



Publications Publications







-theorem.

BUREAU OF ARCHIVES ONTARIO No. 123



SESSIONAL PAPERS.

VOLUME III.—PART I.

FOURTH SESSION OF THE FIRST PARLIAMENT

OF THE

PROVINCE OF ONTARIO.

Session 1870-71.





1091363

HUNTER, ROSE & CO., PRINTERS, TORONTO.

LIST OF SESSIONAL PAPERS.

VOL. 3, SESSION 1870-71.

ARRANGED ALPHABETICALLY.

,	No.		No.
Agriculture. Appointments to Office. Appointments to Office. Arbitration. Arbitration. Asylums Asylum (Blind) Asylums, No. of Lunatics in. Asylum, London Asylum, Malden Asylum, Orillia Balsam Lake Births, Marriages and Deaths. Bonds and Securities of Office. Chancery, Court of Chancery Court. Crown Lands. Crown Lands	20 45 27 16 19 31 7	Immigration Kintrea, Wm. Legislature of Ontario. Municipal Return Municipal Loan Fund Municipal Loan Fund Muskoka District Ottawa Orphans' Home Public Accounts. Public Instruction Public Moneys in Banks. Public Moneys, Debt and Assets. Public Moneys, rate of Interest. Public Works. Registrars Rosseau River Scott's Murder. Scugog River	41 23 1 10 48 26 25 3 33 12 22 27 29 247 18
Drainage Education Estimates Free Grants	39 4 14 30	Taxes, Sale of Lands for Toronto University Toronto University University College	8 35 42 43
Free Grants		Wellington, M. F. J. Co	$\begin{array}{c c} 11 \\ 36 \end{array}$

34 Victoria.

SESSIONAL PAPERS.

ARRANGED NUMERICALLY.

CONTENTS OF PART I.

- No. 1..... Municipal Returns for the Province of Ontario for the year 1868.
- No. 2..... Return of all Fees and Emoluments received by the Registrars of Ontario, for the years 1869 and 1870, made in accordance with the provisions of the Statutes of Ontario, 31 Vic., cap. 20, sec. 74.
- No. 3..... Public Accounts of the Province of Ontario, for the year ending 31st December, 1869; also, Statements of Receipts and Expenditures on account of the Province of Ontario, during the ten months ending 31st October, 1870; also, for the year ended 31st December, 1870; also, Statement of Expenditure on account of the Vote of Credit for 1871.
- No. 5..... Annual Report of the Commissioner of Agriculture and Public Works for the Province of Ontario, on Agriculture and Arts, for the year 1870.

CONTENTS OF PART II.

- No. 4.... Annual Report of the Normal, Model, Grammar and Common Schools in Ontario, for the year 1869, with Appendices, by the Chief Superintendent of Education.
- No. 6.... Annual Report of the Inspector of Asylums, Prisons, &c., for the year ended 1st October, 1870; also, Special Report as to the London Asylum.
- No. 7..... Report of the Commissioner of Crown Lands, for the year 1869.
- No. 8..... Return of the amount it has cost each County for advertising in the Ontario Gazette the Sales of Lands for Taxes for each year since July, 1867.—[Not Printed.]
- No. 9..... Copy of the Award of the Arbitrators between the Provinces of Ontario and Quebec, referred to in the second paragraph of the Speech from the Throne
- No. 10.... Return showing the names of the Municipalities which have borrowed from the Municipal Loan Fund; the amount borrowed by each Municipality; the principal and interest paid on these loans by each Municipality; the principal and interest now due on these loans by each Municipality; with the amount of Sinking Fund and accrued interest on the said Fund at the credit of each Municipality.
- No. 11.... Statement of the affairs of the Mutual Fire Insurance Company of the County of Wellington for the year 1870.—[Not Printed].
- No. 12.... Statement showing the amount of Provincial Money on deposit in any of the Banks, with the respective amounts so deposited, and how deposited, whether on interest, and if so, at what rate or subject to call.—[Not Printed].

No. 13.... Statement of the average number of Lunatics and Idiots in the years 1866, 1867 and 1868, in each of the following Asylums:—1. Toronto. 2. Branch Asylum in the Queen's Park. 3. Orillia. 4. Malden. Also, of the number now in 1. Toronto; 2. London Asylum; and the number which can be accommodated in each of these establishments.—[Not Printed]. No. 14... Estimates of certain sums required to be granted by a Vote of Credit for the service of the Province until the Estimates for the year 1871 are finally passed; /also, Estimates for the year 1871. Statement of the affairs of the Gore District Mutual Fire Insurance Company No. 15. for the year 1870.—[Not Printed]. No. 16... Detailed Statement of all Bonds and Securities recorded in the Provincial Registrar's Office since the first day of January, A. D. 1870, made in accordance with the provisions of Statutes of Ontario, 32 Vic., cap. 29.—[Not Printed. No. 17.... Statement shewing the several amounts, or approximate amounts received by the Crown Lands Department from the sale or disposal of Timber lying, or growing, or being on the several Road Allowances in the several municipal corporations of, or in Ontario, during the past three years; the corporations from which the said Timber was or is being taken, and the names of the several parties to whom the same was sold.—[Not Printed]. No. 18.... Copies of the warrants, depositions, and other judicial proceedings taken on the arrest of A. Scott and Pere Richot, on a charge of murdering Scott at Fort Garry, and of the judgment given on the application of these persons for a writ of Habeas Corpus. No. 19.... Copies of any letters of resignation, if any, of the officers of the Court of Chancery, and abstracts of the patents or other warrants of appointments of any persons appointed since last Session.—[Not Printed]. No. 20.... Copies of all correspondence, reports and papers connected with the Lunatic Asylum at Orillia, and the removal of the lunatics therefrom to London.— [Not Printed.] Copies of all correspondence, reports and papers connected with the Malden Lunatic Asylum, and the removal of the lunatics therefrom to London.— [Not Printed.] No. 22... Copies of all correspondence, not already brought down, between His Excellency and the Canadian Government; and between the Governments of Ontario and Canada, touching any Addresses of this House, or touching Immigration, or touching the Public Debt and Assets (in so far as the Public Debt and Assets are concerned.)—[Not Printed.] No. 23 ... Copies of all correspondence between the Governments of Canada and Ontario (not already brought down), touching any Act of the Legislature of Ontario, and especially touching the disallowance of the Act granting the Supplies for 1869.—[Not Printed.] No. 24... Copies of all correspondence, reports and Orders in Council, and other papers, not already brought down, touching the Arbitration between the Provinces, with a statement of the expenses thereof already paid, and an estimate of those remaining unpaid, if any, (so far as expenses are concerned).

No. 25	Annual Return of the Orphans' Home of the City of Ottawa, of the affairs of the said corporation, and of the real and personal property held by them for the year 1870.—[Not Printed.]
No. 26	Statement of the number of persons still in arrears for lands purchased in the Muskoka District; also, of the number of persons, now resident in the District, who squatted upon the lands before the passage of the Free Grant Act, so far as the same can be ascertained by any evidence in the possession of the resident agent.—[Not Printed.]
No. 27	Annual Report of the Registrar-General of Births, Deaths and Marriages.
No. 28	Annual Report of the Commissioner of Agriculture and Public Works for the Province of Ontario, on Immigration, for the year 1870.
No. 29	Annual Report of the Commissioner of Agriculture and Public Works for the Province of Ontario, on Public Works, for the year 1870.
No. 30	Return of the number of persons who, since the first day of November, 1869, have settled on Free Grant Lands, with the number of acres located, and the names of the Townships in which such persons have settled.
No. 31	Copies of all communications between the Judges of the Court of Chancery and the Government, touching the proposed measure in respect of the Court of Chancery.
No. 32	Statement of the names of all persons, Members of this House, or of either branch of the Legislature of Canada, who have been appointed by the Government of Ontario to any office, commission or employment; showing the nature of the Appointment, its date, and the emolument, if any, derivable from any source in respect thereof.
No. 33	Copy of the minutes of the meetings of the Council of Public Instruction of 1870, with copies of any regulations, or other public documents issued by the Council during the year; and a statement of the date of each meeting, and of the names of the members present at each meeting during the year.
No. 34	Statement of the names of all persons who have, since the beginning of last Session, received Appointments or promotions in the public service, with the date of the Appointments, and the names and emoluments of the offices, showing the increase in the public charge on this head.
No. 35	Copies of all statutes of the Senate of the University of Toronto, Minutes of the Executive Council, estimates and centracts relating either to the repair of the teachers' residences, recently injured by fire at Upper Canada College, or to the erection of a new boarding house in connection with the said institution.—[Not Printed.]
No. 36	Copy of the Report of the Select Committee respecting the Woodstock and Erie Railway and Harbour Company, presented to the House of Assembly of the late Province of Canada, in the year 1857, with the evidence taken before said Committee.—[Not Printed.]
No. 37	Statement showing approximately the average rate of Interest or Profit received by the Province in each of the years 1868, 1869 and 1870, on its invested and uninvested balances.

No. 38 Cop	pies of any Orders in Council, made since the last return to the House, fixing or changing, under the Free Grant Act of 1867 and 1868, the boundaries within which settlement on the Free Grant Lands might take place.
No. 39 Cop	oies of all advertisements, tenders and contracts for work to be carried out under the Drainage Act of 1869; and any reports of the engineers or arbitrators in connection with such work, with a statement of the various expenditures made and contracted for in respect of the same, and for copies of any orders in Council, appointing, or instructions issued to the arbitrators, and of all correspondence between the Government and the municipal authorities on the subject of drainage in the Municipalities.— [Not Printed.]
No. 40 Sta	tement of the moneys expended—1. In draining the land first purchased for the London Lunatic Asylum. 2. In fencing the same. 3. In draining the land secondly purchased for the same Asylum. 4. In fencing the same. 5. In other improvements on the same; and for an estimate of the amount, if any, that will be required to complete each of these works, and of the total cost of the institution, and for copies of any advertisements, tenders or contracts, in relation to the above works.—[Not Printed.]
No. 41 Sta	tement of any intromission which may have taken place in respect of Mr. Kintrea, or the ex-Queen's Printer.—[Not Printed]
No. 42 Ann	nual Report of the Senate of the University of Toronto for the years 1869 and 1870.—[Not Printed.]
No. 43 An	nual Report of the Council of University College, Toronto, for the year 1870.—[Not Printed.]
No. 44 Sta	tement of the various expenditures made and contracted for in connection with the following public works, to wit: the improvement of navigation of Scugog River, the cut between Lakes Joseph and Rosseau, and the new road between Washago and Gravenhurst, with the names of the contractors; and of any reports and estimates made for the Public Works Department in respect thereof.—[Not Printed.]
No. 45 Cop	oies of estimates, advertisements, tenders and contracts for the construction of the Lock between Balsam and Cameron Lakes; reports of the Engineers as to the progress made in the construction, with a statement of the various expenditures made and contracted for in respect of the same.—[Not Printed.]
No. 46 Cop	oies of estimates, advertisements, tenders and contracts for the land and work, and any reports of the architects or departmental officers in connection with the Blind Asylum, and a statement of the various expenditures made or contracted for respecting the same.—[Not Printed.]
No. 47 Cop	oies of any correspondence that may have passed between the Government and the contractors for building the lock on the Rosseau River, and for dredging the same; and also, any reports or correspondence with any other person or persons touching the said works.—[Not Printed.]

No. 48 ... Return to an Address to His Excellency the Lieutenant-Governor, praying that he will cause to be laid before the House certain information touching the Municipal Loan Fund, including a statement of the principal and interest paid by each Municipality; and further, representing that during this Session a Return was made to the said Address, which is incomplete, inasmuch as it does not contain any statement of the amount of interest paid by such Municipalities as have no sums to the credit of the Sinking Fund; and praying that His Excellency will be pleased to cause to be laid before this House, with all convenient speed, a further statement in reply to the said Address.

OF THE

PROVINCE OF ONTARIO,

FOR THE YEAR

1868.

Printed by Order of the Legislative Assembly.



TORONTO:
PRINTED BY HUNTER, ROSE & COMPANY.

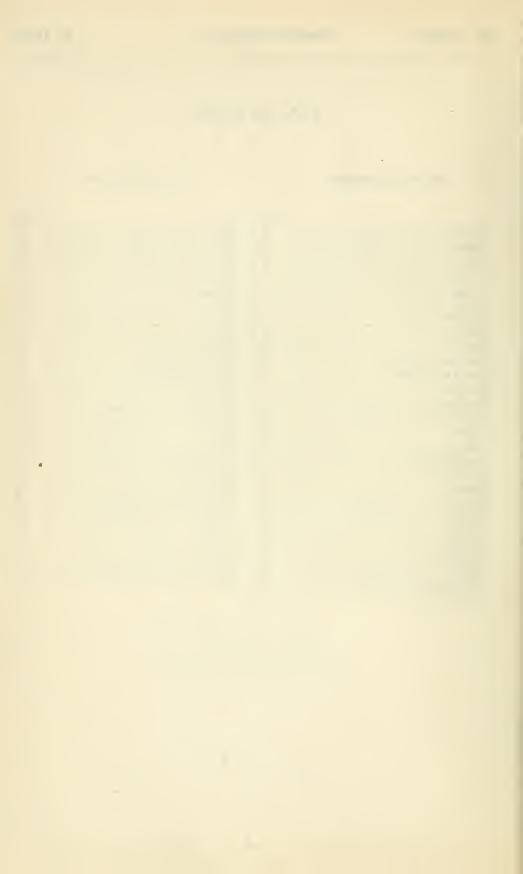
Biller Ent the marriage

INDEX.

MUNICIPAL RETURNS.

MUNICIPAL CENSUS.

	PAGE.	Pac	GE.
Brant	6	Brant	40
Bruce	6	Bruce	40
Carleton	6	Carleton	40
Elgin		Elgin	4(
Essex	8	Essex.	41
Frontenac:	8	Frontenac	41
Grey	10	Grey	41
Haldimand	3.0	Haldimand	42
Halton		Halton	42
Hastings		Hastings	45
Huron		Huron	45
Kent		Kent	43
Lambton		Lambton	43
Lanark		Lanark	43
Leeds and Grenville		Leeds and Grenville	44
Lennox and Addington		Lennox and Addington	4:
Lincoln			4:
		Lincoln	45
Middlesex		Middlesex	45
Norfolk	20	Norfelk	
Northumberland and Durham		Northumberland and Durham	4
Ontario		Ontario	46
Oxford		Oxford	46
Peel	22	Peel	46
Perth	24	Perth	46
Peterborough	24	Peterborough	47
Prescott and Russell	26	Prescott and Russell	47
Prince Edward		Prince Edward	48
Renfrew		Renfrew	48
Simcoo		Simcoe	48
Stormont, Dundas and Glengarry		Stormont, Dundas and Glengarry	49
Victoria	. 30	Victoria	49
Waterloo,	30	Waterloo	49
Welland	32	Welland	50
Wellington		Wellington	50
Wentworth	34	Wentworth	50
York		York	51
Cities		Cities and Towns separated from Counties	51
Towns separated from Counties		Recapitulation	52
Recanitalistica	38		-



FOR

ONTARIO,

FOR THE YEAR 1868.

	Aeres	d.			SSETS]	LIAB
NAMES OF THE	Number of Ae assessed.	Number of Rate- payers assessed.	Assessed value of Real Estate.	Assessed value of Personal Property.	Amount of Tax- able Incomes.	Total Amouat of Arrears of Taxes.	Other Assets.	Corporation Debentures.	Amount due to the Municipal
Brant. BrantfordTown Paris" BrantfordT'p Burford" Oakland" Onondaga" S. Dumfries"	1,781 685 71,542 66,712 10,419 20,997 46,314	1,453 752 1,255 1,221 226 320 575	\$ 1,451,150 652,159 1,910,580 1,323,678 247,053 405,605 1,175,113	59,300 138,500 38,500	\$ 211,020 56,400 13,370 1,000	3,493 1,454 503 69	19,600	19,600	19,253 50,00
Total Towns, &c ADD—For County	218,450	5,802	7,165,338	655,500	298,940	16,103 5,032	692,575 3,973	113,600	
Totals, 1868 Do 1867 Do 1866	218,450 222,989 223,896	5,802 5,678 5,350	7,165,338 7,074,787 5,147,417	655,500 617,700 315,042	298,940 305,190	21,135 12,440 20,354			782,690
BRUCE. Kincardine Vil Southampton " *Amabel and Al-	1,742 3,800	307 170	208,717 80,621			•••••			
bemarle T'p Arran " Brant " Bruce " Carrick " Culross " Elderslie "	41,200 53,410 68,799 56,411 59,770 58,303 63,045	328 593 923 603 791 570	107,162 273,370 452,320 478,240 455,100 401,200 262,638	17,300 45,400 17,900	300	9,407 10,433 600 4,676 783	350 586		
Huron	58,036 50,921 56,425 44,400 34,583	656 518 675 541 514	238,741 244,908 355,900 327,244	3,800 28,600 4,300 54,200 20,700	3,782	3,782 1,006 828 246	1,225	896	
Total Towns, &c ADD—For County	650,845	7876	4,143,781		8,332			318,000	35,00
Totals, 1868 Do 1867 Do 1866	650,845 636,739 673,233	7876 7773 7673	4,143,781 3,726,206 3,870,218				35,890	318,896 297,730 74,925	
CARLETON. New Edinburgh. Vil Richmond	80 1,504 60,294 85,713 63,204 57,862 26,200 55,000 60,376	94 551 843 522 571 200 370	41,877 199,283 763,224 246,972	32,700 37,900 22,000	800	130	300		
North Gower "Osgoode "Torbolton	32,975 91,554 25,072		112,500 446,532	15,500 70,600 7,500		200			
Total Towns, &c *ADD—For County	559,834	5,279	3,390,746	340,835	17,800	4,016	7,945	1,400 40,000	
Totals, 1868 Do 1867 Do 1866	559,834 559,217 551,388	5,279 5,137 6,032	3,390,746 3,151,503 3,783,117		17,800	4,016 520 745	4,440		

^{*} Figures of 1867.

