & Co., 1109 Govt. st., Victoria, B.C.	3 "	69	H. J. Heinz Co., Leamington, Ont.		
" 24	"	66671	" " "	3 "	75	Midland Vinegar Co., Birmingham, Eng.		
" 24	"	66687	Acton Bros., 1317 Douglas st., Victoria, B.C.	3 "	75	White, Cotell & Co., Camberwell, London, Eng.		
" 26	"	66696	Linden Grocery, Linden ave., and May st., Victoria, B.C.	3 "	60	H. J. Heinz Co., Leamington, Ont.		
April 12	"	71342	W. J. Pendray & Sons, Ltd., Laurel Point,	3 pts.	25	B. C. Vinegar Works, Vancouver, B.C.		Spirit Malt Vinegar.
" 12	"	71343	Western Pickling Works, Victoria, B.C.	3 "	25	"		Pure Household Spirit Brown Grain Vinegar.

MALT VINEGAR.

Results of Analysis.											No. of Sample.	Remarks and Opinion of the Chief Analyst.
Sp. Gr. at 15° C.	Acidity as Acetic anhydride p.c. by weight.	Total Solids. Grams per 100 cc.	Total Ash. Grams per 100 cc.	Water Soluble Ash. Grams per 100 cc.	Water Insoluble Ash. Grams per 100 cc.	Alkalinity of Water Soluble Ash. cc. N./10 Acid.	P ₂ O ₅ in Water Soluble Ash. Mg. per 100 cc.	P ₂ O ₅ in Water Insoluble Ash. Mg. per 100 cc.	Rotation 2 dm. at 20° C. Degrees Ventzke.	Ppt. by Barium Test for SO ₄.			Ppt. by Silver Test for Cl.	Ppt. by Basic Lead Acetate.

D. OSULLIVAN, INSPECTOR.

1 0158	4 72	2 16	0 332	0 190	0 142	7 4	27 6	57 3	+ 0 4	Me- dium.	Cop- ious.	Cop- ious.	66652	Genuine.
1 0192	4 54	2 71	0 328	0 142	0 186	2 2	4 8	53 2	+ 3 8	He'vy	Me- dium.	"	66656	"
1 0175	4 36	2 76	0 268	0 094	0 174	2 5	9 4	78 4	+ 0 4	Me- dium.	"	"	66667	"
1 0163	4 06	2 51	0 260	0 078	0 182	1 7	5 6	82 2	+ 0 4	"	"	"	66670	"
1 0179	4 06	2 42	0 606	0 490	0 176	0 8	1 8	59 8	+ 1 0	"	"	"	66671	"
1 0160	4 56	1 85	0 398	0 240	0 158	5 5	16 4	57 2	+ 0 2	"	Cop- ious.	"	66687	"
1 0166	3 92	2 56	0 260	0 086	0 174	1 9	8 0	74 0	+ 0 4	"	Me- dium.	"	66688	"
1 0084	3 96	0 38	0 028	0 020	0 006	1 6	2 0	1 5	- 0 2	Nil ..	Nil ..	Nil ..	71342	Not malt vinegar. Sold as spirit malt vinegar.
1 0080	3 80	0 40	0 014	0 010	0 004	0 6	0 9	1 2	0 0	" ..	" ..	" ..	71343	Not malt vinegar. Sold as spirit brown grain vine- gar.

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.	
				Quantity.	Cent.	Manufacturer.	Furnisher.

DISTRICT OF NOVA SCOTIA—

1916.								
Aug. 18	Malt Vinegar.	76321	Jas. Scott & Co., Halifax.	3 bots.	90	Cross & Blackwell, London, Eng.	Manufacturers..	
" 18	" ..	76322	Wentzell's Ltd., Halifax.	3 "	60	Wilson Lytle & Badgeron, Toronto.	" ..	
" 21	" ..	76323	T. F. Courtney Co., Halifax.	3 "	75	Holbrook Co., London, Eng.	Bauld Bros. Ltd., Halifax.	
" 21	" ..	76324	John Tobin & Co., Halifax.	3 "	25	Purnell Co., Bristol, Eng.	.....
" 21	" ..	76325	Dillon Bros., Halifax.	3 "	45	.....	.....
" 22	" ..	76326	C. McNab, Dartmouth, N.S.	3 "	25	Holbrook Co., England.	Bauld Bros. Ltd., Halifax.	
" 25	" ..	76327	Payzant & King, Halifax.	3 "	24	E. S. Tracey, Halifax.	Manufacturer...	
" 25	" ..	76328	A. W. Smith & Co., Halifax.	3 "	40	Fardon's Vinegar Co., Ltd., England.	.....

DISTRICT OF CAPE BRETON—

Aug. 1	Malt Vinegar.	63849	J. F. Miles, Sydney...	3 qts.	75	Cross & Blackwell, London, Eng.	.....
" 2	" ..	63853	D. M. McMillan, Sydney.	3 "	75	Holbrook & Co., London, Eng.	.....