LIT	IES.			VENU	JE.			EΧ	PEN			
Amount of In-	Other Liabili-	Rate in the \$ imposed for all purposes, exc'pt S.Trustees rates	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of	Other revenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp.for salaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in	Expenditure on Roads and Bridges	Expenditure on all other ac-
\$ 11,78			11,425 11,606 4,581 661 2,178 7,193			4,572 4,032 750	3,720	3,025 920 920 890 362 340 800	\$ 7,472 1,256 1,013 665 212 352	\$	\$ 3,331 1,369 944 2,250 17	1,506 3,452 620
11,786			57,053 15,523		4,817	25,232 8,644	26,530			7,744	13,361	
11,780 11,570 270	8,297		72,576 67,765 66,375	8,985		55,449	15,893	19,470 25,655 16,813	15.287	8 789	13,440 13,595 12,528	
******	*****	.0210	5,000 1,870	*****	*******		********		900	*******		
		.0250 .0300 .0200 .0146	1,163 7,434 4,525 7,800	*************		1,134		345 2,280	418 522 530 585		1,700 970 278	120 512 7,500 119
	3,812 8,286	.0300	6,780 7,556 698 6,867	······		405 370		20	2,280 430	*******	441 379 900	6,596 280
••••••		.0240 .0210 .0161 .0165	7,000 9,500 4,500 6,815	***************************************	********					•••••••	484 1,141 581 541	100 538 4,000 455
********	31,500		76,416 32,533	20,000	1,677	4,276 6,579	19,466		8,404 3,833	200 6,819	9,560 37,421	
••••••	31,500 1,169		108,949 121,066 47,214	20 000 21,000 20,000	1,677 811	10,855 4,613 4,907	19,466 17,666 3,888	15,891 7,433 10,654	12,239 11,839 8,383	7,019 5,649 10		41,809 38,154 27,138
*********	S2	.0062 .0200 .0014	6.371			476 90 629	90	141		•••••	1,924 80 770	676 130 2,474
	************	.0059 .0125 .0200 .0140	6,492 4,600 1,935 1,211			3,268 125 110	********	488 412 260	839 320 389 184	12	4,814 390 135 30	418
	17	.0075 .0041 .0225 .0860 .0014	1,640 6,112			1,790 1,830 421	205	279 898 50 220	516 350 640	20	500 574 300 2, 185	3,044
10000. 10	99		37,440	1,317	2,736	8,889	295 2,400	2,748 760	4,410 2,000	32 9,275	375 12,077	6,989 12,000
••••••	99 2,238			1,317	2,736 2,736 3,947	8,889 4,406 4,850	2,695 2,400 2,400	3,508 3,389 8,330	6,410 5,669 4,890	9,306		18,989 14,836 6,438

	Aeres	Rate-		A S	SETS				LIABI
NAMES OF THE	< <	of Rate	te.	ne	N. 85	of		ro o	Frincipal Amount due to the Municipal Loan Fund.
MUNICIPALITIES.	J 0 .	of	Assessed value of Real Estate.	Assessed value of Personal Property.	Amount of Taxable Incomes.	Amcunt Arrears of xes.	Other Assets.	rporation Debentures.	al icij
(Towns, Villages	75		12	d rso ert	rof aco	An roc	831	Corporation	Frincipal nount due Munici an Fund.
and Townships.)	be:	ber	eal	Pe op	un H	of Arro Taxes.	1	ore	un un
and zowner-p/	Number	Number	Assessed of Real	of of Pr	no	Total of A Tax	he	L d'a	Dar oar
	Z	Z	Aso	A.	A	Ţ	Õ	Ď	A43
ELGIN.									
	1 000	207	\$ 55.542	\$ 19,000	\$ 6,000	\$ 584	3,500	\$	S
ViennaVil.	1,000 74,153	1 629	75,543 513,765	17,600	0,000	2,336	43	2,328	
Aldborough Tp. Bayham "	58,620	1,065	782,460	83,100		219	300	29,705	
Dorchester, South "	30,600	522	720,320	19,100		37			
Dunwich"	49,084	712	557,596	32,800		147			
Malahide "	62,800	1,005	1,227,815	46,300				8,460	
Southwold"	71,315	1,056	949,275	62,500 65,200	900	338			
Yarmouth"	70,568	1,234	1,513,472	05,200	300				
Total, Towns, &c	418,140	6,430	6,340,246	345,600	6,900	3,661		40,493	
App-For County.			50,000	80,000		6,500	32,450	11,200	37,362
Totals, 1868	418,140	6,430	6,390,246	425,600	6,900	10,061	36,293	51,693	
do 1867	427,889	6,488	6,640,417	516,991	14,950	16,305	38,621	26,298	
do 1866	436,091	6,282	4,329,711	322,245		21,481	78,674	28,880	59,734
Essex.								1	
AmherstburghT'n.		550	191,260	8,600	2,900	2,900		16,000	
Sandwich "	1,830	231	177,375	1,120		314			
*Windsor"	1,656	803	890,000	73,100		4,390			
AnderdonTp,	15,861	352	176,862	12,800					
Colchester	64,703	544	301,920	13,300	400				
Gosfield"	58,394	535	279,600 200,970	43,070 17,700		237,670 1,273	25		******
Maidstone " Malden "	45,230 19,600	458 324	178,858	11,700		495	830	6,000	***********
†Mersea	36,219	467	150,196	14,800			- 1	1	
Rochester"	32,643	328	128,542	12,500				500	
Sandwich, East "	34,549	768	265,575	44,300		1,150	784		
+Sandwich, West "	22,004	380	147,553	4,600		358			1
Tilbury West "	46,757	376	143,363	12,200	•••••	4,444	581		
Total, Towns, &c.	379,446	6,116	3,232,074	269,790	53,800	252,994	19,720	38,430	
‡Add—For County.	***************************************		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			6,481	30,000	30,000	
Totals, 1868	379,446	6,116	3,232,074	269,790	53,800	259,475	49,720	68,430	20,224
do 1867	305,092	6,178	3,257,536	406,833	48,400	20,581	50,054	35,380	
do 1866	381,403	5,744		386,666		17,865	51,622	38,240	
	,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1		, , ,	/ -		

^{*}Figures of 1867. †Figures of 1866. ‡Figures of 1867.

FRONTENAC.									
Gardon IslandVil.		121	36,800	20,250					
Portsmouth "	300	: 327	106,490	23,800	23,600	120			
BarrieT'p	14,000	122	16,000					*****	
Bedford and Pal-				i		1			
merston "	77,350	346	98,098	18,500	2,600	230			
Clarendon and	to apple								
Miller "	17,570		20,770	2,100			100		
Hinchinbrooke "	37,015		54,600						
Kennebec "	24,009								
Kingston"	51,818								
Loughborough "	39,220						886	1,200	
Olden "	35,644	202					***********		
030	23,349	103	14,851	4,600					
Pittsburgh and									
Howe Island "	52,395	753	338,194	27,400	******		868	1,100	*****
				8					

LITI	ITIES. REVENUE. EXPENDITURE.												
Amount of In- terest over- due.	Other Liabili- ties.	Rate in the \$ imposed for all purposes, exc'pt	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'd from Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debentures.	Expended for Educational Purposes.	& all other exp.	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure or all other accounts.	
\$	3,240 96 	\$.0100 .0100 .0080 .0038 .0100 .0081 .0091 .0050	\$ 1,873 5,571 7,380 5,639 8,176 10,759 9,622 12,235 61,255 26,704	600	2,485	\$ 114 165 208 4,153 1,601 1,093 7,334 10,023	\$ 18 768 786 588	\$	\$ 221 360 1,778 281 284 946 770 761 5,401 3,854	6,896	\$ 577 938 910 1,230 2,853 1,665 2,981 :,857 14,011 1,721	17,546	
	6,496 3,874 0,035		87,959 74,489 69,633	3,500 5,308 6,005	2,485 3,424 3,009	17,357 25,746 26,047	1,374 1,652 2,128		10,725	6,896 7,639 7,895	15,732 16,266 13,458	54,304	
230	12	.0120 .0100 .0140 .0100	3,600 3,307 13,500			378 3,925	900 139 -1,486	400 4,437	1,000 534 1,270	172	300 255 2,872	6,000	
120	627	.0100 .0120 .0125 .0165 .0125	2,763 4,125 2,969 2,243 2,274	*************	• • • • • • • • • • • • • • • • • • •	728 2,382 436 503	120	396 200 625	494 489 456 441 323	••••••	2,273 1,050 887 891 822	91 4,470 1,129 388	
********	534	.0150	1,399 3,148 1,199	250		100 781 316 3,641	288	217 367 828	334 797 1,369 559	150 214	150 2,013 651 1,724	480	
$ \begin{array}{r} 350 \\ 2,527 \\ \hline 2,877 \\ 2,848 \end{array} $	1,173 4,468 5,641 7,008		40,527 12,719 53,246 50,024	250	2,895 2,895 2,895	$ \begin{array}{r} 13,193 \\ 9,287 \\ \hline 22,480 \\ 15,383 \end{array} $	2,933 5,918 8,851 5,590	13,507	10,080	$ \begin{array}{r} 11,718 \\ \hline 12,254 \\ 12,514 \end{array} $	28,693 17,774		
*******		******		• • • • • • • • • • • • • • • • • • • •	2,895	9,287	5,918	14,071	10,588	11,718	14,805	6,306	

			!	
	293	100	30	l
	1,386		1	070 900
	64 22			100
		11		!
	1,192	400	350	375 100
			!	
	200 10			140
	570			118
	452 10			
	2,755	11 3011 505		676
	2,970}			110 82
	300	1 970		100 210
	610		210	210
	6,257	G 92 510	667 16	422 2,578
******** ****** -0250* 12464.264125	0,2011	nii 66, 810	1 0011 18	344. 9)010
	IJ			

							1110.		111 1012	
Totals, 1868. 513,872 5,412 2,440,329 228,449 26,200 4,255 1,454 110,300 1,656 470,000 311 314,100 2,457 314,103 31,405 31		80 24	te-		A	SSETS	5.			LIABI
Portland. T'p 52,803 503 295,300 25,600 1,905 5 600 Sterrington 55,034 545 262,779 28,500	Municipalities. (Towns, Villages		of		Assessed value of Personal Property.	Amount of Tax-	Total Amount of Arrears of Taxes.	Other Assets,	Corporation Debentures.	Principal Amount due to the Municipal Loan fund.
Portland	FRONTENAC Cont'd.					1	0.3			
ADD—For County	Portland T'r Storrington "	52,803 58,034	545	295,300 262,779	25,600 28,500		1,905			\$
do					228,449			1,854 140,000	2,900 116,300	
Owen Sound. T'n Artemesia T'p 68,237 654 691,400 129,900 50,200 600 15,000 15,000 Artemesia T'p 1000 941 314,100 21,450	de 1867	480,140	5,408	2,579,278	214,105	21,900	12,873	145,139	116,300	
Artemesia.	* GREV.									
Collingwood.	Artemesia T'p	68,237	675	395,614	17,800		1,056	2,000	}	
Egremont	Collingwood "		557	286,041	10,500			2,233		
Glenelg	Egremont "	72,595	703	232,284	11,660		6,322	1,438		
Melanethon	Glenelg" Holland"	69,220	755	245,321	26,900	1,441	1,500			***************************************
Normanby	7 00 11 00 17 10 11 11 11 11 11							10.000		
Proton		66,000	922	281,408	27,810	**********	600			
Sullivan " 65,567 70,000 536 648 135,429 329,238 45,293 59,600 400 2,939 47 6,720 47 Total, Towns, &c. ADD—For County 1,037,951 10,424 4,753,180 475,143 52,041 25,964 26,533 15,800 Totals, 1868 1,063,386 10,112 4,325,969 3,640,567 331,127 128,356 105,702 68,271 31,370 16,000 HALDIMAND. 810 202 203 63,524 208,970 2,730 128,356 3,400 20,450 81 99,705 32,200 800 800 800 Unnville 925 25 266 266 266 266 266 208,970 208,970 208,970 700 208,970 208,970 22 700 208,970 23,850 23,850 23,850 23,850 23 23 24 15 25 23,850 23,850 21,343 212,299 29,800 23 	Proton "	40,938	417,	140,821	10,100					************
Totals, 1868	Sullivan "	65,567	536	135,429	45,293		2,939	6,720		
Malbimann	Total, Towns, &c. Add—For County			· / /				26,538		
Caledonia Vil Cayuga 516 309 152,628 10,600 20,450 95 86 34,265 Dunnville 810 202 63,524 2,730 3,400 81 3,200 800 Canboro T'p 21,600 264 208,970 700 2,900 2 8,000 8,000 3,537 Cayuga N. 33,706 430 296,250 23,850 17 17 17 17 17 17 17 17 17 18	do 1867	1,063,386	10,112	4,325,969	331,127		108,702	68,271	31,370	16,000
Cayuga " Dunnville \$10 925 266 190,632 15,200 2,900	HALDIMAND.									
Dunnville " 925 266 190,632 15,200 2,900 2 8,000 3,537 Cayuga N " 32,796 430 296,250 23,850 17 17 17 17 17 17 15	Cavuga "									
Cayuga N. " 32,796 430 296,250 23,850 17 Cayuga S. " 13,889 163 157,055 8,800 23 15 Dunn " 14,924 234 173,457 15,100 1,100	Dunnville "	925	266	190,632	15,200	2,900				
Dunn. " 14,924 234 173,457 15,100 1,100 Moulton and Shorbrooke. " 31,433 391 212,299 8,700 900 1,200 4,347 9,851 Oneida. " 32,367 562 426,063 21,952 Rainham " 25,381 363 297,790 16,100 400 Sencea " 41,836 525 509,003 28,300 139 1,300	Cayuga N "	32,796	430	296,250	23,850		17			
Shorbrooke. " 31,433 391 212,299 8,700 900 1,200 4,347 9,851 Oneida. " 23,367 562 426,063 21,952 16,100 400 Rainham " 25,381 363 297,790 16,100 400 Seneca " 41,836 525 509,003 28,300 139 1,300	Dunn "									
Rainham " 25,381 363 297,790 16,100 400 400 5encea " 41,836 525 509,003 28,300 139 1,300	Shorbrooke "	31,433				900		1,200	4,347	9,851
21,000 220 20,000 20,000 1,000	Rainham "	25,381	363	297,790	16,100					
	· OHOCO IIIIIII									
Total, Towns, &c. 282,495 4,681 3,470,041 173,632 28,750 517 15,679 47,412 13,388		282,495	1		173,632	28,750			47,412	13,388
Totals, 1863 282,695 4,686 3,470,041 173,632 28,750 517 45,679 47,412 13,388										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	do 1867 do 1866							37,198 41,757		

^{*} Figures of 1867.

LITI	ES.		REVENUE. EXPENDITURE.									
Amount of In- terest over- due.	Other Liabili- ties,	Rate in the E imposed for all purposes, exc'pt S.Trusteesrates	Am't of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp.for salaries & all other exp.	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other accounts.
\$	\$	\$	\$ 3,348 4,246 2,322		\$	\$ 450 140 145	36	\$ 600 670 600	\$ 283 472 300	\$	\$ 467 476 200	\$ 2,643 31 300
	30,000		29,965 19,000	4,900	2,713	2,773 20,000	252 8,608	6,270 3,800	4,362 4,700	16 11,623	4,542 4,375	6,276 8,430
*******	30,000 49,200 49,334		48,000 62,400 81,828	4,965 2,243 18,000	2,713 5,461 5,095	22,773 49,816 58,148	9,160 6,867 8,892	10,070 7,297 10,584	9,062 7,578 6,710	11,639 11,643 11,035	8,917 6,097 8,759	14,706 26,982 38,483
	3,595	.0060 .0086 .0150 .0220 .0080 .0175 .0215 .0130	12,108 5,700 5,804 6,263 3,742 4,759 2,000 3,550 4,000			4,236 475 200 1,137 403 200 683 415	1,045	2,300 400 420 406 400 790 600	800 450 1,000 572 922 500 417	219	1,000 1,000	1,834 150 58 165 2,747 10 3,852
	3.920	.0300 .0200 .0160 .0150 .0170 .0185 .0200 .0120	1,017 4,909 5,000 3,800 14,286 4,749 5,067			401	48	580 902 400 300 250 725	596 479 731 300 1,664 401 522	10	558 521 1,100 293 674 589 640	162 4,050 3,069 5,281 116 292
	11,930	.0100	84,754 18,000			10,616	1,135 22,000		11,530 3,200	229 10,000	13,208 5,000	21,785
270	11,930 32,443 27,866		104,754 53,599 55,645	10,000	2,876 3,233 3,064	10,616 12,938 20,299	23,135 16,262 (15,524	17,011	14,730 19,272 15,186	8,344	18,208 11,452 10,962	18,806
2,688	600 750	.0200 .0130 .0130 .0069 .0050 .0036 .0044 .0130 .0060	4,250 886 1,786 1,658 1,950 657 937 3,655 1,692	200 4,347 600		1,010 281 591 159 958	1,141	293 11	340 134 204 557 400 245		519 538 1,419 304 1,089 2 314 1,400 627 478	1,200
2,688	1,350	.0050	2,867 3,777 26,630	5,947		1,322 2,744 9,848	1,643	251 472 2,329	478 482 4,130	15	714 1,704 9,108	6,466
2,688 1,008 12	4,140	.0017	7,823 34,453 40,909 32,233	5,947 400	2,226 2,226 2,953 2,444	17,918	1,643 1,650 3,258	3,116 5,445 7,894 7,106	$ \begin{array}{r} 1,342 \\ \hline 5,472 \\ 5,147 \\ 5,092 \end{array} $	5,012 5,027 5,157 2,873	9,308 8,781 7,408	6,466 9,051 11,802 14.917

	Acres	Rate-		A S	SETS	•]	LIABI
NAMES OF THE MUNICIPALITIES.	ł .	83	value Istate.	lue	ax-	of		v2	to pal
MUNICIPALITIES.	of J.	of	ssessed value of Real Estate.	ssessed value of Personal Proporty.	Amount of Tax- able Incomes	Amount Arrears of xes.	Assets.	Corporation Debeutures.	Principal Amount due t the Municipa Loan Fund.
(Towns, Villages	SSC	ers	od al I	Per	Inte	1 4 0	Ass	rati	inci nt Mun Fu
and Townships.)	Number assessed,	Number payers	Assessed of Real I	ssessed va of Persor Proporty.	ablo	Total of A Tax	Other ,	Deb	Pragon
	Na 3	Nu	Asi	Ası	An	To	0.6]	చి ్	The The
HALTON,			\$	\$	s	s	\$	s	\$
MiltonT'n	1,400	217	159,683	19,370	4,000	321	5,500	2,200	Ψ
Oakville "	1,300	425	396,400	32,500		245 214	927		
GeorgetownVil. EsquesingT'p	1,300 66,939	304 1,065	151,580 1,082,755	29,000 104,600	600	2,527	921	***********	
Nassagaweya "	44,800	529	309,379	65,200		648	70,000		
Nelson " Trafalgar"	45,648 66,907	750 1,004	1,179,033 1,534,460	52,500 91,800	800 2,300	500 674	10,000	***********	******
Total Towns, &c	228,294	4,294	4,813,290	394,970	11,400	5,129	16,427	2,200	
Add—For County						1,000		6,706	
Totals, 1868		4,294	4,813,200	394,970			16,427	8,706	
Do 1867 Do 1866	229,222 228,315	4,408 4,489	3,517,282 4,811,555	397,112 279,676	20,900	10,838 12,844	19,544 62,799	9,600	************
	l	1 '	1						
Hastings.		- 1							
StirlingVil. Trenton"	1,000 250	191	83,263	4,200 32,200	400	1,210	6,870	1,000	
ElzevirT'p	53,815	341 320	135,459 78,719	5,200	******	1,210	0,870	1,000	
Hungerford "		821	211,960	33,040		3,332	800		
Huntingdon " Madoc "	50,000 67,900	320 680	240,561 334,266	24,000 17,700	*****	2,600	700		
Marmora Lake "	72,631	317	64,042	9,200					
Rawdon " Sidney "	66,452 68,801	620	348,102 863,137	10,200 14,600	7,200	2,628	1,200		
Thurlow "	48,000	1,156	684,738		7,200	******	1,200		*******
Tudor and Wol- laston	50,190	377	38,092	1,800		1,324	124	i	
Tyendinaga "	60,048		630,747	20,800	3,000	3,200	174	2,300	
Total Towns, &c	539,087	7,621	3,713,086	208,540	10,600	14,294	9,694	3,300	
ADD-For County.						•••••	66,677	167,800	
Totals, 1868	539,087	7,621	3,713,086	208,540	10,600	14,294	76,371	171,100	304 500
1867	631,963	7,901	3,620,111	204,890	7,100	59,268	27,541	175,080	104,509

* No Return received for 1866.

Huron.	1	11						1	
GoderichT'n	1,012	720	772,250	40,400	92,700			8,400	100,000
Clinton Vil.	788	417	168,363	40,000	28,800				
AshfieldT'p	64,215	635	411,895	37,300	*** *******	* ••••••			
Colborne	33,370	668	388,602	T4,700	2,600				
Goderich "	52,360	580	714,388	26,500	***********				
Grey "	62,200	690	370,581	6,100	*****				
Hay "	52,831	546	540,553	19,200			1.216		
Howick "	66,583	912	439,465	18,600			1,220		
Hullett	53,505	577	629,542	27,100					
McKillop "]	52,471	624	368,875	7,600		1			
Morris "	62,237	700	350,733	5,600	5.600		280		
Stanley "	44,677	645	458,660	63,600	1 700		200		10.000
Stephen "	55,583	602	417,787						10,000
Scaforth "	403	381	92,809	43,560	24 585	**********	**********		***********
Tuckersmith "	40,986	585	509,410		24,000	***********	4		*********
Turnberry "	35,661	538	284,160	9.500	***********	******	*********		•••••
Usborne "	43,000	632	567,780	33,200	10000000000	***********	**********		******
			,,,,,,,,	00,200		**********	**********	***************************************	******
1		11	- 1						

LITIES.				ENUE	•				PEND	ITU	RE.	
Amount of Interest overdue. Other Liabili-	ties.	Rato in the \$ imposed for all purposes, exc'pt S.Trustees rates	Am'nt of Taxes collected within the year.	Amount raised within the year by Laan.	Rec'd from Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp.for salaries & all other exp. of Munic. Govt.	Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other acceunts.
\$	358	\$.0100 .0040 .0080 .0050 .0055 .0030 .0040	\$ 1,550 1,815 1,302 4,067 2,730 3,500 5,844	\$		\$ 1,380 430 2,487 2,286 593 780	\$ 83	\$ 1,068 	\$ 1,974 508 131 804 403 720 668	\$	\$ 653 408 2,158 626 824 3,152	\$ 45 879 1,620 1,106 1,949 1,756 126
	388	1 c.	20,808 14,462		2,074	7,956 2,751	83 465	9,002 6,615	5,208 1,633	4,713	7,S21 100	7,481 1,199
	388 2,846 3,740		35,270 35,152 30,857	7,050 4,000	2,074 1,998 1,998	10,707 12,568 3,830	548 586 586		6,841 5,593 9,428	4,713 4,898 4,898	7,921 7,475 4,845	8,680 19,081 12,584
	90 90 99,110	.0175 .0160 .0225 .0312 .0162 .0150 .0250 .0250 .0150 .0262 .0150 .0180	2,500 2,967 2,359 4,448 3,105 3,527 1,926 8,400 10,877 9,000 1,004 12,375 62,288 56,245 118,533 133,858	11,000	21 21 1,893	255 557 350 423 714 263 160 900 3,622 11,525 15,147 18,246	138 238 11,779 12,017 11,204	35 111 970 2,784 6,035 8,819	`	35 3,869 3,904 3,257	400 35 9 205 694 3,201 16,137 19,338	307 279 11,279 30,275 41,554
*********	3,618	.0170 .0130 .0150 .0190 .0180	3,736 6,962 5,433 9,267 7,788 6,887 7,787 11,413 8,500 10,789 6,786 7,822 4,668 7,104 4,131			119 1,467 706 416 230 1,156 600 1,159 125 800	800	150 440 480 450 445 470 460 388 860 370 500 400 1,770 360 275	626 366 575 502 509 572 468 400 535 370 600 313 550 659		\$19 1,129 566 1,626 1,500 1,720 1,720 1,800 1,800 2,100 861 1,200 1,365	696 2,002 2,132 152 316 150 200

									1247
	Aeres	ute-	il		SSETS				LIABI
Names of the Municipalities.	44	umbor of Rate-	alue	Assessed value of Porsonal Property.	ľax- mes.	Amount rrears of	80	es.	Principal Amount duo to the Municipal Loan Fund.
(Towns, Villages	6	or o	Assessed value of Real Estate.	d v orso erty.	Amount of Tax-	otal Amour of Arrears Taxes.	Other Assets.	Corporation Debentures.	Principal ount duc Munici
and Townships.)	Number	Numbor	gees f Re	sesse of I Prop	noun	Total of A	her .	Debe	Pri noun o N
	Z	Z	A P	~~~~	A A	T	0	<u> </u>	- 주육 <u>과</u>
HURON.—Continued.	\$	\$	\$	\$	\$	\$	\$	\$	\$
Wawanosh ET'p Wawanosh W"	41,987 42,000	436 532	363,069 318,655				**********		***************************************
Total Towns, &c	805,586	11,120	8,137,444	495,660			1,586	8,400	
ADD—For County	005 506	11.100	0.197.444	105 660			12,000	'{	<u></u>
Totals, 1868 Do 1867	805,586 792,480	10,621	8,137,444 8,277,628	478,625	134,025	77,811	91,696	276,520	273,482
Do 1866	795,468	10,411	8,204,989	004,000		16,657	19,736	101,909	410,000
Kent.									
BothwellT'n Chatham"	2,250 1,650	248 940	713,082	187,400		201 5,469	46,290	3,200	
CamdenT'p Chatham	41,303 84,041	676 905	351,103 530,573			432 992	2,342		
Dover	67,933 S 5,487	566 1,092	220,464 650,878	23,500 54,400		746 802			
Howick" Orford. "	57,878 49,518	842 563	454,447 269,280	36,950 26,200	1,175	495 377		3,855 1,600	
Raleigh " Romney "	70,585 25,785	761 115	462.574 93,582	35,560 7,600	***********	537 323	2,337		
Tilbury, E " Zone "	30,518 24,687	345 284	117,971 97,779	S,800 7,700		120 167		1,500	
Total, Towns, &c.	541,635	7,337	4,069,518	493,360	26,275	10,661	55,253	15,955	
ADD-For County.	* *-******					12,784	83,334	20,000	
Totals, 1869 do 1867	541,635 555,954	7,337 7,302	4,069,518 4,344,538	493,360 516,540	26,275 57,405	23,445 20,874	138,587 127,480		
do 1866	535,215	7,038	4,518,999			21,048		13,200	
LAMBTON.									
SarniaTn. Oil Springs Vil	\$50 2,000	581 229	564,282 296,520	73,800 18,200		2,133 1,840	30,000 300	34,200 1,300	
Petrolea	2,675 69,152	486 688	138,418 516,072	65,700 29,150	5,780	2,365		3,000	
Brooke	80,928 66,835	479 207	368,722	19,900		1,036			******
Enniskillen "	\$2,153	312 495	269,400 461,910	18,600 25,400	2,545	1,200	5,300	5,821 4,000	
Euphemia " Moore	39,092 72,818	717	202,715 562,681	13,600 31,200		320 4,146	2,775	1,639	
Sarnia "	76,4S2 39,154	848 482	636,281 267,295		800	200		2,806	
Sombra	71,688 70,167	536 828	336,156 512,460	8,0001 48,300		414			
Total, Towns, &c.	673,994	6,888	5,132,907	440,350	56,589	13,654	42,775	52,766	
Totals, 1868	673,994	6,888	5,132,907	440,350	56 500	66,015	10,549	14,000	7.0.00
do 1867 do 1866	618,437 655,856	6,636	5,387,635	494,399	56,589 77,614	79,669 10,863	53,334 24,028	66,766 57,292	16.000 9,177
20 1000	000,000	0,120	6,177,527	538,733	********	25,187	12,207	50,900	16,000
1		1	1		l			1	

LITI	ES.			VENU						UTIC	RE.	
Amount of In- terest over- duo.	Other Liabili- ties.	Rate in the \$\frac{x}{\text{imposed for all}}\$ purposes, exc'pt S. Trustoes rate.	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of Ad. of Justice.	Other rovenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp.for salaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other accounts.
\$	\$	\$.0149 .0160	6,108 5,584	\$	\$	\$ 380 284	\$	\$ 262 340	\$ 425 400	\$	\$ 1,567 750	\$ 27
8,658	4,018		147,426 84,772			13,100 13,000	1,304 [37,500	9,410	9,915 3,000	5,000	24,227 29,000	17,228 800
8,658 4,319	4,018 5,648 9,000		232,198 131,552 177,913			26,100 24,444 17,783	38,804 1,304 5,653	9,410 17,719 42,010	16,568	9,812	53,527 44,927 167146	18,028 1,865 115226
33,781 33,781 33,781 35,499 29,035	12,875	.0143 .0160 .0095 .0110 .0125 .0082 .0090 .0120 .0120 .0100 .0200 .0110	5,521	3,356 1,500 5,056 20,000 25,056 5,767	3,217	396 6,007 651 5,463 1,931 1,100 2,152 330 2,402 1,55 1,000 887 22,974 2,492 25,466 26,268 36,293	9,124 9,093	400 397 152 152 100 4,608 1,540 6,148 6,616	500 1,365 566 1,407 510 324 760	9,215 9,215 9,346	1,000 2,391 1,101 3,351 1,166 800 1,852 300 1,930 211 21,777 14,437	20,263 49,565 48,781
	1,200 760 760 260 595 1,000 3,816 34,344 38,15:	.0144 .0125 .0185 .0080 .0100 .0070 .0080 .0085 .0080 .0070 .0146 .0150	2,850 2,021 3,300 1,833 4,418 4,694 3,635 3,357	2,715 4,000 1,119	2,627	3,400 12,539 1,209 1,779 1,324	466 656 8 238 5,201 2,042	1,378 258 102 7,002 379 257	793 1,232 450 365 536 900 353 851 394 426 906 400 8,595 2,015	6,626	1,392 1,235 2,500 2,420 995 5,478 1,104 4,217	1,556 1,801 200 140 91 4,500 1,206 5,291 1,569 6,436 103 250 37,309 460
********	8,700 8,584	•••••	82,505 65,196	13,676	4,673	22,705 12,600	5,500	10,603	11,721	9,908	28,155	44,998

	Aeres	Rate-		A	SSETS	•			LIABI		
Names of the Municipalities.	ė	of	of Roal Estate.	Assessed value of Personal Property.	Tax-	Amount rears of	ots.	on arcs.	due to		
(Towns, Villages and Townships.)	Numbor of	Number Fayers	Assossed of Real E	of Person Property.	Amount of Taxable Incomes.	Cotal Amou of Arrears Taxes.	Other Assets.	Corporation Debentures.	Principal Amount due to the Municipal Loan Fund.		
	Num	Nun	Asso of I	Asse of Pr	Amo	Total of Arr Taxes.	Othe	Corl	Am		
Lanark.			\$	\$	\$	\$	\$	\$	\$		
PerthT'n LanarkVil	1,000 2,758	716 100	535,050 59,113	70,100 15,600	57,200 8,800		20,000	9,400			
Smith's Falls" BathurstT'p	400 61,964	224 592	201,645 256,460	43,400 58,100	22,400		3,700 600				
Beckwith	56,621 33,974	493 269	263,960 94,051	32,700 10,300	1,704	1,766	4,400 400				
vant	94,268 33,007	415 130	143,180 37,612	43,300 11,990		2,374					
Drummond " Elmsley North "	57,733 26,672	504 280		44,400 7,000		*: ** ****	2,000				
Lanark" Montague"	53,079 53,895	386 546	209,542 199,3-8	41,800 9,000		80	1,453				
Pakenham" Ramsay"	48,888 58,488	399 728	150,106 444,840	103,100	600 5,400						
Sherbrocke South " !	33,536	187	46,290	11,500		4,263	33,453	9,400			
Total, Towns, &c' ADD—For County	616,283	5,969	3,026,993	536,500	96,104	7,888	00,400	9,400	800,000		
Totals, 1868 do 1867	616,283 615,508	5,969 5,932	3,026,993 3,001,769	536,500 556,400	96,104 91,800	12,156 12,305	33,453 32,234	9,400	800,000		
do 1866	622,167	5,973	3,095,542	468,744		20,109	38,588	11,900	800,000		
LEEDS AND GREN-											
BrockvilleT'n Prescott"	550 589	2,014 683	967,048 496,875	58,900 45,000	35,300	132	2,400	15,000			
GananoqueVil Kemptville "	1,343 382	276 207	131,278 84,326	14,600 21,600		46					
Merrickville " AugustaT'p Bastard and Bur-	71,069	159 958	58,180 727,479	3,000 43,0 00	1,900	110 10 10 10 10 10	2,000 13,324				
gess	60,000 35,382	810 373	350,630 133,375	7,200 1,700		6	90		•••••		
Crosby S	33,683 72,688	401 930	207,885 390,495	19,000 55,000		6 231	4,285				
Elizabethtown " Elmsley"	76,626 21,939	1,233 247	742,812 105,768	25,000 4,800		1,356			154,000		
Escott, front "Gower, S"	22,3 9 21,612	280 196	84,944 134,125	6,400 2,900		2	35				
Kitley	48,178	577	327,586	20,225		12		•••••	******		
downe, front " Leeds and Lans- downe, rear "	56,630 45,017	686) 507	257,519	29,560 10,100	300	40	••••••		********		
Oxford" Wolford"	60,028 43,643	750 514	384,749 251,575	46,700 3,800		300	20,000 1,350	8,100	**********		
Yonge, front of " Yonge and Es-	29,221	353	164,728	7,000		17	4,541				
colt, rear of "	29,286	447	248,888	9,900	400	21					
Total, Towns, &c. ADD—For County	730,987	12,601	6,469,965	435,385	37,900	2,771	710,214 65,286	37,600 20,000	554,000		
Totals, 1868 do 1867 do 1866	717,431	12,601 10,236 10,107	6,469.965 5,512,398 5,576,788	435,385 417,525 317,096	7,900 3,728	2,780 9,247 14,853	140,670	57,600 33,300 54,000	554,000 244,778 163,300		

LITI	ES.			VENU	Е.		EXPENDITURE.					
Amount of Interest overdue.	Other Liabili-	Rate in the \$ imposed for all purposes, exc'pt S.Trusteesrates	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'd from Gov. on account of Ad. of Justice,	Other revenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp for salaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure or all other aecounts.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	÷
	150	.0100 .0130 .0095 .0069 .0080 .0075	6,900 1,097 2,544 2,158 3,716 772	2,000		1,226 240 554 500 320 130	1,640	2,073 780 606 760 309 260	750 121 212 380 400 250	47	1,100 502 200 800 348	2,000 329 1,490 80
		.0100 .0040 .0075 .0110 .0063 .0090 .0097 .0080	1,973 713 2,580 1,600 2,227 3,720 3,606 9,067 606	600		1,403 196 630 147 		1,255 256 620 814 270 622 5,719 170	137 400 259	28	576 187 470 343 871 75 475 992 150	1,019 164 1,409 499 246 50 203
507360	150		43,279 2,722	2,885 6,367	980	6,542	1,640	14,514 3,262	5,370 1,240	1,386 5,501	7,089	7,759
507360 69,151 68,931	150 8,399 450		46,001 42,948 50,687	9,252 3,660 1,500	980 1,242 2,378	6,542 6,586 8,294	1,640 760 800	17,776 20,337 25,404	11,262	6,887 6,035 7,745	7,089 13,414 5,809	7,949 9,014 19,329
25,797	3,000	.0070 .0136 .0100 .0100 .0090 .0057	9,403 9,528 2,074 1,950 1,289 1,300			3,440 2,025 428 468 217 1,787	930 1,020 277		1,231 357 322 164		3,660 1,324 387 495 474 595	2,880 675 1,052 668 133 300
		.0071 .0065 .0058 .0057 .0059 .0080 .0075	2,549 1,435 1,468 4,287 1,000 880 845 304 3,188						814 140 303	 	50 562 123 1,524 2,823 43 241 55 491	150 340 75 1,596 500 60 570 65 146
********		.0080	2,302			68			523	 	947	274
*******		.0065 .0093 .0080 .0075	3,920 2,137			280 1,179 80 4,541	584	220	292 743 425 224		253 478 250 33	522 2,491 75 125
25,797			53,116			16,748 32,661	2,811					12,697
25,797 17,721 15,052	20,842				2,982 2,516 3,235	24,909		22,266		8,762 6,723 8,199	15.073 14,627 8,567	31,393 21,130 46,049