DISTRICT OF NEW BRUNSWICK—

July 6	Malt Vinegar.	69501	2 Barkers Ltd., St. John, N.B.	3 bots.	75	Holbrook & Co., London, Eng.	.....
" 6	" ..	69502	Walter Gilbert, St. John, N.B.	3 "	75	Maconochie Bros., London, Eng.	.....
" 6	" ..	69503	Dearborn & Co., St. John, N.B.	3 "	60	Purnell, Webb & Co., Bristol, Eng.	.....
" 10	" ..	69504	G. F. Barborn Co., Ltd., St. John, N.B.	3 "	60	Fardon's Vinegar Co., Ltd., Birmingham, Eng.	.....
" 10	" ..	69505	W. A. Simonds, St. John, N.B.	3 "	60	Geo. Hodge & Sons, Ltd., London, Eng.	.....
" 27	" ..	69506	Geo. T. Whelpley, Fredericton, N.B.	3 "	75	Lazenby, London, Eng.	.....
" 27	" ..	69507	A. E. Eardley, Fredericton, N.B.	3 "	20	Fardon's Vinegar Works, Ltd, Birmingham, Eng.	.....
Aug. 3	" ..	69508	W. B. McKay Co. Ltd., Sussex, N.B.	3 "	84	Holbrook & Co., Ltd., London, Eng.	.....
" 4	" ..	69509	J. F. Ryan, Moncton, N.B.	3 "	20	H. J. Heins Co., Pittsburg, Pa.	.....
" 4	" ..	69510	Reed Co., Ltd., Moncton, N.B.	3 "	75	Wilson, Lytle & Badgeron Co., Toronto.	.....

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.							No. of Sample.	Remarks and Opinion of the Chief Analyst.	
	Acidity.		Total Solids gms. per 100 cc.	Total Ash gms. per 100 cc.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Polarization in 2 dm. tube.	Lead Acetate pptc.			Formic Acid Test.
	As Acetigms. per 100 cc.	As Anhydride gms. per 100 cc.								

R. J. WAUGH, INSPECTOR.

.....	5.52	4.69	2.56	0.35	84	-2.0	Copious.	.....	76321	Genuine.
.....	4.86	4.13	2.10	0.17	30	+2.0	"	.....	76322	Ash slightly below standard. Pass.
.....	4.86	4.13	2.50	0.25	64	+2.0	"	.....	76323	Genuine.
Bulk.....	4.41	3.77	2.31	0.42	54	+0.4	"	.....	76324	"
.....	5.40	4.50	0.73	0.04	8	0.0	Trifling.	.....	76325	Not malt vinegar. Adulterated.
Bulk.....	4.62	3.93	2.85	0.36	60	+3.2	Copious.	.....	76326	Genuine.
.....	4.32	3.67	0.23	0.00	Traces.	0.0	Nil.....	36.5	76327	Not malt vinegar. Adulterated.
.....	4.98	4.23	2.31	0.24	72	+1.4	Copious.	.....	76328	Genuine.

E. F. MACKEN, INSPECTOR.

.....	5.46	4.64	2.61	0.35	61	-2.0	Copious.	.....	63849	Genuine.
.....	5.40	4.59	2.97	0.29	30	+3.2	"	.....	63853	"

JOHN C. FERGUSON, INSPECTOR.

.....	4.86	4.13	2.56	0.26	42	+2.0	Copious.	.....	69501	Genuine.
.....	6.30	5.41	3.18	0.21	56	+8.2	"	.....	69502	"
.....	4.53	3.85	2.78	0.45	54	+3.6	"	.....	69503	"
.....	5.01	4.26	2.31	0.25	64	+1.2	"	.....	69504	"
.....	4.92	4.18	3.16	9.58	72	+1.6	"	.....	69505	"
Distilled.....	7.20	6.12	0.07	0.01	Traces.	-1.0	Nil.....	.....	69506	Not malt vinegar. Adulterated. Labelled distilled.
Bulk.....	4.20	3.57	2.54	0.44	68	+1.2	Copious.	.....	69507	Genuine.
.....	4.63	4.10	2.47	0.25	44	+2.0	"	.....	69508	"
.....	5.22	4.44	2.62	0.27	48	-0.4	"	.....	69509	"
.....	4.89	4.16	2.06	0.15	24	+1.6	"	.....	69510	Ash below standard. Pass.

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.	
				Quantity.	Cent.	Manufacturer.	Furnisher.

DISTRICT OF QUEBEC CITY—

1916.							
July	3	Malt Vinegar.	56771	Pierre Pageau, Loretteville, Que.	3 bots.	75	Crosse & Blackwell.. N. Turcotte, Quebec.
"	4	"	56772	A. Drolet, 712 St. Valier, Que.	3 "	75	Holbrook Co..... J. B. Renaud, Quebec.
"	4	"	56773	" " " "	3 "	90	Heinz Co..... "
"	4	"	56774	Cantin & Frere, 271 St. Joseph, Que.	3 "	75	Crosse & Blackwell.. Turcotte & Frere
"	4	"	56775	O. Lacroix, 19 St. Joseph, Que.	3 "	90	Holbrook & Co., London.
"	4	"	56776	E. G. Turcotte, 74 Grain, Que.	3 "	75	Crosse & Blackwell.. Turcotte & Frere
"	4	"	56777	" " " "	3 "	45	Holbrook & Co..... J. B. Renaud...
"	4	"	56778	C. S. Riverin, 55 Couronne, Que.	3 "	75	" " " " " "
"	4	"	56779	" " " "	3 "	60	Wilson's... Langlois & Paradis.
"	4	"	56780	Myrand & Pouliot, 70 Couronne, Que.	3 "	90	H. J. Heinz Co., Pittsburg.

DISTRICT OF QUEBEC PROVINCE—

July	11	Malt Vinegar.	5353	A. Lacasse, St. Claire....	3 bots.	8	St. Lawrence, Quebec.
"	12	"	5356	Dorchester Lumber Co., St. Malachi.	3 "	15	Drouin Frere, Quebec.
"	13	"	5359	D. Towel, St. Leon	3 "	15	Dorchester Lumber Co., St. Malachi.
"	14	"	5361	Lacasse & Audet, St. Edward.	3 "	15	" " " " " "
"	16	"	5364	G. Dussault, St. Marguerite.	3 "	15	Drouin Frere & Ratray, Quebec.
June	20	"	72283	J. N. R. L'Esperance, Montmagny.	3 "	1.05	Holbrook & Co., London.
"	27	"	5727	Eugene Lacas, St. Jerome.	3 "	60	Purcell, Ltd.
"	27	"	5728	Charlesmagne Taillon, St. Jerome.	3 "	75	" " " " " "
"	27	"	5729	Pierre Simard, St. Jerome.	3 "	75	Fardon's Vinegar Co. Ltd.
"	27	"	5730	C. E. Lafamme, St. Jerome.	3 "	60	Wilson Lytle Badgerow.