	200	d. d.		A	SSETS				LIABI		
NAMES OF THE MUNICIPALITIES.	Acres	of Rate-assessed.	value	alue	nx-	unt 3 of	,	1 89	to to		
(Towns, Villages	r of	r of		Assessed value of Personal Property.	Amount of Tax-	Amount Arrears of	Other Assets.	Corporation	Amount due to the Municipal Loan Fund.		
and Townships.)	Number of	Number	Assessed of Real 1	f Po	loun lo l	1 50	ler A	Pors	rinc M M		
1	Na a	Nu	Asso	ASS	Am	Total of A Tax	0 th	Gor	Amou the Loan		
LENNOX AND AD- DINGTON.											
BathVil	2,101	126	\$ 123,662	18,200	\$	\$ 474	1,200	\$ 400	\$		
Napanee" Newburgh"	1,400 3,478	558 242	401.735	29,950 4,950	100		6,000	12,200			
Adolphustown T'p Amherst Island "	11,320 14,500	136 201	140,400 173,436	8,122 19,400			1,348				
Camden East " Denby, Abinger	83,127	1,129	680,980	32,300		1	1,000				
and Ashby " Ernestown"	16,927 60,765	112	16,971 910,445	1,200 44,360	**********	26	14,045		,		
Fredericksb'g, N. " Fredericksb'g, S. "	22.742 19,772	367	326,505 327,013	5,110 2,200	365	677	800	400			
Kaladar and Anglesea"	25,602	210	35,414	4,800			}	400			
Richmond" Sheffield	49,222	748 570	381,733 145,535	16,200		821 831	12,228				
Total, Towns, &c.		5,726	3,777,579	İ	405		20.001	12.000			
ADD—For County		0,120		187,892	465	2,829 8,528	36,621 102,786	13,000			
Totals, 1868 do 1867		5,726	3,777,579	187,892	485	11,357	139,407	\$2,000			
do 1866		5,799 6,421	3,802,546 3,769,379	212,379 178,450		11, 560 3,224	146,876 102,088	82,200 78,751			
Lincoln.					1	1	1 1		1		
Ste. CatharniesT'n	****	1,772	1,919,438	189,400	265,377	16,202	26,000	162,041	190,000		
Niagara " Port DalhousieVil	500 400	526 207	219,920 121,050	29,400 11,400	15,000 3,000	2,896	92,183	3,514	40,224		
CaistorT'n Clinton"	32,833 25,307	419 504	358,270 620,906	18,100	•••••	67	791 500		***********		
Gainsboro' "	38,721	568	630,104	42 ,300 7,418		9 35	131,509	*****	***********		
Grimsby	33,760 26,135	600 742	683,973 810,670	49,600 44,700	5,400	3 135	279		*********		
Louth" Niagara"	19,865 22,600	362 420	462,328 685,986	21,500 40,700	200	180					
Total, Towns, &c.	200,121	6,120	6,512,645	454,518	288,977	19,527	249,971	165,555	220 004		
ADD-For County	4,522	34	44,542	494,310	200,311	19,021	249,871	24,442	230,224 20,766		
Totals, 1368 do 1867		6,154 5,049	6,557,187 6,755,893	454,518 527,260	288,977 272,073	19,527	249,971	189,994	250,990		
do 1806	193,598	5,852	6,812,206	777,606	412,015	24,533 9,940	193,707 170,326	211,495 184,581	843,964 230,224		
-1											
MIDDLESEX. StrathroyT'n	2,329	519	\$ 204,777	\$ 54 200	\$-	\$	\$	\$	\$		
WardsvilleVil	444	132	32,228	54,300 4,900	20,000 600		************	5,000			
AdelaideT'n Biddulph"	44,121 38,676	565 752	339,615 440,685	31.200 17,400		4,350	634				
Caradoc	62,363 22,987	748	369,959	32,400	5 000	418			***********		
Dorchester, North "	50,430	722	237,208 967,760	1,900 41,300	5,800 1,000	1,152 1,179	1,287				
Ekfrid	53,636 47,176	630 590	272,797 640,900	19,200 37,700					***********		
London "	98,000	2,147	2,000,300	215,000	1,660						
McGillivray " Metcalfe "	61,009 31,140	519 590	727,150 253,655	21,400 9,100		497	36	•••••			
			,	,					******		

LITI	ES.		RE	VENUE	E .		EXPENDITURE.					
Amount of In- terest over- due.	Other Liabili- ties.	Rate in the \$ imposed for all purposes, exc'pt S.Trustees rates	Am'nt of Taxes collected within the year.	Amount raised within the year by Lean.	Rec'dfrom Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debentures.	Expended for Educational Furposes.	Exp.forsalaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other accounts.
\$	Ş	\$.1100 .0162 .0100 .0055 .0055 .0075	\$ 870 5,723 684 878 1,597 5,300 220 4,776	\$ 1,986	8	\$ 150 2,514 193 20 1,000 2,49 1,760	\$ 54 976	\$ 620 2,097 426 160 750 50 2,060 575	57	\$ 17	* 2,740 106 50 50 1,650 105 184	\$ 493 4,972 1,117 20 1,200 305 1,018 1,039
	987	.0050 .0060 .0150 .0062 .0100	1,731 1,975 1,900 130	**********		443 80 532		160 17 425		29	585 8 382 245	
- ,	987 48,000	23 milles	25,784 13,753	1,986		6,941 21,735	1,030 3,892	7,340 7,819	5,086 1,782	2,626	6,230 1,782	12,179 12,086
*******	48,987 146,876 102,088	2,000	39,537 34,975 46,828		3,483 2,170	28,676 9,510 13,532	4,922 5,613 4,454	15,159 14,806 7,048	6,868 7,547 7,461	2,672 6,278 5,520	8,012 9,938 5,539	24,265 25,876 34,802
13,273	1,980	.0140 .0105 .0070 .0050 .0065 .0065 .0060 .0062 .0065 .0066	42,596 2,443 2,042 1,815 4,465 36 4,401 5,558 3,227 5,102	3,000		S,307 4,595 517 1,275 171 90 616 632 326 532	10,269	4,295 50 900 500 340 	17,423 3,060 196 262 348 259 329 4,501 338 313	1,060 6 11	2,568 1,342 517 310 350 431 452 567 202 168	2,600 1,072 1,940 3,127 70 349 362 2,759 503
13,273	1,980		71,685 31,972	3,000 11,000	3,540	17,061 631	10,645 1,770	9,114 5,847	27,630 1,474	3,322 5,944	6,907 2,901	12,782
13,273 10,859 8,446	4,333		103,657 98,931 64,127	14,000 42,782 1,902	3,540 2,434	17,692 35,410 25,897	25.846	14,961 10,328 10,698	13,102	9,266 8,718 1,682	10,663	36,984 85,511 36,767
	478	.0175 .0177 .0100 .0185 .0120 .0090 .0200 .0122 .0103 .0080 .0150 .0125	4,200 431 3,652 6,870 6,428 3,905 9,406 8,563 22,238 7,603 5,294			1,016 341 350 	300	2,550 98 583 423 520 225 1,051 450 2,736 1,175 575 240	160 334 500 386 255 325 305 395 900 575		500 314 521 1,300 678 242 500 1,134 418 1,000 4,000 260	750 354 2,161 850 216 3,336 115 9,310 64 416 800

· · · · · · · · · · · · · · · · · · ·									
	Acres	Rate-		A S	SETS	•		I	IABI
NAMES OF THE MUNICIPALITIES.	بيه	umber of Rate	issessed value of Real Bistate.	Assessed value of Personal Property.	Amount of Tax- able Incomes.	Amount rrears of s.	ets.	on ures.	cincipal unt due te Municipal Fund.
(Towns, Villages and Townships.)	Number o	Number	Assessed of Real F	ssessed value of Personal Property.	ounto le Inc	201	Other Assets.	Corporation Debentures.	Principal Amount dues the Municip Loan Fund.
	Nun	Nan P	Asse	Asse	Ama	Total of A Tax	Oth	Corl	Am the Loa
MIDDLESEX.—Con. Mosa	47,705	630	\$ 366,655	\$ 32,400	\$	\$ 222	\$ 60	\$	\$
Nissouri, West " Westminster"	49,500 64,623 38,876	626 1,250 528	540,023 2,052,053 272,964	44,100 58,200 23,600		8,296	1,000	******	
Williams, East " Williams, West "	34,733	583	188,200	15,000			1,000		
Total, Towns, &c. App-For County	745,748	12,172	9,907,929	659,100	29,260	16,114 48,716	3,017 120,000	5,000 840,485	
Totals, 1868 do 1867 do 1866	745,745 745,777 754,680	11,917	9,907,929 8,864,821 6,466,073	659,100 734,300 361,819	29,260 12,810	64,830 60,383 60,888	123,017 794,734 809,076	845,485 876,252 884,252	
Norfolk.									
SimcoeT'n CharlottevilleT'p	400 53,574	532 801	379,682 635,443	62,200 17.100	1,800	103 2,000	2,800 7,134	1,500 1,600	400,000
Houghton " Middleton "	33,824 42,660	376 543	266,250 296,069	$4,000 \ 24,200 \ 30,200$		1,459 641 $1,751$	1,969	1,300	3,000
Townsend " Walsingham " Windam	65,606 78,818 67,000	1,031 954 854	934,453 581,915 733,681	26,650	2,000	1,151 500	1,858 100		1
Woodhouse "	34,533	789	739,970	31,800					
Totals Towns, &c. ADD—For County	376,415	5,880	4,597,663	217,165	3.800	7,605 2,800	13,861	10,000	403,000
Totals, 1868 Do 1867 Do 1866	376,415 382,712 372,737	5,880 5,737 5,387	4,867,663 4,524,542 4,433,153	217,165 232,765 178,774	3,800 31,425	10,405 15,169 14,204	13,861 15,716 74,950	14,400 11,857 3,906	403,000 497,177 103,000
Northumberland and Durham.									
Durham. BowmanyilleT'n	3,300	768	677,839	59,700		1,569	22,500	48,000	
NewcastleVil CavanT'p	2,400 62,925	1,006	157,235 752,132	19,820 72,100		312 50	2,400 100		8,000
Cartwright " Clark " Darlington"	34,400 66,629 68,061	570 1,050 1,217	270,797 848,690 1,444,119	24,116 79,000 121,900	1,100 4,150	58 500	! 	***************************************	25,200
Hope	63,420 69,304	836 142	782,453 451,950	34,400 19,500		122 809	986	**********	60,000
Northumbsrland. Brighton Vil	2,636 1,076	231 176	188,844 146,630	6,200 19,200	2,600 5,000	132	100 244	1	
Colborne	14,983 47,409	177 177 657	123,920 469,642	11,200 14,500	300 300 325	273 77			
Cramahe	46,009 75,053	627	525,125	22,000 105,540		359	1,496	984	
Hamilton " Monaghan "	62,932 17,759	1,087	\$83,693 252,285	43,169 21,600	6,500	8	9,019		
Murray " Percy " Seymour "	18,137 51,479 65,000	662 712 777	498,647 420,396 436,630	7,600 37,900 49,200	3,600	1,169	539 1,600	• • • • • • • • • • • • • • • • • • • •	33,600
Total, Towns, &c Add—For County.			9,336,182 11,124,819	768,645	67,975	5,438	39,984 25,000	48,984	126,800
Totals, 1868 do 1867 do 1866	772,912 797,392 818,751		20,461,001 10,021,594 9,551,111	883,209	51,185		64,984 261,655 277.873	48,984 63,216 63,048	126,800 5 05 ,380

^{*} Return of 1867.

LITI	ES.			ENU				EXI	ENI			
Am'nt of Interest overdue.	Other Liabili- ties.	Rates in the \$ imposed for all purposes, cxc'pt S.Trustees rates	Am'nt of Taxes collected within the year	Amount raised within the year by loun.	Rec'd from Gov. on account of Ad. of Justice.	Other	Interest paid on Debentures.	Expenditurefor Educational purposes.	Exp.for salaries & all other exp. of Mun. Gov't.	Exp. on acc't of Ad. of Just. in all its branch.	Expenditure on Roads and Bridges.	Expenditure on all other account.
	\$.0125 .0140 .0081 .0195 .0175	\$ 4,878 8,777 10,852 5,124 1,662	\$	\$		\$	\$ 350 400 1,422 598 580	\$ 376 250 687 375 348	\$	\$ 27 500 1,539 955 1,175	\$ 170 100 1,092 4,254 123
15,340			109,283 87,171			10,030 19,930	500 54,430	13,976 2,643	6,794 4,851	19,874	15,063 21,974	24,105 79,485
15,340 17,864 16,585	36,221 48,476 63,644		186,454 209,764 195,323	3,224		30,020 129,689 51,811	52,166	16,619 18,723 30,558	10,462	18 597	32,741	103590 85,243 87,790
			5,501 4,000 2,050 1,609 5,072 3,740 4,374 4,630	1,300		1,475 2,466 334	3	3,089 425 464 486 1,339 514 490 570	546 600 365 411 420 428 325 599		1,732 450 450 1,174 624 2,838 450 546	2,260 100 34 1,221 869 1,446 471 577
			30,976 21,081	2,721 3,000	3,948	5,424 1,778	19 420	7,377 8,990	3,694 2,070	10,253	8,264 560	6,978 7,637
74,058		.00434	52,057 52,976 46,380	5,721 1,500 9,407	3,948 2,694 2,953	7,202 9,214 8,953	439 615 888	16,367 15,380 17,394	5,764 6,375 5,708	10,253 8,286 10,499	8,317	14,615 12,170 12,112
	16,000	.0149 .0125 .0080	11,651 2,582 7,427 2,364			1,694 483 809	2,880	2,370 605 370	290 670		1,100 1,067	1,688 1,111 5,003 150
35,000	26,000	.0095 .0065 .0060 .0080	12,032 9,215 5,189 3,613						707 650 565		779	1,250 379
	168	.0052 .0060 .0090 .0075	2,063 747 4,531 3,296 9,199			3,516 170	304	825 150 423 456 1,500	238 216 343 604 685	11	473 217 719 1,306 3,205	4,022 4,000
		.0055 .0050 .0095 .0115	6,015 1,411 4,487 5,607			1,699 1,132 1,131		1,498 160 940 410	550		1,428 701 1,026 1,261 743	901 20 243 4,877 463
35,000	43,068		97,144 56,994	10,000		18,145 1,219	45,700	13,227		11 16,000	1,000	9,698
35,000			154,138 156,645 141,681	7,500	5,070 4,608	39,767		13,227 18,430 28,051	16,803	14,304		74,797

	Acres	d.		AS	SETS			1	LIABI
Names of the Municipalities.	G _{re}	of Rate-	value istate.	Assessed value of Personal Property.	Amount of Tax- able Incomes.	Amount Arrears of xes.	rg tg	es.	rincipal unt due to Municipal Fund.
(Towns, Villages				ssessed valu of Personal Property.	mount of Tax- able Incomes	Am rread	Other Assets	Corporation	Principal Amount due the Municip Loan Fund.
and Townships.)	Number	Number payers	Assessed of Real J	ssesse of F Prop	olo	Total Anof Arre	er /	Por	Prin Noun
	Ä	ž	As	Ası	An	T	041	Ç	Amou the Loan
ONTARIO. WhitbyT'n	3,800	555	\$ 567,996	\$ 43,400	\$ 50,300	\$ 2,129	\$ 10,866	\$ 2,500	\$
OshawaVil.	2,400	726	382,240	64,200	21,300	137	10,000	1,400	
BrockT'p Mara & Rama"	66,476 100,780	736 610	441,879 425,550	38,640 33,100		288			
Pickering " Reach "	70,095 61,243	1,275 1,359	1,719,852 882,962	148,300 89,500	8,100	596 36	632		
Scugog	43,745 8,366	539 112	355,838 98,204	21,300 6,200		127 28			
Thorah	37,049 52,439	391 841	300,787 566,260	7,100 25,100	900	550 386			
Whitby, E "	31,508 31,163	683 677	938,740 899,590	68,300 49,200	16,300	14	2,000 2,000		***************************************
Whitby, W	509,064		7,579,898		98,020	4,291		3,900	
Total Towns, &c. ADD—For County.	509,004	8,504	7,519,898	594,340	90,020	4,291	15,498	33,700	
Totals, 1868 do 1867	509,064 486,654	8,504 8,564	7,579,898 7,524,583	594,340 558,500	98,020 112,348	4,291 18,299	15,498 4,072	37,600 39,379	
do 1866		8,345	6,905,752	566,533	112,040	7,210	25,326	40,907	*** ******
0		· ·						1	<u> </u>
Oxford. IngersollT'n	1,722	1,238	720,375	50,900	3,800	2,545	28,864	40,600	
Woodstock" EmbroVil.	1,650 1,400	825 160	799,890 85,768	78,500 2,600	36,300 1,100	1,500 16	30,000	23,391	
BlandfordT'p	29,660	328	483,835	15,300		113	146		
Blenheim "Dereham "	66,110 67,294	1,084 977	1,088,871 1,175,715	41,400 81,900	3,300 2,000	321 969	18,804	20,800	
Nissouri, E " Norwich, N"	46,262 34,316	576	619,361 714,670	36,900 64,000	*****	632	5,000 350	15,000 4,938	151,276
Norwich, S "Oxford, E"	35,707 35,511	530 522	501,909 815,850	27,800 101,200	5,755	9	$1,400 \\ 2,392$		
Oxford, N	20,878 25,392	330	350,288	29,600 41,700		88	2,002		
Zorra, E "	56,270	511 ₇₇₆	637,258 965,788	45,000	3,400	346			
Zorra, W "	54,800	611	1,003,966	19,700	******	433	14,728		
Total Towns, &c App—For County	476,972	9,102	9,963,564	636,500	55,655	6,972	102,217 46,000	107,791	151,276
Totals, 1868	476,972	9,102	9,963,564	636,500	55,655	6,972	148,217	123,591	171,276
do 1867 do 1866	472,679 447,268	8,608 8,126	9,769,944	642,500 544,933	71,350	7,717	145,990 143,757	126,343 122,071	360,816 143,450
								1	
PEEL.	1,282	955	200.210	00.000	17.010	650	500	300	
BramptonVil. Streetsville "	479	377 190	292,313 115,070	20,600 12,500	1,400	28	437	300	
AlbionT'p	56,302 68,745	985 753	859,777 631,987	66,000 32,950	1,600	10 918	344 800		
Chinguacousy " Toronto"	80,019 65,712	1,200 1,243	1,922,361 1,691,661	142,600 133,400	5,010 6,300	61	17,755		
Toronto Gore "	18,995	305	471,342	39,400	660		(******		
Total Towns, &c Add—For County	291,534	5,058	5,984,511	447,450	32,886	1,667	19,836 2,500	3,000 43,250	
Totals, 1868	291,534	5,053	5,984,511	417,450	32,886	1,667	22,336	46,250	
Do 1867 Do 1866	289,885 384,262	5,006 5,121	6,036,769 6,228,552		35,190	783 1,800		47,700	
	!		l						

					Calle Marin House, Stocker Stocker Stocker							
LITI	ES.			VENU	Ε.				PEND	ITU	RE.	
Amount of Interest overdue.	Other Liabili- ties.	Rate in the \$ imposed for all purposes, exc'pt S.Trusteesrates	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'd from Gov. on account of Ad. of Justice,	Other revenues.	Interest paid on Debentures.	Expended for Educational purposes.	Exp for salaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other ac- counts.
\$	\$ 500 94 2,814 534 3,942 3,438	\$.0085 .0115 .0091 .0068 .0061 .0054 .0041 .0049 .0056 .0056 .0056	\$ 8,138 7,723 2,595 11,488 5,138 4,045 503 1,645 8,003 5,346 4,622 59,246 28,000	5,850	1,192	15,455 11,718	\$ 106 160 160 143 409 1,830 2,239 2,756	\$ 2,682 2,000 659 930 632 591 697 50 234	\$ 1,729 770 305 550 971 925 261 7 652 527 825 7,917 2,900 10,817	54	4,232 1,650 998 3,420 1,556 9000 16 791 908 1,202 1,378 19,090 2,000	29,802
	1,793 1,021 1,295 4,109	.0070 .0100 .0020 .0030 .0052 .0045 .0075 .0040 .0055 .0015 .0040	11,001 9,627 394 1,632 5,968 5,116 3,214 2,973 1,557 1,633 2,026 3,439 4,320 59,332 20,822	31,872	3,750	3,583 2,852 440 79 964 892 600 266 2,260 1,269 203 179 200 836	2,556 1,544 1,248 900 296 193 6,737 2,536	2,405 3,644 424 592 460 325 155 561 707 9,273 10,115	10,104 641 1,605 72 241 510 1,000 400 274 400 371 1,091 1,091 400 346 7,658 2,500	4,336	2,622 434 254 440 2,558 1,153 1,512 572 1,048 209 438 363 1,262 1,451 14,346 4,000	1,162 3,651 252 1,192 3,391 3,219 1,715 1,750 2,267 1,675 2,44 1,578 893 2,452 25,441 6,622
1,016 273	300 300 200 300 800 910 1,738	.0081 .0094 .0048 .0066 .0042	4,850 4,795 9,235 8,133 2,225 32,624 32,624 48,170	3,000 3,000 3,000 14,010	2,477 2,477 1,439	1,588 323 1,077 1,204 3,350 600 200 8,342 	3,313 3,313 2,562	1,173	9,374 9,196 519 175 699 800 858 1,200 440 4,691 1,599 6,290 8,375	5,605 5,605	734 131 532 2,269 2,328 1,256 678 7,928 383 8,311 13,566	3,475 246 670 6,015 7,940 8,714 230 27,290 5,796

	80	11							
	2 1	G t		AS	SETS.]	LIABI
NAMES OF THE MUNICIPALITIES.	of Aeros	of Rato- assessed.	ssessed value of Real Estate.	Assessed value of Personal Proporty.	Amount of Tax- able Incomes.	Amount rears of	ets.	on ires.	Principal Amount due to the Municipal
(Towns, Villages and Townships.)			sed eal E	ssessed value of Personal Property.	mount of Tax able Incomes.		Other Assets.	Corporation Debentures.	Principal Amount du the Munici Loan Fund
and Tomassipory	Number	Number	Assessed of Real	Asse of Fr	Amo	Total of Ar Taxes	Other	Corp	Am the
PERTH.			\$	\$	\$	\$	\$	\$	\$
StratfordT'n	1,000 2,000	760 140	669,390 38,558	42,100 7,557	38,600	100	26	36,000	******
ListowellVil. Mitchell" Blanshard"	1,400 45,955	269 642	257,737 814,555	10,400	1,600	3,656	12,693	12,250	**********
Downie	48,805 43,127	592 556	373,305 345,010	27,600 59,000	400	118			
Easthope, S " Ellice	22,772 55,283	367 617	185,212 418,700	12,200 13,200		1,777			
Elma " Fullarton"	54,607 40,181	605 545	216,617 693,537	2,900 33,000			3,440	20,525	
Hibbert " Logan "	41,437 53,767	587 557	505,271 312,510	15,600 14,200		261	33,221	44,000	
Mornington " Wallace "	49,496 50,451	670 561	242,872 224,314	800 10,870	302	1,487	720	25,000	
Total Towns, &c ADD—For County	510,281	7,468	5,297,583	264,107	40,902	7,399	50,160	137,775 35,000	288,000
Totals, 1868 do 1867	510,281 513,450	7,468	5,297,588 5,475,847	264,107 263,605	40,902 37,700	7,399 33,918	50,160 257,046	172,775 374,250	
do 1866	519,525	7,264	4,150,871	176,505		14,573	64,825	119,200	288,000
Petenborogh.									
AshburnhamVil.	875	188	110,045	2,300	8,200				
AsphodelT'p.	37,815 6 2 ,609	596 265	235,575 96,685	16,900 6,100	500	 			
†Burleigh, &c "Dummer"	85,166 59,806	148 321	55,742 111,812	14,000		1,612	421		
Douro " †Dysart, &c " Ennismore "	38,305 154,121	417' 103 176	154,231 88,387 64,502	11,400 700 7,700		18 68			
Galway	16,801 15,180 42,973	111	22,020 68,953	5,500		40	142		
Monaghan, N " Minden	14,501 22,142	315 144	150,412	9,200 2,300	2,310		1,364		***************************************
Otonabee	65,161	779 599	474,143 434,999	64,400		254		•••••	
Snowden" Stanhope"	13,350 7,600	84	19,405 9,070	200		71			
Total Towns, &c	693,540		2,117,392		13,710	3,331 8,226	1,927 2,718	27,000	
Totals, 1868	693,040		2,117,392			11,557	4,645	27,000	
do 1867 do 1866			2,152,658 2,111,328			20,013 13,325	300	27,000 33,440	

^{*} Belmont and Methuen embraced in one Municipality.

[†] Including Burleigh, Anstruther, Chandos, Cardiff, Mammoth, Harcourt and Bruton, embraced in one Municipality.

[‡] Including Dysart, Guilford, Dudley and Harburn, embraced in one Municipality.

	LITIES. REVENUE. EXPENDITURE.											
LITI	ES.		REV							ITU	RE.	
of In-	Liabili-	Rate in the \$ imposed for all purposes, exe'pt S.Trustees rates	f Taxes within ear.	raised he year oan.	Rec'd from Gov. on account of Ad. of Justice.	venues.	Interest paid on Debentures.	rpended for Educational Furposes.	Exp.forsalaries & all other exp. of Munic. Gov't	Exp. on acct. of Adm.of Just. in all its branches.	Expenditure on Roads and Bridges.	iture on her ac-
Amount terest due.	Other J	Rate in imposed purposes S.Truste	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfron acco	Other revenues.	Interest paid of Debentures.	Expended Education Furposes.	Exp. for	Exp. on Adm.of all its b	Expenditu Roads v Bridges.	Expenditure all other a counts.
								``				
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	238 400	.0160 .0100 .0080	1,200 1,200 3,124	6,000		8,132 400 1,804	2,480 375	2,492 800 6,000	150; 462		6,000 300 1,538 1,989	8,132 100 4,890
	•••••	.0080 .1200 .0080 .0120	8,344 3,518 4,019			350		322 350 292	792		2,697 784 400	502 253
		.0100 .0186 .0060	6,009 3,969 7,190	•••••		1,959 1,388	1,230		944 521 493	10	1,918 1,379 1,780	6,114 2,796 5,895 800
	2,389	.0100 .0103 .0140 .0106	5,208 5,100 8,009 4,524		••••••	5,323 220 4,063	2,640	438 395		113	1,000 1,494 1,345 2,542	3,892
	3,027		70,214			23,639	1	11,089	13,873 2,367	123 9,414	25.166	36,943 3,687
27,000 16,000	3,027 66,928 118,616		70,214 86,772 19,083	6,000 2,050		23,639 110,501 12,298	6,725 8,666 5,970	11,089 15,856 19,206	16,240 15,310 20,217	9,537 9,255 9,362	31,679	71,415
=								<u> </u>				
*******	 	.0100	2,421 7,892					325	234 113		396 226	
00100000	1,350	.0200 .0171 .0520 .0265	1,524 400 3,753			199 50 1,604		260	144 260 490	********	1,068 21 1,034	1,396 110 3,164
	155	.0210 .0150 .0163 .0150	1,269 1,172 325						411 140 202 129		922 725 160 50	50
*******		.0112	3,299			183 216 1,575			241 213 417		214 147 1,366	
*******		.0123 .0110 .0150	200					500	435 82 60		1,428 180	4,855 360
******	1,505	.0055	38,260 32,612		1,054	3,827 5,051	1,674	1,725 695	3,571 2,047	7,084		1,708
*******	3,250 28,624 12,967		70,872 53,494 20 ,756		1,054 1,636 1,566	3,884		. 7,176	1 - 7,270	7,084 6,661 5,887	15,668	15,582 24,527 20,769

						-			
	Aeres	d.		A	SSETS				LIABI
NAMES OF THE MUNICIPALITIES.	Ae	of Rate-	value state.	value onal y.	ax-	unt	m,	° 22	o to
	of d.				Amount of Tax- able Incomes.	Arroars of	Assots	rporation	ncipal nt duo to Municipal Fund.
(Towns, Villages and Townships.)	mber of	umber	Assessed of Real	ssessed va of Person Property.	Int	es es	As	Corporation	Principal Amount du the Munic
and Townshipst)	Number	Number	f II	of of Pro	able	Total of A Tax	Other .	P. D.	Prin Amou the Loan
	Ž	Z	¥°	₹		Ĕ	0	0	
* PRESCOTT AND		-		•		ŝ	\$	\$	\$
Russell.			\$	\$	\$	\$	•	Φ	ę
Hawkesbury Vil.	5,410	222	151,260		9,700			600	
Alfred T'p	47,480	295	116,423	2,600		*****		******	
Caledonia "	46,838	234	82,939	8,800	******	**********			
Clarence "	†60,000	109 ¹ 432	111,688 164,605	14,000		903	600		
Cumberland "	69,143 75,075	417	132,712			272	400	**********	
Hawkesbury, E "	55,650	734	318,996			1,500	400		
Hawkesbury, W "	23,719	337	201,376			25	5,300		
Longueuil "	19,283	275	166,110						
Plantagenet, N "	49,993		125,038			1,200	434		
Plantagenet, S "	50,168	281	126,959					·	
Russell "	45,943	338	201,700	13,300		300	800		
Total Towns, &c	548,702	4,181	1,899,806	253,900	16,780	4,200	7,534	600	
Add -For County.		*********					15,000		
Totals, 1867	543,702	4,181	1,899,806	253,900	16,780	4,200	22,534	2,200	
do 1865						4,200			

^{*} Return of 1867. No return in 1866. † Return of 1866.

PRINCE EDWARD.									1
PictonT'n	586	499	415,255	57,200	11 400	493	10,200		
Wellington Vil.	1,442	132	87,659	11,200		****			
AmeliasburgT'p	43,421	601	568,915						
Athol "	23,262	345	250,251	19,400			3,361		
Hallowell "	44,021	740	854,450						
Hillier "	31,170	491	696,893						
Marysburg "	76,457	803	542,848	39,700	2,000		6,700	1	
Sophiasburg "	43,870	535	700,624	61,848					
						!			
Total Towns, &c		4,146	4,116,985		23,100	508	27,911		
ADD-For County			28,000						
m . 1						!			
Totals, 1868		4,146	4,144,985	343,898					
do 1867		4,183	3,538,423	441,730	, , , , ,				
do 1866	235,895	4,290	4,156,563	335,225	1	2,678	36,908	3,30	
* Renfew.			1	1	I	ı	1	1	1
" RENFEW.								i	
AmpriorVil.	1,125	147	81,285	10,500		83		2,000	
Pembroke "	590	213	1 124,970			1			
Renfrew "	238	125	93,385			267			
AdmastonT'p	51,370	372	72,659	20,600					
Algona	13,790		12,307	3,700		١			
Alice	36,936	283	48,518	8,400	1	200			
Bagot & Blyth-						i			
field"	24,078		35,816]	240			
Bromley	38,257		25,404			140		1	
Brougham "	10,735	75	8,684	3,500				I	
Brudenell, Rad-			i	{				1	
cliff, Lyndock	01.010	000							
and reagrant	24,643		(0.,230	, ,,,,,,,		88			
Grattan	24,897	222	41,808	10,100		400			
tawatchan "	8,912	40				!			1
tawatchah	3,912	63	7,580	3,200		25	l	l	
# D of 100	1 des								

^{*} Return of 1867.

LITI	ES.		RE	VENU	Е.			EX	PENI	UTI	RE.	
Amount of In- terest over- duo.	Other Liabili-	Rate in the \$\frac{2}{\text{imposed for all}}\$ purposes, exc'pt S.Trustces rates	Am'nt of Taxes collected within the year.	Amount raised within the year by Lean.	Ree'dfrom Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debcatures.	Expended for Educational purposes.	Exp.for salaries & all other exp.	Exp. on aect. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	Expenditure on all other accounts.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1,600	.0045 .0084 .0120 .0100 .0077 .0070 .0040 .0050	1,493 911 886 400 2,513 1,000 2,049 1,137 2,485 1,738 821 1,366		20	20 1,633 281 281 228 652 540 75	413	88 200 240 80 454 616 806 34 100 300 200 220	240 275 318 400 397 250 352 495 240 420		150 400 800 289 158 46 364 522 843 600 400	70 149 96 73 35 155 50 110
	3,587	.0047	16,799 9, 2 51		20 1,748	4,272 112	413 118	3,338 5,369	4,098 901	616 2,820	4,572	1,933 300
	3,587 3,709		26,050 23,869	2,000	1,748 850	4,384 8,475	531	8,707 10,143	4,999 4,829	3,436 3,754	4,572 8,253	2,233 3,485

		1								1		
		.0018	7,386			4,165	352	3,000	9,576			700
*****	1,000					312						247
		.0025	2,320			140,		420				327
		.0051	1,409					319			10	640
		.0040	3,850			405	i	700	350		480	2,588
}		.0025	1,900			248		300	645		108	537
		.0050						1,180	1,200			
		.0032	2,806					400	413	 		739
i	1,000		22.851	 • • • • • • • • • • • • • • • • • •	l • • • • • • • • • • • • • • • • • • •	5,270	352	6,319	13,070		613	5,778
	' 1							4,252	2,492	3,026	240	5,462
					<u> </u>							
	1.000		32,186		1,208	11,970	352	10,571	15,562	3,026	853	11,240
			37,123			10,707	242		7,242	3,065	1,760	20,944
	4,626						228			3,152	1,246	20,973
												-
											1	
- (2010	0.005				128	0 000	990		417	320
********		.0240				400		2,083				1
	1,000	.0100	2,220					561				
	•••••	.0185						3,090				836
		.0150					•••••	280		!		
		.0300	597					75				
*******		.0110	500	600	*******			80	170		50	
			0.04						00		00	
********		.0150								١		
*********		.0180						550		•••••		
********		.0200	200	• • • • • • • • • • • • • • • • • • • •			********	145	50	,	52	
1	i						1 04		0.00	0.4		
		.0200				*****			300			1 000
		.0300	800			130			485		100	1,220
									100			1 200
	71	.0300	666						125			1,390

	Aeres	d.		A	SSETS				LIABI
NAMES OF THE MUNICIPALITIES. (Towns, Villages	of.	umber of Rate-	Lestate.	ssessed value of Personal Property.	of Tax-	Amouut rrears of	ssets.	rporation Debeutures.	Principal ount due to Municipal
and Townships.)	Number o	Number payers	Assessed value of Real Estate.	Assessed vs of Person Property.	Amount of Tax-	Total Amou of Arrears Taxes.	Other Assets.	Corporation Debeuture	Principal Amount due to the Municipal Loan Fund.
Renfrew.—Cont'd.	s	\$	\$	\$	\$	\$	\$	\$	3
HortonT'p	35,663 56,321	231 414	105,214 130,608	20,750 18,100	900	551 168	400		*
Pembroke " Pettawawa " Rolph, Buchanan, Wylie &	7,438 9,046	113 82	48,710 11,620	5,000 1,500		83	91		****
Mackay " Ross " Sebastopol "	9,965 39,954 13,210	74 302 112	9,191 87,284 24,116	4,276 25,150 4,100		141	600		
Stafford " Westmeath"	18,460 60,827	150 459 318	35,228 118,804	4,300 20,600		150			
Total Towns, &c	37,041 523,496	4,565	55,563 1,209,994	11,600 243,516	2,685	2,720	1,432	2,000	
Add—For County		4,565	1 000 004		2,685	3,374	1,432		
Totals, 1867 do 1866 do 1866		4,563 4,444	1,209,994 1,218,565 1,395,615		2,000	2,759 1,616	17,174		
Simcoe.								}	
CollingwoodT'n Barrie"	4,400	351 756	303,184 451,555	2,060 126,573	22,810	133 5,000	2,000 5,000		
BradfordVil. OrilliaT'p	1,700 463	271 181	161,193 120,010	8,550 32,000				4,325	
Adjala " Essa	47,498 66,177	526 612	316,900 651,058	5,000 19,200		75			
Flos	52,331 43,612	349 538	166,340 743,685	12,400 31,400					
Innisfil	68,331	1,009 634	704,984	21,500					
Mono	63,102 69,178	658	218,092 289,363	21,800 21,500	**********	747	85	••••••	
koka" Mulmur"	26,703 69,221	247 564	28,520 267,772	16,100		53 72			
Nottawasaga " Orillia & Mat- chedash "	93,805 72,533	1,108 363	1,274,503	57,700 9,200	5,200	3,304	4,000 586		*** ** ***
Oro	72,747 52,094	742 322	305,069 208,476	13,200 6,400		2,282			***** *****
Tecumseth " Tiny and Tay "	63,078 118,047	742 731	938,140 269,219	36,300 10,300	2,000				************
Tossorontio " Vespra "	44,945 61,646	227 389	258,922 206,970	25,900			321		
Total Towns, &c App—For County			8,057,194	498,723	31,610	25,814 150,000	13,722 85,000	21,325	12,000
	1,091,611 1,098,637 1,056,716	11,320 11,187 10,032	8,057,194 8,664,202 5,004,934	498,723 536,084 244,790	31,610 8,800	175,814 37,360 91,265	98,722 99,049 20,883	21,325 165,500 175,250	12,000 13,662 12,000
C		1					1		
STORMONT, DUNDAS, AND GLENGARRY.									
CornwallT'n IroquoisVil. Morrisburgh"	486 800 1, 066	718 122 194	300,100 7,305 115,638	105,123 8,500 33,200	20,200 600 1,800	55		1,600 200 1,600	******
CharlottenburgT'p	82,291	1,061	796,720	104,100		2,309	200		******