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.							No. of Sample.	Remarks and Opinion of the Chief Analyst.	
	Acidity.		Total Solids gms. per 100 cc.	Total Ash gms. per 100 cc.	Phosphate P ₂ O ₅ mgms. per 100 cc.	Polarization in 2 dm. tube.	Lead Acetate ppte.			Formic Acid test.
	As Acetic gms. per 100 cc.	As Anhydride gms. per 100 cc.								

X. W. E. BELAND, INSPECTOR.

.....	5.70	4.84	2.24	0.30	78	-1.6	Copious	.....	56771	Genuine.
.....	5.52	4.69	2.98	0.33	50	+6.6	"	.....	56772	"
.....	5.16	4.39	2.94	0.28	36	-1.6	"	.....	56773	"
.....	5.58	4.74	2.47	0.30	92	-2.0	"	.....	56774	"
.....	5.52	4.69	2.60	0.32	42	+2.8	"	.....	56775	"
.....	5.80	4.84	2.93	0.33	88	+0.2	"	.....	56776	"
.....	5.34	4.54	2.57	0.40	66	+6.8	"	.....	56777	"
.....	5.40	4.59	2.52	0.25	68	+2.4	"	.....	56778	"
.....	4.74	4.03	2.65	0.26	32	+0.8	"	.....	56779	"
.....	5.22	4.44	2.70	0.27	64	-0.4	"	.....	56780	"

J. E. AUDET, T. GENDREAU AND N. CADIEUX, TEMPORARY INSPECTORS.

.....			0.45	0.04	2	.....	Negative.	.....	5353	No. malt vinegar, adulterated.
.....			0.22	0.03	3	.....	"	.....	5356	" "
.....			0.23	0.02	trace.	.....	"	.....	5359	" "
.....			0.26	0.03	4	.....	"	.....	5361	" "
.....			0.16	0.02	6	.....	"	.....	5364	" "
.....			3.33	0.36	40	.....	"	.....	72283	Genuine.
.....			3.03	0.41	40	.....	"	.....	5727	"
.....			1.86	0.16	24	.....	"	.....	5728	Ash low. Pass.
.....			2.78	0.29	42	.....	"	.....	5729	Genuine.
.....			1.85	0.13	24	.....	"	.....	5730	Ash low. Pass.

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.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF THREE RIVERS--

1916.							
June 26	Malt	5423	Camille Barrette, Joliette.	1 pt.	25	Crosse & Blackwell, London, England.	
" 27	Vinegar.	5427	J. H. R. Deblois, St. Thomas, Joliette.	3 bots.	45	Holbrook Co., London, England.	
July 1	"	5440	Wm. Ferrault, Joliette	3 "	75	Crosse & Blackwell, London, England.	
" 4	"	5448	J. A. Boisvert, Joliette	3 "	75	Holbrook & Co., London, England.	
" 6	"	5451	J. O. Daviault, Berthierville.	3 "	75	Crosse & Blackwell, London, England.	

DISTRICT OF EASTERN TOWNSHIPS--

June 27	Malt	73811	S. Bourgeois & Co., St. Hyacinthe.	3 bots.	50	Wilson Badgerow...	
" 28	Vinegar.	73812	P. J. Jiard, Richmond, P. Q.	3 "	65	.....
" 28	"	73813	McCrae Bros., Richmond, P. Q.	3 "	50	Geo. Hodge & Son..	
" 28	"	73814	Dand. Bedard, Richmond, P. Q.	3 "	50	Holbrook Co., London.	
" 29	"	73816	Thomas Hebert, St. Hyacinthe.	3 "	75	Chaput & fils, Montreal.	
Aug. 3	"	73951	John Donigan, Magog.	3 "	60	Geo. Hodge & Sons, Montreal.	
" 3	"	73952	Grasselin & Paradis, Magog.	3 "	75	Holbrook & Co., London, England.	
" 10	"	73953	N. Mitchell Co. Ltd., Granby.	3 "	75	Crosse & Blackwell, London, England.	
" 10	"	73954	W. D. Bradford, Granby.	3 "	75	Wilson, L. B., Co. Ltd., Toronto.	
" 16	"	73955	D. McDonald, Alexandria.	3 "	75	Geo. Hodge & Son, London.	

DISTRICT OF MONTREAL--

Sept. 5	Malt	74841	P. Daoust, 140 St. Catherine st., Montreal.	3 bots.	45	Holbrook & Co.	
" 6	Vinegar.	74842	Abramson & Basevitz, 25 Ontario street E., Montreal.	3 "	30	Chiver's.....	
" 6	"	74843	J. I. Mallette, 60 Ontario st. E., Montreal.	3 "	45	Wilson's	

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total solids grs. per 100 cc.	Total Ash grs. per 100 cc.	Phosphates P, O, mgms. per 100 cc.	Formic acid test.	Acidity as acetic acid.		

DR. V. P. LAVALLEE, INSPECTOR.

.....	2.20	0.29	50	Negative.	.....	5422	Genuine.
.....	2.60	0.32	32	"	.....	5427	"
.....	1.85	0.32	29	"	.....	5440	"
.....	2.29	0.37	28	"	.....	5448	"
.....	2.08	0.31	35	"	.....	5451	"

E. BLONDIN, TEMPORARY INSPECTOR, J. J. COSTIGAN, ACTING INSPECTOR.

.....	2.41	0.18	52	Negative.	.....	73811	Ash slightly low. Pass.
.....	3.56	0.40	28	"	.....	73812	Genuine,
.....	2.68	0.40	30	"	.....	73813	"
.....	2.20	0.32	28	"	.....	73814	"
.....	2.42	0.28	60	"	.....	73816	"
.....	2.56	0.41	33	"	.....	73951	"
.....	2.53	0.32	29	"	.....	73952	"
.....	2.20	0.30	32	"	.....	73953	"
.....	1.25	0.16	16	"	.....	73954	Ash low. Pass.
.....	2.60	0.44	40	"	.....	73955	Genuine.

D. J. KEARNEY, INSPECTOR.

.....	2.51	0.32	64	Negative.	.....	74841	Genuine.
.....	2.43	0.30	82	"	.....	74842	"
.....	1.65	0.35	48	"	.....	74843	Solids slightly low. Pass.

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.	
				Quantity.	Cent.	Manufacturer.	Furnisher.

DISTRICT OF MONTREAL—

1916.							
Sept. 6	Malt	74844	Moguin Frere, 120 St. Denis st., Montreal.	3 bots.	90	Crosse & Blackwell..	.....
" 6	Vinegar.	74845	J. D. Gilmour Co., 123 St. Paul street W., Montreal.	3 "	30	The Lion Vinegar Co	.....
" 8	"	74846	Goodwins Ltd., St. Catherine street W., Montreal.	3 "	90	H. J. Heinz Co. ....	.....
" 8	"	74847	" " "	3 "	60	Geo. Hodge & Son, Ltd.	.....
" 8	"	74848	R. Walsh, 376 Dorchester st. W., Montreal.	3 "	30	Fardon's Vinegar Co	.....
" 8	"	74849	Almy's Ltd., St. Catherine st. W., Montreal.	3 "	69	Grimble's, London, Eng.	.....
" 8	"	74850	" " "	3 "	75	Midland Vinegar Co.	.....

DISTRICT OF VALLEYFIELD—

Aug. 1	Malt Vinegar.	74901	G. Pilon, St. Zotique, P.Q.	3 bots.	45	Crosse & Blackwell..
--------	---------------	-------	-----------------------------	---------	----	----------------------	-------

DISTRICT OF OTTAWA—

July 12	Malt Vinegar.	73659	Wm. Lorimer, Brockville.	1 bot.	25	Grimbles, London, Eng.	.....
" 15	"	73661	E. D. Osborne, Arnprior.	1 qt.	10	.....	Forbes Bros., Arnprior.
" 18	"	73674	W. G. Cummings, Britannia Bay.	1 "	20	Lion Vinegar Co, Montreal.	F. J. Castle Co., Ottawa.
" 19	"	73675	C. Goulet & fils, 289 Rochester street, Ottawa.	3 bots.	45	Wilson, Lytle, Badgerow Co., Ltd., Toronto.	.....
" 20	"	73676	E. M. Lerner & Son, By ward market, Ottawa.	3 "	25	The T. A. Lytle Co., Toronto.	.....
" 21	"	73678	R. C. Cummings, Cummings Bridge.	1 qt.	20	.....	S. J. Major, Ltd., Ottawa.
" 24	"	73683	H. Shore, 510 Bank st., Ottawa.	3 bots.	75	The Turner Co. Ltd., Toronto.	.....
Aug. 10	"	73686	F. W. Dent, Rockland.	3 "	75	Sir Robert Baruett & Co., London.	H. N. Bate & Son, Ottawa.
" 23	"	73687	The Sanitary Grocery, 316 Nelson street, Ottawa.	3 "	30	The T. A. Lytle Co., Ltd., Toronto.	Lerner & Son, Ottawa.
" 23	"	73688	Trudel Frere, 291 Le Breton st., Ottawa.	3 "	75	Canadian Distributing Co., Toronto.	.....

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total solids grms. per 100 cc.	Total Ash grms. per 100 cc.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Formic acid test.	Acidity as acetic acid.		

Concluded.

.....	1.08	0.31	80	Negative..	.....	74844	Genuine.
.....	1.54	0.31	34	"	.....	74845	Solids low. Pass.
.....	2.27	0.25	82	"	.....	74846	Genuine.
.....	1.00	0.26	76	Fairly positive.	.....	74847	Solids low. Pass.
.....	1.93	0.26	70	Negative..	.....	74848	Genuine.
.....	1.15	0.18	52	"	.....	74849	Solids and ash low. Pass.
.....	2.54	0.42	74	"	.....	74850	Genuine.

J. J. COSTIGAN, ACTING INSPECTOR.

.....	2.04	0.32	44	Negative..	74901	Genuine.
-------	------	------	----	------------	-------	-------	----------

J. A. RICKEY, INSPECTOR.

Guaranteed pure.....	1.41	0.18	38	Negative..	.....	73659	Solids and ash low. Pass.
Bro., Arn.....	3.64	0.41	24	Trace.....	.....	73661	Genuine.
Castle Co., va.....	1.61	0.23	16	Negative..	.....	73674	Solids slightly low. Pass.
Wilson's English malt Vinegar pure.	1.86	0.16	32	"	.....	73675	Ash slightly low. Pass.
Pure English malt vinegar.	2.31	0.64	32	"	.....	73676	Genuine.
Major, Ltd., va.....	2.20	0.41	24	"	.....	73678	"
Finest English malt vinegar, three star quality.	0.66	0.05	32	Strongly positive.	.....	73683	Not malt vinegar. Adult-erated.
Bate & Son, va.....	2.50	0.25	66	Negative..	.....	73686	Genuine.
R & Son, va.....	2.18	0.18	34	Trace.....	.....	73687	Ash slightly low. Pass.
Pure English malt vinegar. "Mary Pickford."	2.29	0.17	40	Negative..	.....	73688	" " " "