LITIES. REVENUE. EXPENDITURE.												
LITI	ES.			VENUI	Ξ.			ΕX	PENI	DITU	RE.	
of In-	Liabili.	Rate in the \$ imposed for all purposes, exc'pt S.Trustees rates	Am'nt of Taxes collected within the year.	Amount raised within the year by Laan.	Rec'd from Gov. on account of Ad. of Justice.	nes	Interest paid on Debentures.	for	Exp. for salaries & all other exp. of Munic. Govt.	Exp. on acet. of Adm. of Just. in all its branches.	lon	Expenditure on all other accounts.
	Cial	the for a , exc' es rat	'nt of Ta- ected wit the year.	ount raishin the y	d fromGo account of Justic	Other revenues	terest paid o	rpended fo Educational purposes.	xp.for salarics all other exp Munic. Govt	Exp. on acet. of Adm. of Just. in all its branches.	Expenditure Roads and Bridges.	ture
4 12		in sed ses,	t of ted	La Car	d fro	re	est	Expended Educatih purposes.	or s oth	op of of	ndi nds dge	xpenditurally other counts.
Amount terest due.	Other ties.	Rate impos purpos S.Trus	n'n Hec	thin by	200	her	ter	Ed Pur	ahi Mu	its	Rose Bri	all
Ata	ot ii	E in E.S.	AI co]	Ar.	Rec'on	O	In	É	Lix de a	Ey Ad	É	범
											1	
\$	\$ 320	\$	\$	\$	1 \$	\$	\$	\$ 190	S 240	\$	1 S 670	\$ 44
		.0120	2,754			******		246		********	830	4.5
		.0165	900 218	¦				69	100 74		100	8
*******		.0175	210			25	********	00	1.5		25	l •••••••
		.0275	191	İ	1		1		200		i	
********		.0140	424	1		70			295		474	
*********		.0175	580	***********		272		141	280		40.	
••• ••••		.0750	780 2,800		1		1	100	97 323		1.840	51
********		.0180	2,095	************					370	3	260	862
	1,391		23,036	600		1,515	192	7.898	5,825	0.7	10,391	5,392
	3,072	***********	16,481			3,873	3,260	3,693		5,107	10,591	0,002
	4,463		39,517	2,300		5,388	3,452	11,591	17,776	5.104	10.391	5,392
	19,031		24,746	978		1,099	2,454	5,111		1,187		7,451
	833		23,905	59,027		1,895	129	6,053	7,641	121	3,943	7,509
		1										
		.0130	4,235			864	322	410	1,857		529	1,028
	4,000	.0070	7,367	••••••		2,211	260	1,640	945			2,265
		.0075	1,810 677			696 593,	189	150	394 217		781 407	668 1,191
		.0075	2,254					560				19101
*******		.0037	1,785		********	320					2,000	60
*******		.0125	3.018					800			658 771	492 122
*******		.0044	6,500					1,741	1.170		900	
*********		.0045	682 3,700		•••••	628		360 946			195 806	
********		1									1	
		0150	406 2,396	•••••		164		98	209 336		1 000	·····
		.0076				824	720				1,628 2,983	$\frac{75}{235}$
	1	1 1				0.774		1				
	• • • • • • • • • • • • • • • • • • • •	.0097	1,769 900			2,174 3,092		443	412 665		1,273	1,229 2,184
		.0040	2,834			1.643		4	340		1,145	178
********	}	.0042	2,000		•••••	480		250	519 500		1,300 1,835	
******		.0051	1,463	************		347		341			493	346
		.0080	1,164						500		807	
*******	4,000		53,054		241	14,240	1,491	8,149	12,561		20,464	10,300
			63,017		2,849	445	8,625	7,739	3,886	10,226		
	4,000		116,071		3,090	14.685	10,116	15,888	16,447	10,226	20,464	46,960
********	543	t t	51,822	3,000	5,005	26,230	1,840	16,7911	16,281	2,830	24,1691	12,574
******	2,458		123,702	• • • • • • • • • • • • • • • • • • • •	4,569	19,095	10,418	12,410	13,603	16,159	14,081	65,700
	1			-			1				1	-
						-						
•		.0069	4,364				120		4161		2,000	3,000
		.0062	760			48	12	180	90		220	276
		.0053					160	700	690		1,032	******
*******	600	.0005	4,200			794		864	081		2,600	1,200
			,		'			'	1			

	Acres	Rate-		A	SSETS				LIABI
NAMES OF THE MUNICIPALITIES.	1	of Rate	alue	alue	rax- mes.	s of	07	es.	Amount due to the Municipal Loan Fund.
(Town?, Villages	Number of assessed.		ssessed value	Assessed value of Personal Property.	mount of Tax-	Arrears of	Other Assets.	Corporation Debentures.	Principal ount due Munic
and Townships.)	mbe sses	Number	Rea	esse f P	able I	of ArreTaxes.	er A	pora	Prin oun M
	Nu	Na Na	Ass	Ass	Am	Total of A	Oth	Cor	Amou the Loan
Vanishing Committee again to the Parish									
STORMONT, DUNDAS AND GLENGARRY.			\$	\$	\$	\$	\$	\$	\$
(Continued.) CornwallT'p	61,995	792	572,604	61,300	20,000	901			
Finch" Kenyon"	51,362 79,911	483 713	316,570 322,538	3,800	300	800			
Lancaster "	51,128	800 759	476,635 500,317	40,600	3,000	1,286			
Matilda"	61,239	812,	549,900	49,900					
Mountain " Osnabruck	57,600 63,309	661 1,044	248,856 662,097	9,200 57,295	800	 • • • • • • • • • • • • • • • • • • •	*******		
Roxborough " Williameburg "	69,818 58.356	589 793	252,401	45,400 70,737		59,950 412	401		
Winchester "	57,600	661	325,500	44,700					
Total Towns, &c	772,873	10,132	5,987,208	706,845	51,500	65,760 1,165	601	3,400	
•		10,132	5.007.000	F00.045	57.500	'		2 400	
Totals, 1868 do 1867		9,847	5,987,208 5,989,010	706,845 658,880	51,500 56,032	9,172	13,331 16,492	3,400 4,600	6,092
do 1866	762,073	9,745	5,867,426	992,084		9,492	18,964	6,000	7,397
Victoria.								11	
LindsayT'n	1,600	554	498,674	19,500		720	24,004	18,000	
BexleyT'p Carden & Dalton ''	27,631 27,972	S0 191	58,580 73,780	7,100					
*Eldon " *Emily "	61,682 57,967	516 639	228,297 326,816	8,200 67,610			433		
Fenelon" Laxton, Digby	52,359	590	216,310			2,600	400	3,000	
and Langford. "	65,802	173	83,740	5,800	**** . ******	*********			
Lutterworth, An-	15,007	119	20,356	2,450		50			**********
Macaulay, Dra- per, Stephen-						i	į		
son and Ryde " Mariposa "	29,070 74.156	196 908	29,070 663,396	5,350 25,900	1,000	68 490			*********
Ops	56,037 56,660	645 166	330,737 101, 9 07	28,200 700		9,105	1,200		80,000
Verulam"	55,828	420	174,193	1,400					••••••
Total Towns, &c	581,771	5,197	2,805,856	172,310	1,000	13,483	26,137	21,000	80,000
ADD—For County	577,359	5,300	4,435,722	189,500		24,096	75,324	76,000	
Totals, 1868do 1867	1,159,130 544,207	10,497 4,418	7,241,578 2,962,164	361,810 203,210	1,000 ¹ 15,400,	37,529 61,667	101,461' 140,918 ₁	97,060 93,000	80,000 134,068
do 1866	519,792	4,961	2,939,725	188,277		46,350	125,082	76,000	120,000
WATERLOO.	1	11	1	1	1	1	1		
BerlinT'n	3,000 1,400	731 823	391,700	59,700 125,950	25,710 10,694			20,000	
Galt Vil.	624	166	726,744 103,772	14,400	20,300				
New Hamburg " Waterloo"	948 1,088	252 298	114,650 284,741	46,700 23,500	4,900 25,300			27,200	
Preston " N. Dumfries Tp.	2,714 44,256	428 816	312,848 941,294	69,000 71,200	7,200 6,845	78	590	3,600	
Waterloo "	81,544	1,263	1,650,570	218,000	5,192 350	28	•••••		
Wellesley "	70,813	920	1,167,740	87,400	500	28	••••••		

[#] Figures of 1867.

LITI	ES.		RE	VENU	Ε.			EΧ	PENI	DITU	RE.	
of In-	i	Rate in the \$ imposed for all purposes, exc'pt	Am'ut of Taxes collected within the year.	Amount raised within the year by Loan.	of of	nos.	Interest paid on Debentures.	for	Exp for salarics & all other exp. of Munic. Gov't	Exp. on acct. of Adm. of Just. in all its branches.	Expenditure on Roads and Bridges.	ac.
of o	Liabili	for for exec	ut of Ta ected wit the year.	Amount raised within the year by Loan.	Rec'd from Gov. on account of Ad. of Justice,	Other revenues.	terest paid o	spended fo Educational purposes.	Exp for salarics & all other exp. of Munic. Gov'	Jus	penditure Roads and Bridges.	Expenditure all other counts.
titt C	1 (Rate in imposed purposes, S.Trustees	t cf ted e y	n to	cco f Ju	rea	est	Expended Educatio purposes	or oth	of	xpenditur Roads an Bridges.	rpendit all oth counts.
Amount terest due.	Other ties.	rpo rpo Tru	n'u llec th	thin by		her	ter	Kpc Ed Pui	all Mr	d dr	Ro Br	xpe all
Ar to do	0,1	S. n. n. S.	S A	W.	Rec on Ad.	ŏ	- I	<u> </u>	13 % P	E A E	H	=
\$	s	\$	8	\$	\$	\$	\$	\$	\$	\$	\$	ક
*			*					600	100		1,069	500
		.0041	1,700			1,066 300		25	478 200		920	900
		.0053	1,782			430		651	378		1,202	4S 544
******		.0050	2,042 2,744			73 556		500 500			1,025 $1,671$	679
	1	.0025	1,449			1,400		639	399		891	802
		.0075	2,117			95 1,068		462 776	400 288		1,200 1,388	300 1,492
		.0042	699			1,145		380	338		593	533
******		.0037	2,087			851		666	431		806	992
		.0075	3,014	520		511		612	459		1,332	1,696
	600		28,762	520	*****	8,337	292	7,555	6,222	10	17,949	12,962
	275	.0013	8,554		2,809	300		1,823	2,697	2,968	45	7,111
	875		37,316	520	2,809	8,637	292	9,378	8,919	2,978	17,994	20,073
• • • • • • • • • • • • • • • • • • • •	1,179		43,502	600		14,850	1,163 272	$11,254 \\ 10,925$	8,781	3,023 4,688	15,200 $11,887$	20,060 12,274
********	1,651		38,983	** * * * * * * * * * * * * * * * * * * *	3,410	15,838	212	10,020	13,154	4,000	11,001	12,214
	1				1		i	1				
	3,258	.0150	0 509			2,549	1,080	645	1 865		889	5,386
	0,200	.0100				2,040	1,000	010	199		488	50
*******		.0050	271					93	215		122	
		• • • • • • • • • • • •										
	2,500	.0200	4,759	3,000		5,239	55	210	429		4,889	6,689
		.0090	818	 		238		193	594		286	
					1				105		110	260
*******	**. *** ** ***	.0100	200			70		75	105		110	368
		0750	0.07	5.01				F 0	005		107	901
********		.0150	835 3,384	50	••••••	1,225		70	285 600		187 1,120	281 2,790
4,706	220	.0170	9,004			120		230	278		1,565	6,218
		.0150	2,561			127		100	1,240			161 241
	2,455	.0220	4,601						302		2,449	241
4,706	8,433		35,202	3,050		9,568	1,135	1,616	5,902		13,166	22,184
********	14,000		23,441		1,484	1,125	4,980	4,691	3,500		6,066	3,072
4,706			58,643	3,050	1,484	10,693	6,115	6,307	9,402		19,235	25,256
5,918	21,652 28,753		91,481 33,417	8,225	1,464 2,790	9,003 3,926	5,214	5,214 9,736	10.303 9,335	5,118 7,653	20,563 10,896	50,336 25,155
	20,100		00,111	0,220	2,,,,,	0,000	1,001	0,100	-,,,,,,,,	.,,,,,	- ,	
							1				1	
*******		.0100	5,000			989	1,200	2,400			\$00 2,000	1,189 4,257
********		.0110	12,113 1,921			3,357 430	2,040	4,455 805			137	1,474
*******		.0075	1,200			224		1,100	214	********	327	230
*****	110	.0162		м		1.070	1,667	1,400		•••••	252 662	$\frac{220}{960}$
		.0066	4,487 4,368	•••••		1,078 965	240	1,800	434 587		1,268	773
		.0031	6,386			1,080,		1,000	1,340		2,210	1,923
*****		.0052	6,836	•••		898		850	600		3,020	•••••
	1	1										

NAMES OF THE							MUN.	IOIPAI		CAMO
MCKICHAITHES		cres	d.		A 8	SETS]	
Total Towns, C., 20,360		44	f Rassessessesses	alue tate.	alue nal	Fax- mes.	s of	, 60	es.	al ne to sipal
Waterico	(Towns Villages			d v	d v erso erso	t of 'nco	Amerear	SSC	ution utin	t du
Waterico		nbe	nbe	Rea	P	ount e I	Ar axe	er A	pors	Prin oun M
Waterico		Nun	Nun	Asse of]	Asse of P1	Amcabl	Tota of Tr	Ctbe	Corl	Amo the Loa
Wilmot	WATERLOO Cont'd.		-		0	9		· ·	9	
Total Towns, &c. 220,360 7,405 8,100,717 905,750 111,791 156 6,681 117,138	Wilmot T'p		868	1,331,834	113,000					۰۰۰۰۰۰
Totals, 1868. 320,360 7,405 8,100,717 905,750 111,701 156 72,754 137,135 do 1867 312,593 7,315 8,045,001 921,300 185,900 2,741 126,683 116,411 Totals, 1868. 314,824 6,951 6,770,102 686,750 9,883 76,2001 118,011 Totals, 1868. 314,824 6,951 6,770,102 686,750 9,883 76,2001 118,011 Totals, 1868. 202 111,415 2,550 7,400 1,641 Totals 1868. 202 111,415 2,550 7,400 1,645 193 36,889 Totals 1868. 232,824 5,371 5,344,638 396,325 138,807 3,516 26,001 6,738 44,900 Totals 1868. 232,838 5,299,119 366,100 159,711 2,793 115,802 61,900 Totals 1868. 232,828 5,381 5,344,638 396,325 138,807 3,512 174 1,000 Totals 1868. 232,828 5,371 5,344,638 396,325 138,807 3,516 106,011 7,7339 46,738 Total Towns, &c. 236,284 5,371 5,344,638 396,325 138,807 3,516 26,001 69,010 6	Woolwich "	53,000								
do		320,360	7,405	8,100,717	905,750	111,791			20,000	
## Of this amount \$16,778 was expended on account of purchase of an Industrial Farm and the creetion Welland										
Welland										
Chifton	* Of this amount	\$16,778	wasexp	ended on ac	count of p	urchase o	f an Indu	strial Far	m and the	erection
Chippawa Vil 100 202 109,625 25,200 16,625 193 36,839 Port Erie " 668 202 111,115 2,555 7,400 3,9812 174 11,000 2,810 3,9812 Thorold " 1,569 449 1294,812 41,950 39,812 174 11,000 2,810 3,9812 Welland " 18,947 278 369,277 20,000 700 742 4,200 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174 11,000 3,9812 174	WELLAND.		==						1	
Port Eric.										28 820
Welland	Fort Erie						190		200	
Bertie	Thorold "				41,950			11,000	2,810	
Crowland 18,947 278 339,277 20,000 7	Welland " RertieT'p								40,000	
Pelham	Crowland "	18,947	278	359,277	20,000	700				
Samford	Trumborro Delinin							10.806		
Wainfleet "44,978 514 369,555 13,575 121 20,000 9,899 Total Towns, &c. 236,284 5,371 5,344,638 396,325 138,807 3,516 26,021 69,010 46,738 ADD - For County. 236,284 5,371 5,344,638 396,325 138,807 3,516 26,021 69,010 46,738 ADD - For County. 236,284 5,371 5,344,638 396,325 138,807 3,516 106,021 77,339 46,738 do 1867	Stamford		573	734,504	65,900	6,620				
Willoughby " 18,333 250 319,326 25,800 97 15										
Totals 1868										
Totals 1868 236,284 5,371 5,344,638 396,325 138,807 3,516 106,021 77,339 46,738 4				5,344,638	396,325	138,807	3,516			
Color Colo					004.005	100.00*	9.110			
Wellington Guelph										
Guelph T'n 3,480 1,049 1,294,025 154,700 167,100 28,598 53,427 Flora Vil. 1,000 366 235,911 16,550 26,200 3,412 14,040 14,040 Fergus 1,000 242 279,430 45,800 7,350 1,153 2,589 15,500 Mt. Forest 1,325 221 104,360 6,900 1,400 504 1,000 Orangeville 1,325 221 104,360 6,900 2,950 3,000 2,950 Amthur 65,310 684 469,40 41,700 600 3,000 2,950 Eramosa 43,916 600 661,705 92,600 3,800 3,000 2,000 Erin 40,966 856 919,171 53,950 55,800 600 3,000 1,000 Erin 76,295 899 579,550 55,800 3,000 19,600 19,600 Maryboro' 55,545 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
Elora Vil 1,000 366 235,911 16,550 26,200 3,412 14,040 Fergus " 1,000 242 279,430 45,800 7,350 1,153 2,589 15,500 Mt. Forest " 717 290 131,660 29,400 1,400 Orangeville " 1,325 221 104,360 6,900 Amaranth T'p 48,634 343 141,595 10,300 2,950 Arthur " 65,310 684 469,540 41,700 Eramosa " 43,916 660 661,705 92,600 3,300 Eramosa " 40,906 856 919,171 53,950 Garafraxa " 76,295 899 579,550 55,800 Guelph " 37,100 570 1,041,575 116,700 5,900 350 14,500 19,600 Maryboro " 55,545 683 334,550 16,300 Maryboro " 55,545 683 334,550 16,300 Minto " 26,957 656 524,912 61,200 Peel " 73,587 1,123 692,455 57,100 Pilkington " 28,820 542 509,930 53,400 Puslinch " 56,513 706 913,545 135,200 5,000 38 Total Towns, &c. 710,715 11,155 9,371,072 1,000,900 216,250 15,062 51,187 264,767 Totals, 1868 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 384,767 Totals, 1868 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 384,767 Totals, 1868 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 753,842 77,316 Totals, 1868 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 753,842 77,316 Totals, 1868 710,715 721,037 10,806 9,205,245 992,825	WELLINGTON.									
Fergus " 1,000 242 279,430 45,800 7,350 1,153 2,589 15,506 Mt. Forest " 717 290 131,680 29,400 1,400 504 1,000 1,000 Orangeville " 13,25 221 104,360 6,990 504 1,000 1,000 Amaranth Tp 48,634 343 141,595 10,300 2,950 Arthur " 65,310 684 469,404 41,700 600 3,000 Erin " 40,906 856 919,171 53,950 Guelph " 37,100 570 1,041,575 116,700 5,000 350 14,500 19,600 Luther " 79,877 530 96,043 10,000 5,822 40,000 119,600 Minto 26,957 656 524,912 61,200 1,216 2,100 10,000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>28,598</td><td>53,427</td><td></td></t<>								28,598	53,427	
Mt. Forest. " 171 290 131,660 29,440 1,400 1,000 1,000 Amaranth Tp 48,634 343 141,595 10,300 2,950 1,000 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>7,350</td><td>1,153</td><td>2,589</td><td>15,500</td><td></td></td<>						7,350	1,153	2,589	15,500	
Amaranth Tp A48,634 343	Mt. Forest "								1 000	
Arthur 65,310 684 469,540 41,700 600 3,000	011011501111111111111111111111111111111						2,950	,		
Erin " 40,906 856 919,171 53,950 <t< td=""><td>Arthur</td><td>65,310</td><td>684</td><td>469,640</td><td></td><td>2 200</td><td></td><td>3,000</td><td></td><td></td></t<>	Arthur	65,310	684	469,640		2 200		3,000		
Garafraxa										
Luther 79,877 530 96,043 10,000 5,622 40,000 40,000 Maryboro' 55,545 683 33,4550 16,300 400 71,200 Nichol 26,957 656 524,912 61,200 1,216 2,100 10,000 Peel 73,587 1,123 692,455 57,100 17 40,000 17 Pilkington 28,820 549 509,930 53,400 38 400 913,545 Puslinch 56,513 706 913,545 135,200 5,000 38 51,187 264,767 50,500 50,000 38 51,187 264,767 50,500 50,000	Garafraxa "	76,295	899	579,550	55,800			l		
Maryboro' 65,543 683 331,350 16,300 40,000 71,200 40,000 71,200 10,000 1,216 2,100 10,000 </td <td>G G G G G G G G G G G G G G G G G G G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5.822</td> <td>14,500</td> <td>19,600</td> <td></td>	G G G G G G G G G G G G G G G G G G G						5.822	14,500	19,600	
Nichol	Maryboro' "	55,545	683	334,550	16,300				40,000	
Peel " 73,587 1,123 692,455 57,100 17 40,000 Pilkington 28,820 549 509,930 53,400 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										
Puslinch " 56,513 706 913,545 135,200 5,000 38 Total Towns, &c. Address 710,715 11,155 9,371,072 1,000,900 216,250 15.062 51,187 264,767 Totals, 1868 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 384,767 Do 1867 721,037 10,806 9,205,245 992,825 5,626 51,581 753,842 77,316	Peel "	73,587	1,123	692,455	57,100	١			40,000	
Total Towns, &c. 710,715 11,155 9,371,072 1,000,900 216,250 15.062 51,187 264,767 120,000 10,582,092 100,582,092 120,000 216,250 15.062 51,187 120,000 120,000 1867 710,715 9,555 19,953,164 1,000,900 216,250 15,062 51,187 384,767 10,806 9,205,245 992,825 51,581 753.842 77,316						5,000				
Add For County		710 715				218 250	15.069	51 197	1 264 767	i
Do 1867 721,037 10,806 9,205,245 992,825		1	1 . (210,230	15.002	91,187		