BULLETIN No. 364-

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.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF KINGSTON-

1916.								
July 3	Malt Vinegar.	73634	Sam Sleeman, Port Hope.	3 bots.	30	Eby Blain, Ltd., Toronto.		
" 4	"	73638	W. H. Ireland, Trenton.	3 "	60	Wilson, Lytle & Badgerow Co., Toronto.		
" 4	"	73640	E. T. Marsh, Trenton.	3 "	60	Toronto Vinegar & Beverage Co., Toronto.		
" 4	"	73645	The Beverly McDonald Co., Napanee.	3 "	75	The Turner Co., Ltd., Toronto.		
" 6	"	73647	H. S. Wilder, Kingston.	3 "	30	T. A. Lytle Co., Ltd., Toronto.		
" 6	"	73653	M. V. Ainslee, Kingston.	3 "	75	Grimbles, London, Eng.		
" 7	"	73656	Kingston Vinegar Co., Kingston.	1 qt.	Nil.	Vendors		
" 7	"	73657	John M. Gordon, Kingston.	1 "	18	Midland Vinegar Co.	W. E. Patrick, Toronto.	
Oct. 3	"	73695	Mitchell's Grocery, Peterboro.	3 bots	60	The Turner Co., Ltd., Toronto.		
" 3	"	73696	Dawson Bros., Peterboro.	3 "	75	"		
" 3	"	73697	Frank Darling, Peterboro.	3 "	75	"		

DISTRICT OF TORONTO-

July 14	Malt Vinegar.	75446	J. C. Steel, 1068 College St., Toronto.	3 bots.	4			
" 14	"	75447	J. Garbutt & Son, 120 Arthur St., Toronto.	3 "	30		Unknown	
" 14	"	75448	J. Lundy, 109 Vaughan Road, Toronto.	3 "	30		F. Coward, Toronto.	
" 14	"	75449	A. E. Way, 384 Oakland Ave., Toronto.	3 "	30	Geo. Hodge & Son, Ltd., London.	Armstrong & Pafford, Toronto.	
" 15	"	75450	W. Williams, 267 Parliament St., Toronto.	3 "	30	Wilson, Lytle & Badgerow, Toronto.		
" 19	"	75453	McDonald & McCann, 94 Avenue Rd., Toronto.	3 "	45	E. Lazenby & Son, London, Eng.		
" 19	"	75454	J. Mulholland, 144 Avenue Road, Toronto.	3 "	50		Parsons, Brown & Co., Toronto.	
" 21	"	75455	S. Zudkowitz, 166 Bathurst St., Toronto.	3 "	30		S. Patterson & Co., Toronto.	
" 22	"	75456	Kemp Beverage Co., 784 Bathurst St., Toronto.	3 "	25			
" 22	"	75457	J. Graham, 1241 Bloor St. W., Toronto.	3 "	30		Eby Blain, Ltd., Toronto.	

MALT VINEGAR.

Inspector's Report (is not an expression of opinion).	Results of Analysis.						Remarks and opinion of the Chief Analyst.
	Total solids grm. per 100 cc.	Total ash grms. per 100 cc.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Formic acid test.	Acidity as acetic acid.	No. of Sample.	

J. A. RICKEY, ACTING INSPECTOR.

Pure English Malt Vinegar.	2.75	0.28	40	Negative.	.....	73634	
Pure Malt Vinegar	2.18	0.19	30	"	.....	73638	
Purnell's English Malt Vinegar.	2.06	0.27	42	"	.....	73640	
Three Star Quality Finest English Malt Vinegar.	0.66	0.04	10	Strongly positive.	.....	73645	Vinegar. A dul-
Pure English Malt Vinegar.	2.28	0.18	40	Negative.	.....	73647	ated. slightly low. Pass.
Grimble's English Malt Vinegar.	1.23	0.17	42	"	.....	73650	Solids and ash low. Pass.
.....	1.66	0.13	26	"	.....	73651	Solids and ash low. Pass.
.....	2.54	0.47	44	"	.....	73652	Genuine.
Labelled Three Star Quality Finest English Malt Vinegar. Distilled	0.65	0.05	Nil.	0.013	.....	3 57 73653	Not Malt Vinegar. Adulterated.
" " ..	0.65	0.05	"	0.019	.....	3 57 73654	"
" " ..	0.65	0.05	"	0.025	.....	3 57 73657	"

H. J. DAGER, INSPECTOR.

.....	0.31	0.04	Trace.	Trace.	.....	75446	Not Malt Vinegar. Adulterated.
Crown Brand. Pure Eng. Malt Vinegar.	1.66	0.15	10	Negative.	.....	75447	Solids and phosphates low. Pass.
Canadian Pure Malt Vinegar.	1.26	0.16	34	"	.....	75448	Solids and ash low. Pass.
Pure Malt Vinegar.....	1.79	0.25	50	"	.....	75449	Genuine.
Pure Eng. Malt Vinegar. Bottled by vendor.	1.90	0.18	40	"	.....	75450	Ash slightly low. Pass.
Pure Malt Vinegar ..	1.88	0.25	11	"	.....	75453	Genuine.
"	1.70	0.15	18	"	.....	75454	Solids and ash low. Pass.
Pure Eng. Malt Vinegar.	1.62	0.15	11	Trace.	.....	75455	" "
" " ..	1.69	0.14	34	Negative.	.....	75456	" "
Bottled by vendors.	2.56	0.34	30	"	.....	75457	Genuine.
Pure English Malt Vinegar.							