							-	-	-	75 (1000) 1000		
LITI	ES.	1	REV	ENU	Е.			EXI	ENI	ITU	RE.	
Am'nt of Interest overdue.	Other Liabili- ties.	Rates in the \$\(\frac{\pi}{\pinposes}\) imposed for all purposes, exu'pt \$\(\frac{\pinposes}{\pinposes}\) Trustees rates	Am'nt of Taxes collected within the year	Amount raised within the year by loan.	Rec'd from Gov. on account of Ad. of Jutice.	Other	Interest paid on Debentures.	Expenditurefor Educational purposes.	Exp. for salaries & all other exp.	Exp. on acc't of Ad. of Just. in all its tranch.	Expenditure on Roads and Bridges.	Expenditure on all other account.
s	s	s	\$	s	s	8	S	8	S	s	ŝ	s
4		.0050	7,745		Ų	929	1	850	775		3,465	
		.0045	5,182			020		700	711		2,129	
	110		60,767			9,950	5,147	15,860	8,301		16,270	13,892
	3,873	2	8,612	19,175	3,847	7,045	600	7,031	2,853	8,148		*17998
		į										
	3,983		69,379						11,154			31,890
	9,783							19,116				30,463
		*****	58,601	380	4.596	16,324	7,145	18,395	8,775	7,166	19,654	23,903

thereon of a House of Industry and Refuge.

				-								
	!		(1	:					
		.0065	3,408			725	İ	1,283	1.305	91	731	741
		.0040						806			941	1,896
	332		1,003				1 16	216	210		270	555
		.0135	5,600			742	1,055	1,330	540		1,428	1,783
	***************************************	.0050	1,870			696,	1,000	600	159		763	207
********	*****	.0090	5.947			260	32	320	500		200	201
		.0060	2,412			200		225	154		124	20
*******		.0050	3,676			521		339	450	20	403	205
**********	******	.0068	3,677			1,201	}	538	340	~ ~ ~	52	235
		.0050	3,757			1,629		942			112	517
********	*****	.0075	5,136				420		308			415
	***********	.0140				742 42		734	396		391	136
	**********		5,458				1,200	300			75	
********		.0062	2,253			264		114	240		347	23
1,220	332		45,732			6,822	2,723	7,725	8,088	111	5,937	6,733
1,220	18,000		40,102		3,166		2,829	4,611	13,584		986	5,538
	10,000				0,100	0,110	2,020	4,011	10,004	1,110	700	
1,220	18,332		45,732		3,166	12,235	5,552	12,336	21,672	8,290	6 992	12,271
927	16,482		46,483			15,808	5,954	6,455	9,003			18,413
	16,392		43,407				6,900			6,326		12,617
	10,002		10,101	100	2,002		- 0,000		*,*/21	0,020	0,000	12,011
-												
1												
*** ****	2,763	.0125	20,443			17,526	2,511	3,967	4,025		2,956	2,119
		.0090	2,070			675	227	60			319	3,388
	1,154	.0115	3,945			4,086	210				317	5,570
		.0100	1,576			505			346		982	70
	l	.0057	1,035	•••••		390	70		233		225	
		.0100	1,518			100			367	18	425	20
	2,222	.9080	2,560			1,267		730	781		1,485	1,258
		.0080	4,222			500		2,981	470	1	1,264	520
24		.0055	5,841	700		898		1,390	449		940	368
	l	1 ,0036	5,700						800		750	
		.0056	6,520			1,715	1,176	500	765		1,333	148
*******		.0125	1,275			***************************************			440		380	
		.0210	6,320		*****			990	542		1,044	7,394
*******		.0170	6,695			999	72	818	543	15	1,505	944
		.0076	3,286			1,384	1	649	803		414	2,629
		.0130	10,547	900		262		1,200	777		1,619	209
		.0060			: , • • • • • • • •				328		600	20
	•••••	.0060	4,000			285		650	445	105	908	200
24	6,139		87,053	4,363	i	30,592	4.266	13,935		138		24,927
	•••••			******			7,000	2,000	4,900	4,600	17,600	14,700
	0.100	***	07.450	1.0.10		20.702	31.003	75.005	15.000	4 7110	25 100	20.00
21	6,139	**********	87,053			30,592		15,935		4,738	35,166	
*****	15,032		84,920	2,350		43,253	17,143		16,275	4,711		
76	5,419		58,989	9,335		36,574	9,135	33,106	13,599	4,600	37,652	49,757
)	l l	:								1		

ATTENDED TO STATE OF THE PARTY						-			
	6.8	l.		A	SSETS			-	LIABI
Names of the Municipalities. (Towns, Villages and Townships.)	Number of Acres	Number of Rate- payers assessed.	Assessed value of Real Estate.	Assessed value of Personal Property.	Amount of Tax-	Total Amount of Arrears of Taxes,	Other Assets.	Corporation Debentures.	Amount due to the Municipa!
WENTWORTH.			\$	\$	\$	\$	\$	\$	\$
Dundas T'n. Ancaster T'p. Barton " Beverly " Binbrook " Flamboro' E " Flamboro' W " Glanford " Saltfleet " Total, Towns, &c Add—For County Tetals, 1868	550 45,675 14,490 70,213 26,825 33,053 30,154 23,339 28,126 272,725	800 883 766 1,141 322 733 751 419 603 6,418	1,323,844 616,818 661,141 377,618 554,058 705,839 513,760 414,176 6,024,274	64,700 47,300 16,900 91,034 22,500 74,100 8,500 12,100 13,700 350,834	95,546	26,012 52 57 347 475 110 343 676 28,072	22,500 14,125 5,837 2,259 1,948 11,837 6,490 64,996	68,715 68,715 34,917 103,632	52,000
Do 1867 Do 1866 York.	271,906	6,402	5,930,748 6,023,544	482,108 457,555	109,375	36,095 42,637	211,840	70,777 129,768	
AuroraVill Holland Landing " Newmarket" Yorkville " EtobicokeTp. Georgina" Gwillimbury E" King " Markham " Searboro'" Vaughah" Whitchurch " York " Total, Towns, &c Add—For County Totals, 1868 Do 1866 Do 1866	527,926	10,479	126,335 82,784 311,550 573,847 884,900 351,018 737,129 396,774 1,522,045 2,046,667 1,140,020 1,835,771 1,111,480 1,887,337	10,600 15,600 24,440 31,093 62,740 14,000 35,600 25,100 2,600 151,800 89,100 93,300 121,500 145,700 \$23,099 974,758 1,345,440	2,750 2,800 23,200 5,100 350 	1 1,861 245 68 1555 69 2,156 81 2,621 7,262 5,020 7,547	214 1,955 28,502 10,800 432 10,000 26,077 10,500 88,480 2,798 91,278 71,229 95,590	18,200 18,200 45,550 63,750 68,560 131,316	

-												_
LIT	IES.	11		VENU	Е.		11	EN	PEN	DITU	JRE.	
Amount of In- terest over-	Other Liabili-	Rate in the \$ imposed for all purposes, exe'pt	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of		Interest paid on Debentures.	Expended for Educational	Exp. for salaries & all other exp.	Exp. on acct. of Adm. of Just. in	Expenditure on Roads and	Expenditure on all other ac-
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
229		.0036 .0056 .0058 .0058 .0050 .0050	4,886 5,552 5,576 2,268 3,099 4,330 2,811			1,725 396 1,607 254	5,09	1,842	601 523 560 234 456 590 396		410 310 633 270 141 354	4,747 33 5,702 459 52 3,502 211
229 834		.0353	47,500 27,318		4,456	16,324 26,644	5,095 2,495		5,734 6,975	15,631	5.325 3,872	28,142
1,063 1,000 718	3,600		74,818 66,783 50,697			54,193	7,590 8,145 9,251	12,396	11,817	15,631 14,868 16,240	7,099	62,896
	1,000	.0070 .0041 .0082 .0029 .0030 .0025	997 1,393 4,477 4,444 1,096 3,345 11,512			1,143 3,564 1,023	1,388	704 100 795 606 201 651 445	\$49 500 420 428 442		361 186 1,076 670 874 1,123 958 950 1,714	773 621 1,005 3,704 3,494 540 1,881 303 792
	2,025	.0030 .0037 .0020 .0030 .0032 .0045	11,512 7,074 3,883 11,072 5,424 7,416			900	•••••	900 65 6,175 1,765 987	750 618 1,827		2,600 3,264 2,285 1,183 3,443	1,250 3,264 4,355 1,840 6,386
	4,3 2 7 3,397		64,975 20,715		3,294	18,638 3,433	1,388 2,990	14,045 1,260	9,659 6,132	12,102	20,687 2,350	30,208 11,400
SS	7,724 4,316 6,132		95,690 84,651 143,906	5,701 12,220	3,294 3,955 4,884	22,071 14,218 21,915	4,378 4,722 5,763	20,969	15,791, 14,537, 21,727		23,037 23,395 20,854	41,608 33,217 103404

							-		
	eres	Rate-		AS	SETS.				LIABI
NAMES OF THE MUNICIPALITIES.	V	U)	value Estate.	value onal y.	ax-	unt	o ₂	on es	e to
	of ed.	ofo	E	1 5 tr	t of Ta	Amount rrears of	ssets.	oration	Principal noun, due e Municip
(Towns, Villages and Townships.)	nber	mber	ssed		unt : In	SS.	r A	ora	Princip mount le Mur oan Fu
,	Number assess	Number	Assessed of Real	lese of Pr	Amount of able Incor	Total of A Taxe	Other	Corporation	Prin Amou the N Loan
CITIES.			\$	\$	\$	\$	\$	\$	\$
Hamilton	2,300	6,067	6,781,161					2,512,829	
Kingston	2,300	3,572	3,572,344	685,840	287,340	55,340		323,733	
London	1,245	3,861	3,860,120	543,200	625,550	60,602	1080,246	524,722	375,400
Ottawa	1,829	5,548	4,311,634	336,200	320,600	84,340	57,336	104,816	50,000
Toronto	*4,885	14,857	18,664,047	3645,088	2364,538		1892,246	2,278,840	
				` 					105 100
Total Cities 1868.		33,905						5,744,940	
Do 1867.		32,510	36,736,909					5,601,841	
Do 1866.	13,196	31,238	38,301,882	10353282		421,117	4094,064	5,849,544	375,400
								1	

[#] Figures of 1866.

Towns SEPARATED FROM COUNTIES.									
Belleville	1,200	1,621	2,370,698	167,300	58,300			33,000	
Brockville	550	2,014	967,048	58,900	35,300	589	490,005	1,200	400,000
Cobourg	2,389	1,075	1,313,567	429,238	56,590	2,769		243,364	******
Peterboro'	570	1,210	990,290	175,200	81,200	308	3,047	81,800	100,000
Port Hope	958	1,072	1,098,800	139,600	83,511	6,844	232,719	66,811	
*St. Mary's	2,681	721	526,625	33,600	40,876	1,800	24,369	30,000	
St. Thomas	600	445	406,340	1,000	18,100	4,438	3,463	107,100	
							!		
Total separated									
Towns 1868	8,948	8,158	7,673,368	1,004,838	373,877	36,748	776,203	563,275	
Do 1867	8,7481	7,982	7,186,178	674,528	457,395	19,066	1,038,464	404,653	3,326,692
Do 1856	9,419	7,119	7,823,286	685,581		29,938	1,213,338	582,876	1,371,223

^{*} Figures of 1867.

LITI	ES.		RЕ	VENU	Ε.			ΕX	PENI	ITU	RE.	
Amount of In- terest over- due.	Other Liabili- ties.	Rate in the \$ imposed for all purposes, exc'pt S.Trustees rate.	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of Ad. of Justice.	Other revenues.	Interest paid on Debentures.	Expended for Balancian Purposes.	Exp.for salaries & all other exp. of Munic. Gov't	Exp. on acet. of Adm. of Just. in all its branches,	Expenditure on Roads and Bridges.	Expenditure on all other accounts.
\$ 41,670 239799	\$ 54,027 43,515	\$.0130 .0137 .0105 .0168	\$ 150,575 58,744 53,019 5,079 157,056	\$	\$ 1,132 852 343 4,493	\$ 40,793 18,950 22,724 21,875 612,472	\$ 108873 19,452 31,243 7,579 135599	\$ 27,584 10,015 13,246 16,872 29,329	5,862		7,034 9,921	
281469 256477 214422	445,792 856,243 533,645		424,473 512,961 576,555	29,900 16,400 44,870	6,820 15,485 10,638	716,814 397,808 525,271	302746 301384 326518	84,151	84,413		90,156	590816 284586 529003

									1			
	16,000	.0095	34.142			3,550	3,380	800	5,000		6,000	6,350
25,797		.0070	9,403	******		3,440	930	3,816	2,447	1,061	3,660	2,890
		.0125	18,564	******		2,152		2,700	2,095	1,000	1,754	2,075
3,961	1,816	.0110	14,487	5,000		12,678	5,028	3,318	2.177	2,978	4,145	13,677
	239,563		12,123			12,416	4,278	3,000	2,381	875	3,491	24,596
	16,000	.0150	9,379			1,400	2,094	3,000	1,180	275	1,783	3,625
		.0110	3,802	********	 	1,813	3,213	1,561	874	003	1,390	389
		·										
	i				1	1						
29,758			101,900	5,000		37,449	18,923	18,195	16,154	6,789	22,223	52,592
20,638			98,595			39,048	18,977	15,331	18,023	7,856	16,305	84,773
665305	356,207		87,076	37,088		63,783	23,883	25,904	63,074	7,746	17,625	67,793
	1						1				,	