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.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF HAMILTON—

1916.								
June	26	Malt Vinegar.	73604	Dunn Bros., 123 James St. N., Hamilton.	3 bts.	60	Wilson Lytle Badgerow Co., Toronto	
"	26	"	73608	Pebbles Hobson & Co., King & McNabb St.	1 qt.	20	Holbrooks, London, Eng.	
"	27	"	73610	M. Cummings, James & Barton St.	2 bts.	10	Unknown	Unknown
"	27	"	73611	S. Froman	"	30	R. M. Griffin, 26 Gore St., Hamilton	
"	27	"	73612	S. E. Smith, 346 James St. N.	"	30	Bard & Co., Hamilton	
"	30	"	73626	R. Peirson, St. Catherine's.	"	30	T. A. Lytle Co., Toronto	
"	30	"	73627	Marshall's Grocery, Niagara Falls.	"	75	The Midland Vinegar Co., Birmingham, Eng.	
"	30	"	73628	Fred A. Berriman	"	45	W. Williams, 207 Parliament St., Toronto	
"	26	"	75401	Taylor & Pringle Co., Owen Sound.	"	30	Holbrook Ltd, England.	
"	27	"	75402	D. A. McClean	"	30		T. A. Lytle Co., Toronto.
"	29	"	75403	L. Taylor, 187 Paisley St., Guelph.	"	60	Wilson Lytle, Badgerow Co., Toronto	
"	29	"	75404	Jas. O'Brien, 5 Gordon Ave.	"	30		McPherson Glasgow, L' Hamilton.
"	29	"	75405	Jackson & Sons, 25 Wyndham St.	"	15	Wilson Lytle & Badgerow, Toronto.	
July	4	"	75406	John Sloan, 98. Water St., Galt.	"	30	Midland Vinegar Co. Birmingham.	
"	4	"	75407	Hugh Walters, 43 Main St., Galt.	"	75	Toronto Vinegar & Beverage Co., Toronto.	
"	4	"	75409	Schell Bros., 12 King St., Berlin.	"	45	Macnochie Bros., Ltd., London, Eng.	
"	5	"	75410	Crompton Grocery Co., Colborne St., Brantford.	"	60	James Turner Co. Ltd., Toronto.	

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.					No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Totals solids grams per 100 cc.	Total ash grams per 100 cc.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Formic acid to ct.	Acidity as acetic acid.		

J. A. RICKEY AND J. DAGER, ACTING INSPECTORS.

Pure English Malt Vin- egar.	1.63	0.14	30	Negative	73604	Solids and Ash low. Pass.
	2.71	0.	7	"	73606	Genuine.
	0.71		4	"	73610	Not Malt Vinegar. Adult- erated.
Pure English Malt Vin- egar.	1.87	.19	28	"	73611	Genuine.
Pure English Malt Vin- egar. Old Glory Brand.	2.18	.25	42	"	73612	"
Pure English Malt Vin- egar.	2.13	0.22	20	Trace	73626	"
Midland Malt Vinegar..	2.21	0.45	40	Negative	73627	"
Blue Label, Pure English Malt Vinegar.	0.15	0.02	2	Trace	73628	Not Malt Vinegar. Adult- erated.
	2.44	0.25	47	Negative	75401	Genuine.
Wilson's Pure English Malt Vinegar.	2.32	0.15	45	"	75402	Ash low. Pass.
Pure English Malt Vin- egar.	2.44	0.18	42	"	75403	Ash slightly low. Pass.
Pure English Malt Vin- egar Flag Brand.	2.75	0.47	50	Trace	75404	Genuine.
	2.00	0.15	22	Negative	75405	Ash low. Pass.
Midland Pure Malt Vin- egar.	2.41	0.41	36	"	75406	Genuine.
Purnell Pure English Malt Vinegar.	2.74	0.31	24	"	75407	"
English Malt Vinegar...	1.89	0.21	30	"	75409	"
Three Star Quality Eng- lish Malt Vinegar.	0.48	0.03	5	Strongly positive.	75410	Not Malt Vinegar. Adult- erated.

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.	
				Quantity.	Cents.	Manufacturer.	Furnisher

DISTRICT OF WINDSOR—

1916.							
July	4	Malt Vinegar.	65010	Jones & May, Exeter....	1 qt..	30	H. J. Heinz
"	5	"	65011	Gill Bros, Strathroy.....	3 bots.	75	Holbrook & Co., London, Eng.
"	5	"	65015	R. H. Davis, Strathroy..	"	60	..... Toronto Vinegar, & Beverage Co., Toronto.
"	5	"	65016	Wm. Cress, Strathroy....	"	30	Purnell's, Bristol, Eng.
"	5	"	65017	W. G. Meekinson, Strathroy.	1 qt..	25	Crosse & Blackwell London, Eng.
"	5	"	65018	Mihell & Gill, Strathroy..	3 bots.	75	Wilson Lytle Co., Toronto.
"	6	"	65023	F. R. Dale, Port Stanley.	"	45	Holbrook & Co., London, Eng.
"	6	"	65028	W. E. Lumby, St. Thomas, Ont.	"	45	T. A. Lytle Co., Toronto.
"	6	"	65030	G. R. Rinn, St-Thomas, Ont.	"	45	..... John Garvey & Sons, London, Ont.

DISTRICT OF MANITOBA—

Aug.	22	Malt Vinegar.	75038	A. Lindsay & Son, Stoney Mountain.	3bots.	75	Wilson Lytle, Badgerow Co., Toronto
"	22	"	75039	P. J. Foley & Co., Stonewall.	"	75	Grosse & Blackwell, London, Eng.
"	25	"	75041	Edward Tissot, St. Claude	"	30	..... A. McDonald Co., Winnipeg.
"	25	"	75042	C. J. H. Arbez, St-Claude	"	30	.....
"	28	"	75043	A. R. Christie, 253 Portage Ave., Winnipeg.	"	75	Midland Vinegar Co., Birmingham, Eng.
"	29	"	75044	W. Ephstein, West Selkirk	"	40	.....
"	29	"	75045	Atrubin & Co., West Selkirk.	"	15	.....
"	29	"	75046	D. Dalman, West Selkirk	"	45	..... The Geo. McLean Co., Winnipeg.
"	29	"	75047	Shephard Pears & Co., West Selkirk. —	"	35	.....
"	30	"	75048	Fort Garry Market Co., Ltd, Garry St. Winnipeg.	"	75	Gold Standard Mfg Co., Winnipeg.

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of analysis.							No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids gms. per 100 cc.	Total Ash gms. per 100 cc.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Formic Acid test.	Acidity as acetic Acid.	Lead Acetate ppt.	Polarization in 2 dm. tube.		

JOHN TALBOT, INSPECTOR.

.....	2.35	0.22	50	Negative	.....	.....	.....	65010	Genuine.
.....	2.44	0.32	34	"	.....	.....	.....	65011	"
Purnell's English Malt Vinegar.	2.44	0.29	44	"	.....	.....	.....	65015	"
" "	3.38	0.64	19	"	.....	.....	.....	65016	"
.....	1.83	0.29	36	"	.....	.....	.....	65017	"
.....	2.03	0.17	42	"	.....	.....	.....	65018	"
.....	2.45	0.32	11	"	.....	.....	.....	65023	"
Pure English Malt Vinegar.	1.86	0.13	36	"	.....	.....	.....	65028	Ash low. Pass.
Quaker Pure English Malt Vinegar.	0.85	0.06	6	Trace.	.....	.....	.....	65030	Not Malt Vinegar, Adulterated.

J. B. COSGROVE, INSPECTOR.

Wilson Brand.....	2.10	0.16	35	.....	4.03	Copious.	+2.2	75038	Ash slightly low.
.....	2.34	0.32	78	.....	4.39	"	+1.3	75039	Genuine.
.....	0.40	0.09	Trace.	.....	5.56	Nil.	Zero.	75041	Not Malt Vinegar. Adulterated.
.....	1.44	0.13	"	.....	6.02	"	"	75042	Solids, Ash and Phosphates low. Adulterated.
No. 24 Quality.....	2.28	0.48	86	.....	4.39	Copious.	+1.1	75043	Genuine.
Bulk.....	0.37	0.06	None.	.....	3.01	Nil.	Zero.	75044	Not Malt Vinegar, Acidity too low. Adulterated.
"	0.49	0.12	"	.....	3.83	"	"	75045	Not Malt Vinegar, Adulterated.
"	0.37	0.03	"	.....	4.03	"	"	75046	Not Malt Vinegar, Adulterated.
"	0.68	0.06	Trace.	.....	6.78	"	"	75047	Not Malt Vinegar, Adulterated.
.....	2.18	0.17	44	.....	4.06	Copious.	+2.8	75048	Genuine.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Vendor as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF ALBERTA—

1916.							
July 29	Malt Vin-egar.	52491	The Good Co., Lethbridge	3	bots	90	Holbrook & Co., London, Eng.
" 29	"	52492	Campbell, Wilson & Horne Lethbridge.	3	"	60	Wilson, Lytle & Badgerow Co., Toronto.
Aug. 1	"	52493	Geo. I. Wood, Calgary....	3	"	1 06	Crosse & Blackwell London, Eng.
" 1	"	52494	John Irwin, "	3	"	90	Midland Vinegar Co., Birmingham
" 1	"	52495	J. T. MacDonald, "	3	"	75	Georgeson & Co. Calgary.
" 1	"	52496	S. G. Freeze, "	3	"	75	Midland Vinegar Co., Birmingham
" 1	"	52497	J. K. Wilcox, 8th Avenue Calgary.	3	"	75	Wilson, Lytle & Badgerow Co., Toronto.
" 1	"	52498	Samuel Smith, City Market, Calgary.	3	"	30	Polar Aerated Water Works Calgary.
" 3	"	52499	Hudson's Bay Company, Calgary.	3	"	60	Crosse & Blackwell London, Eng.
" 3	"	52500	" " "	3	"	75	Wilson, Lytle & Badgerow Co., Toronto.

DISTRICT OF ROCKY MOUNTAINS—

July 5	Malt Vin-egar.	68249	Joy Bros., Nelson, B.C. . .	3	"	90	Crosse & Blackwell London.
" 5	"	68250	" " "	3	"	60	Holbrook & Co., London.
" 24	"	68262	Agnew & Co., Rossland, B.C.	3	"	1 05	White Cottell & Co., London.
" 24	"	68263	N. Laface, " "	3	"	1 05	Grimble & Co., London.
" 24	"	68265	C. Nigro, " "	3	"	75	Taylor & Pringle, Owen Sound.
" 24	"	68266	Hunter Bros., " "	3	"	35	H. J. Heintz Co., Leamington.
Aug. 7	"	68270	Knight & Barnes, Phoenix B.C.	3	"	75	Empress Mfg. Co., Vancouver.
" 7	"	68271	Morrin, Thompson & Co., Phoenix, B.C.	3	"	45	.....
" 15	"	68276	Merritt Cash Store, Merrit, B.C.	3	"	80	Kelly Douglas & Co., Vancouver.
" 15	"	68277	" " "	3	"	60	B. C. Vinegar Works, Vancouver.

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.							No. of Sample.	Remarks, and opinion of the Chief Analyst.
	Acidity as Acetic gms. per 100cc.	Total Solids gms. per 100 cc.	Ash, gms per 100cc.	Phosphates P ₂ O ₅ magna. per 100cc.	Lead Acetate ppte.	Polarization in 2dm. tube.	Sp. gr. at 15.5° C.		

A. W. R. MARKLEY, INSPECTOR.

.....	4.54	2.88	0.32	57	Copious	+3.5	.....	52491	Genuine.
Pure English Malt...	3.98	2.50	0.15	42	"	+1.0	.....	52492	Ash low. Pass.
.....	4.54	3.09	0.31	72	"	+1.5	.....	52493	Genuine.
.....	4.44	2.62	0.42	78	"	+0.8	.....	52494	"
Rajah Brand.....	3.57	0.33	0.02	None.	Nil....	Zero.	.....	52495	Not malt vinegar Adulterated.
.....	4.44	2.55	0.44	72	Copious	+1.0	.....	52496	Genuine.
Pure English Malt...	4.13	2.42	0.13	32	"	+2.2	.....	52497	Ash low. Pass.
Pure Spirit Malt...	3.83	0.42	0.05	Trace.	Trifling.	Zero.	.....	52498	Not Malt Vinegar. Adulterated,
Polar Vinegar.....	4.64	2.37	0.30	76	Copious	+2.0	.....	52499	Genuine.
Pure English Malt...	4.23	2.32	0.14	38	"	+3.0	.....	52500	Ash low. Pass.

THOS. PARKER, INSPECTOR.

.....	4.52	2.27	0.32	85	Copious	+0.5	1.0168	68249	Genuine.
.....	4.56	2.66	0.31	51	"	+3.5	1.0194	68250	"
.....	4.50	1.89	0.37	67	"	+0.2	1.0159	68262	"
.....	3.70	1.92	0.24	59	"	+3.0	1.0145	68263	"
.....	3.99	0.93	0.06	16	Trifling.	+1.0	1.0108	68265	Not Malt Vinegar. Adulterated.
.....	4.34	2.81	0.28	78	Copious	+0.5	1.0171	68266	Genuine.
Climax Brand....	2.92	0.64	0.01	2	Nil.....	-0.5	1.0074	68270	Not Malt Vinegar. Acidity too low. Adulterated,
.....	8.25	0.99	0.07	4	"	0.0	1.0175	68271	Not Malt Vinegar. Adulterated.
Nabob Brand.....	3.84	2.54	0.20	69	Copious	+1.0	1.0157	68276	Genuine.
Labelled; MacKen- zie's Pure Spirit Malt Vinegar. Blended* Made from pure grains, under Government supervision. The word "Blended" is stencilled on, is very indistinct.	2.84	0.39	0.02	2	Nil.....	-0.5	1.0065	68277	Labelled as blend. Acidity too low. Adulterated.

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.	
				Quantity.	Cost.	Manufacturer.	Furnisher.

DISTRICT OF VANCOUVER—

1916.							
July	4	Malt Vinegar.	55652	McCulloch Bros., 422 Hastings St., E., Van.	3 bota.	75	Kelly, Douglas & Co., Ltd., Van.
"	6	" "	55655	Hugh Miller, 30 East 25th Ave., So., Van.	3 "	75	Purcell's, Bristol, Eng.
"	4	" "	55656	James Walden, 4112 Main St., Van.	3 "	75	Holbrook's, London, Eng.
"	4	" "	55657	R. J. Barnard, 2751 Main St., Van.	3 "	1.20	H. J. Heinz Co., Pittsburg, Pa.
"	4	" "	55658	Powell's Market, 58 Hastings St., E., Van.	3 "	75	W. H. Malkin Co., Ltd., Van.
"	5	" "	55659	Hobson Mfg. Co., 1923 Granville St., Van.	3 "	25	H. J. Heinz Co., Pittsburg, Pa.
"	5	" "	55660	" " "	3 "	75	" "
"	5	" "	55661	Empress Mfg. Co., Ltd., Van.	3 "	nil.	Vendors.....
"	5	" "	55663	Efford Bros., 573 Broadway, Van.	3 "	75	Crown Mfg. Co., Van.
"	7	" "	55671	B. C. Vinegar Works, 1365 Powell St., Van.	3 "	75	Vendors

MALT VINEGAR.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.							Remarks and Opinion of the Chief Analyst.
	Sp. gr. at 15° C.	Acidity as anhydride p.c. by weight.	Total Solids gms. per 100 c.c.	Total Ash gms. per 100 c.c.	Phosphates P ₂ O ₅ mgms. per 100 cc.	Rotation in 2 dm. tube.	Color, with basic lead acetate.		No. of Sample.

C. S. EMES, INSPECTOR.

Nabob Brand...	1.0137	3.78	2.01	0.23	84	+ 0.5	Copious.	55652	Genuine.
.....	1.0242	4.24	4.08	0.88	70	+ 1.0	"	55655	"
.....	1.0196	4.54	2.65	0.33	68	+ 3.0	"	55656	"
.....	1.0180	4.20	2.78	0.27	86	+ 0.5	"	55657	"
Malkin's Best Brand.	1.0149	4.12	2.09	0.16	43	+ 1.0	Distinct	55658	Ash low. Pass.
Draught.....	1.0149	4.07	2.21	0.26	90	+ 0.5	Copious.	55659	Genuine.
Golden West Brand.	1.0146	4.05	2.26	0.26	73	+ 0.5	"	55660	"
Draught.....	1.0150	4.00	2.24	0.16	44	+ 0.7	Distinct	55661	Ash low. Pass.
Crown Brand...	1.0089	2.51	1.30	0.16	47	+ 0.2	"	55663	Acidity too low. Adulterated.
Sunset Brand...	1.0194	4.31	3.04	0.33	61	+ 1.5	Copious.	55671	Genuine.