NAME OF COUNTY,										
Countries or Ontario 218,460 5.802 7,165,338 655,500 28,394 21,135 696,548 113,600 630,000 630		cres	ate-		A	SSETS				LIABI
Counties of			Ress	lue ate.	ue 131	ax-	of		o ₂ *	al to
COUNTIES OF ONTARIO. S S S S S S S S S S S S S S S S S S S	NAME OF COUNTY.			Sst	val sor	f T	ars	etis	on	palici
COUNTIES OF ONTARIO. S S S S S S S S S S S S S S S S S S S		er	er	ed El	Per	In	Alrre	Ass	ati	nt d
COUNTIES OF ONTARIO. S S S S S S S S S S S S S S S S S S S		na b Sec	ay	88.00	rol	le sur	La V	i i	ebc	in Na
Counties of Ontario S		Nu a	n C	583	SS of	about	Hoot	th th	EA	OB DE
Brant				~	~	~				427
Brant	CONTINUENCE									
Bruce				\$	\$	\$	\$	\$	\$	\$
Bruce	Danak	910 450	5 000	F 105 990	ess son	200 040	01 105	000 540	110 000	E 00 0 0 0
Carleton 559,835 5.279 3390,746 340,855 17,800 4,016 7,945 41,400 37,265 Essex 418,140 6,439 6,390,246 25,600 6,900 10,061 36,293 516,63 37,265 Frontenae 513,872 5 412 2,440,329 228,449 26,200 21,755 141,854 119,200 Grey 1,083,951 1,0424 4,753,180 475,181 52,714 28,750 517 45,679 47,412 13,838 Haldimand 282,995 4,686 3,479,041 173,632 28,750 517 45,679 47,412 13,838 Hastings 539,987 7,821 3,713,866 208,546 10,600 14,294 76,671 171,100 99,783 Harron 81,638 13,129 3,414,499,660 155,985 133,535 299,863 233,861 Kent 541,633 7,337 4,068,518 493,360 26,575 23,415 143,557 33,955 10										
Figure							4.016			00,000
Prontenne										37,262
**Grey			6,116				259,475		68,430	20,224
Haldimand										
Halton 247.294 4.813,290 349,970 11,400 6,122 16,427 8,706 97.88 Hastings 539,987 7,621 3.713,088 208,546 10,600 14,294 76,671 171,100 99,783 Haron 805,586 11,120 8,137,444 495,660 155,985 23,445 13,536 299,863 237,861 kent 541,635 7,337 4,069,518 493,360 26,527 23,445 143,587 35,955 100,001 Lambton 616,283 5,969 3,026,993 536,500 96,104 12,156 33,345 9,400 800,901 Loeds & Grenville 12,041 6,469,965 435,385 37,900 2,771 775,500 576,000 554,000 Leenox & Adding'n 322,355 5,726 3,777,579 187,892 465 11,357 139,407 82,000 Middlesex 745,748 12,1729 9907,993 669,100 29,260 64,331 12,497 189,994 25	*(Frey									************
Hastings										13,388
Haron										
Kenf. 541,635 7,337 4,069,518 493,360 26,275 23,445 143,587 35,955 100,000 Lambton. 673,994 6,885 5,132,907 40,250 56,589 79,669 53,324 66,766 16,000 Loeds & Grenville. 730,987 12,601 6,469,965 435,385 37,900 2,777,579 17,590 57,600 554,00 Lennox & Adding'n 204,643 6,154 6,557,187 454,518 288,977 19,527 249,971 189,994 250,990 Middlesex 745,748 12,172 9,907,929 659,100 29,260 64,830 123,917 845,435							14,204			
Lambton. 673,994 6,888 5,132,907 440,550 56,588 79,669 53,324 66,766 16,000 Lanark 616,283 5,969 3,025,993 536,500 6,104 12,156 33,453 9,400 800,000 Lennox & Adding'n 352,355 5,726 3,777,579 187,892 465 11,357 139,407 82,000 Lincoln. 204,643 6,154 6,557,187 454,518 288,977 19,527 249,971 189,994 250,990 Middlesex 745,748 12,172 9,007,999 659,100 29,260 64,830 123,017 845,435 Norfolk. 376,415 5,880 4,597,663 217,165 3,800 10,405 13,861 14,400 403,000 Northumberland & Durham 772,912 11,970 20,461,001 768,645 67,975 5,438 64,984 48,984 126,800 Oxford 476,972 9,102 9,963,564 636,500 55,655 6,972 140,217 123,591 171,270 Peter 50,234 5,053 5,984,511 447,450 32,886 1,667 22,336 46,250 Petrh 510,281 7,468 5,297,588 264,108 41,200 7,399 50,160 172,775 288,000 Peterborough 693,040 4,423 2,117,392 205,000 13,710 11,557 4,645 27,000 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 1,599,806 253,900 16,780 4,200 22,534 2,200 Prescott & Russell. 548,702 4,181 4,144,955 348,398 23,100 598 27,911 Prince Edward 264,229 4,166 4,146,955 4,207 3,117,91 155 72,754 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400 3,133 3,400						26.275	23.445			
Lanark 616,283 5,969 3,026,993 536,500 96,104 12,1564 33,455 9,409 800,001 1										
Lennox & Adding'n 350,987 12,601 6,469,965 435,385 37,900 2,771 775,500 57,600 554,000 Lincoln 352,355 5,726 3,777,579 187,892 465 11,357 139,407 82,000 Lincoln 204,648 6,154 6,557,187 454,518 288,977 19,527 249,971 389,994 250,999 Middlesex 745,748 12,172 9,907,929 669,100 29,260 64,830 123,017 13,861 14,400 403,000 Mortoland & Durham 772,912 11,970 20,461,001 768,645 67,975 5,438 64,934 48.984 48.984 126,800 Mortoland 476,972 9,102 9,963,564 636,500 55,655 6,972 140,217 123,591 171,277 172,177		616,283	5,969							
Lincoln	Loeds & Grenville									554,000
Middlesex 745,748 12,172 9,907,929 659,100 29,260 64,830 123,017 845,485										
Northumberland & Orthumberland & Durham					454,518					250,990
Northumberland & Durham										409 000
Durham		1) (0) 410	3,000	4,001,000	217,100	5,300	10,400	15,501	14,400	400,000
Ontario 500,064 6,504 7,579,898 594,340 98,020 4,291 15,498 37,600 171,277 Peel 291,534 5,053 5,984,564 636,500 55,555 6,6972 140,217 123,591 171,277 Perth 510,281 7,468 5,297,588 264,108 41,200 7,399 50,160 172,775 288,006 Peterborough 693,040 4,423 2,117,392 205,000 13,710 11,557 4,645 27,000 172,775 288,006 Princo Edward 264,229 4,146 4,144,985 343,898 23,100 508 27,911 27,000 172,775 288,006 Simcoe 5,3496 4,565 1,209,994 243,516 2,685 3,374 1,432 34,750 12,325 12,000 Stormont, Dundas and Glengarry 77,2873 10,182 8,987,208 706,815 51,500 66,925 13,331 3,400 97,000 89,000 Watorloo 226,345		772.912	11,970	20,461,001	768,645	67.975	5.438	64.984	48,984	126,800
Oxford 476,972 9,102 9,963,564 636,500 55,655 6,972 140,217 123,591 171,276 Peel 291,534 5,053 5,984,511 447,450 32,866 1,667 22,336 46,250										
Perth	0xford	476,972	9,102		636,500					171,276
Peterborough										
Prescott & Russell 548,702 4,181 1,899,806 253,900 16,780 4,200 22,534 2,200										288,000
Prince Edward 264,229 4,146 4,144,985 343,898 23,100 508 27,911 34,750 Renfrew 523,496 4,565 1,209,994 248,516 2,685 3,374 1,432 34,750 Simcoe 1,091,611 11,820 8,057,194 498,723 31,610 175,814 98,722 21,325 12,000 Stormont, Dundas and Glengarry 772,873 10,182 8,987,208 706,815 51,500 66,925 13,331 3,400 30,000 Watorloo 203,030 7,405 8,100,717 905,750 111,791 155 72,754 137,138 Welland 236,284 5,371 5,344,638 396,325 138,807 3,516 106,021 77,339 46,738 Wentworth 277,275 6,418 6,024,274 350,831 95,546 28,072 63,750 11,479 354,662 31,187 384,767 384,767 384,767 384,767 384,767 384,767 384,767 384,763 384,767										******
**Renfrew 523,496 4,565 1,209,994 243,516 2,685 3,374 1,432 34,750									2,200	•••••
Simeoe 1,091,611 11,320 \$,057,194 498,723 31,610 175,814 98,722 21,325 12,000 Stormont, Dundas and Glengarry Victoria 772,873 10,132 8,987,208 706,815 51,500 66,925 13,331 3,400									34.750	*****
Stormont, Dundas and Glengarry 772,873 10,132 8,987,208 706,815 51,500 66,925 13,331 3,400										
and Glengarry. 772,873 10,132 8,987,208 706,815 51,500 66,925 13,331 3,400		, , , , , , , ,	,,,,,,	5,551,101	100,120	0.,	-,0,0.1	00,122	1 -1,020	22,000
Victoria 1,159,130 10,497 7,241,78 361,810 1,000 37,529 101,461 97,000 80,000 Watorloo 203,600 7,405 8,100,717 905,750 111,791 156 72,754 137,138 137,138 137,138 137,138 146,733 Wellington 3,516 106,021 77,739 46,733 46,733 15,344,638 396,225 138,807 3,516 106,021 77,339 46,733 77,339 46,733 84,767 70,715 11,155 19,953,164 1000,900 216,250 15,062 51,187 384,767 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000 63,750 103,632 52,000	and Glengarry									
Welland 236,234 5,371 5,344,638 396,325 138,807 3,516 106,021 77,339 46,738 Wellington 710,715 11,155 19,953,164 1000,900 216,250 15,062 51,187 384,767 384,767 Wentworth 272,725 6,418 6,024,274 350,831 9,546 28,072 64,996 103,632 52,000 York 19,605,395 268051 230575,455 16214982 2278,858 1375,517 3611,444 3939,301 3913,578 App—Cities and Sep. Tewns 21,507 42,063 44,892,674 8103,786 4300,065 384,542 3375,163 6308,215 932,406 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 3350,281 10502313 10260151	Victoria							101,461		80,000
Wellington 710,715 11,155 19,953,164 1000,900 216,250 15,062 51,187 384,767 Wentworth 272,725 6,418 6,024,274 350,834 95,346 28,072 64,996 103,632 52,000 York 527,926 10,574 13,007,657 824,999 70,225 7,262 91,278 63,750 Total Counties 19,605,395 268051 230575,455 16214982 2278,858 1375,517 3611,444 3939,301 3913,578 Sep. Towns 21,507 42,063 44,892,674 8103,786 4300,065 384,542 3375,163 6308,215 932,400 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 13,972,917,299636 212888,435 23963077 7768,547 1353,992 8350,281 10502313 10260151										
Wentworth 272,725 6,418 6.024,274 350,831 95,546 28,072 64,996 103,632 52,000 York 527,926 10,574 13,007,657 824,999 70,225 7,262 91,278 63,750 53,750 Total Counties 19,605,395 268051 230575,455 16214982 2278,558 1375,517 3611,444 3939,301 3913,578 App—Cities and 21,507 42,063 44,892,674 8103,786 4300,065 384,542 3375,163 6308,215 932,400 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 8350,281 10502313 10260151										46,738
York 527,926 10,574 13,007,657 \$24,999 70,225 7.262 91,278 63,750										52.000
Total Counties 19,605,395 268051 230575,455 16214982 2278,858 1375,517 3611,444 3939,301 3913,578 App—Cities and Sep. Tewns 21,507 42,063 44,892,674 8103,786 4300,065 384,542 3375,163 6308,215 932,400 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7768,547 1353,992 8350,281 10502313 10260151										02,000
ADD—Cities and Sep. Towns 21,507 42,063 44,892,674 \$103,786 4300,065 384,542 3375,163 6308,215 932,400 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 8350,281 10502313 10260151										
Sep. Tewns 21,507 42,063 44,892,674 \$103,786 4300,065 384,542 3375,163 6308,215 932,406 Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 8350,281 10502313 10260151		19,605,395	265051	230575,455	16214982	2278,858	1375,517	3611,444	3939, 301	3913,578
Totals, 1868 19,626,902 310114 275468,129 24318768 6578,923 1760,059 6986,607 10247516 4845,978 Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 8350,281 10502313 10260151		21,507	42,063	44,892,674	\$103,786	4300,065	384,542	3375,163	6308, 215	932,400
Do 1867 18,972,917,299636 212888,435 23963077 7708,547 1353,992 8350, 281 10502313 10260151	•							<u> </u>	İ	
20 10001111 20,017,122 200000 200201,001 2020001 111111111 1201,011 0074,012 10100000 0120,002										
	200 1000	20,011,122	200000	2,0201,001	23230001		1201,011	0017,014	1010000	0120,002

^{*} Figures of 1867.

LITIE	s.]	REVEN	UE.	- 11		EX	PEND		RE.	
4.7. 1		9 0	च्या ।	. 5	5;	0.0	for	1 2 c	Exp. on acct. of Adm. of Just. in all its branches.	g l	on ac-
of In-	Liabili	Am'nt of Taxes collected within the year.	Amount raised within the year by Loan.	Rec'dfrom Gov. on account of Ad. of Justice.	Other revenues	terest paid o	2	Exp. for salaries & all other exp. of Munic. Gov't	ct.	Expenditure on Roads and Bridges.	
. 00	Lis	int of Tallected with	ount raishin the y	nno	DAG	Interest paid Debentures	rpondod Educatio purposos.	sal her	Ju	s s	ependiture all other counts.
Amount terest due.		t o	L	lfr eec	i i	ost ber	Exponded Education purposes	for	on of o	oad idg	rpendit all oth counts.
moun terest due.	Other ties.	th th	thi		ho	De	da al	all M	dundinit	G M H	and and and and and and and and and and
Ar	O Ct	A100	W.	Rec on Ad.	ō	I I	国	E 43 20	a A E	闰	M
		1		1			1				
\$	\$	s	8	s	\$	\$	\$	\$	\$	s	\$
147			4.								
11,780	12,108	72,576	00.000	4,817	33,876	26,530	$\frac{19,470}{15,891}$	13,908 12,118	7,714	$\frac{13,440}{46,926}$	24,617 40,017
	31,500 99	127,121	20,000 1,317	$\frac{1,677}{2,736}$	10,574 8,889	19,466 2,695	3,508	6,410	9,307	12,077	18,989
	6,505	88,450	3,500	2,485	17,357	1,374	15.269	9,255	6,8961	15,737	41,195
2,877	5,641	53,246	250	2,895	22,480	9,051	22,183	18.654	12.254	28,693	20,025
******	30,000	48,965	4,900	2,713	22,773 10,616	9,160 23,135	9.146	9,062 14,730	11,639 10,229	8,917 18,208	$\frac{14,706}{21,786}$
2,688	11,930 1,350	104,754 26,630	5,947	$\frac{2,876}{2,226}$	16,668	$\begin{bmatrix} 25,155 \\ 1,643 \end{bmatrix}$	5,145	5,472	5,027	9,308	9,051
0000	388	35,267	1	2,074	3,707	548	15,617	6,811	4,713	7,9211	8,680
	90	56,245	11,000	1,893	11.525	11,779	6,035	4,443	3,869	19,338	30,275
8,658	4,018	232,198			26,100	50,504 9.124	9,410	12,915	5.000 9,215	53,527 36,214	18,028 49,565
33,781	31,155 38,159	55,621 46,561	25,056 47,178	$\frac{3,217}{2,627}$	25,460 37,944	7,243	13,190	10,610	6,626	30,009	37,309
507,360	150	46,001	9,252	980	6,542	1,640	17,776	6,610	6,887	7,089	7,759
25,797	8,819	78,155		2,982	49,409	3,411	31,058	18,809	8,762	15.073	31,393
	48,987	39,537	1,986		28,676	4,922	15,159	6,858	2.672 9,266	9,808	24,265 36,984
13,273 15,340	1,980 36,221	103,657	14,000	3,510 5,787	17,692 30,020	12,415 54,930	14,961 16,619	11,645	19,874	37,037	103,590
74,058	3,000	32,057	5,721	3,948		439	16,367	5,764	10,253	8,824	14,615
					1					00 000	00.004
35,000	43,068	154,138	10,000	4,317	19,364	48,884	13,227 21,441	14,926 10,817	16,011 54	20,008 21,090	39,234 35,425
	3.942 4,109	87,246 80,154	5,850	1,192 3,750	15,455 14,661	2.239 9,273	19,408	10,158	5,103	18,346	32,063
	\$00	32,624	3,000	2,477	83,422;	3,313	2,055	6,280	5,605	8,311	33,086
	3,027	70,214	6,500	15	23,639	6,725	11;089	16,240	9,537	37,079	40,630
	3,250	70,872		1,054	8,878	1,674	2,420	5,618	7,084 3,436	13,498 4,572	15,582 2,233
*************	3,587 1,000	$\begin{array}{c c} 26,050 \\ 32,186 \end{array}$		1,768 1,208	4,384	531 352	8,707 10,571	4,999 15,562	3,026	853	11,240
	4,463	39,517	2,300	1,200	5,388	3,452	11,591	17,776	5,194	10,391	5,392
	4,000	116,071		3,090	14,635	10,116	15,888	1-6,447	10,226	20,464	46,960
	0==	27 210	520	2,809	8,637	292	9,378	8,919	2,978	17,994	20,073
4,706	875 22,433	$\begin{bmatrix} 1 & 37,316 \\ 1 & 58,643 \end{bmatrix}$		1,484	10,693	6,115	6,307	9,402		19,235	25,256
	3,983	69,379	19,175	3,817	16,995	5,747	22,891	11,154	8,148	16,270	31.890
1,220	18,332	45,732		3,166	12,235	5,552	12,336	21,672	8,290	6,923	12,271
24	6,139	87,053		4 450	30,592 42,968	11.266 7,590	15,935 15,214	17,999 12,709	4,738 15,631	35,168 9,197	39,627
1,063	3,635 7,724	74,818 95,690		4,456 3,294	22,071	4,378	15,214	15,791	12,102	23,037	41,608
							-		!		
737,625	406,467	2674712	1	87,400	733,547	377,508	474,105	430.059	274,714	668,592	1
311,227	719,171	476,373	34,900	6,820	754,263	321,669	115,241	99,399	106,474	114,363	644,403
1048,852	1125638	3151085			1478810	699,177	589,346	529,458	381,188	782,955	
2281,055			249,537	121,816	1343465	617,795	590,950	497,823	387,301	803,995	
1051,816	1479442	2828790	272,792	115,703	1254594	665,061	676,470	220,830	373,483	091,490	1865,687
		1.		(

THE MUNICIPAL CENSUS OF ONTARIO, 1868.

COUNTIES.	Nunber of persons in the family of each person rated as a resident,	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
BRANT, Town. Paris " Win. Paris Win.	7,745 3,218 5,310 4,978 1,012 1,614 2,985	442 101 5,653 4,702 779 1,748 3,921 17,346	20 14 18,092 13,310 2,363 5,749 13,654 53,202	497 67 3,600 2,925 542 1,047 2,316 10,994	321 133 2,804 2,098 392 799 1,613 8,160	288 57 518 340 62 164 250
BRUCE. Will.	3,406 609 994 3,108 2,787 *5,258 4,226 2,860 2,797 4,510 2,515 2,572 2,012 2,520 1,520 41,704	3,067 84 441 3 050 2,884 4,263 4,157 2,637 2,841 3,054 2,132 887 1,781 1,933 1,691 34,902	5,229 82 789 5,169 3,952 5,865 6,666 3,632 3,716 5,246 3,089 2,972 3,185 2,586 55,538	1,326 13 336 1,789 1,120 2,328 3,157 1,461 1,269 791 979 4,586 1,246	766 19 72 703 502 1,035 1,130 617 517 526 394 481 486 414 443	187 60 1014 296 272 347 546 229 241 251 243 190 243 207
* Figures of 1867. Carleton. Richmond Vill. New Edinburgh " Fitzroy T'p. Gloucester " Huntley " March " Marlborough " Nepean " North Gower " Osgoode " Torbolton " * Census of 1861.	490 448 2,741 843 	130 15 1,670 1,544 2,884 2,100 746 1,730 3,108 1,200 3,888 712 19,727	171 2 3,971 2,362 4,086 4,090 4,090 3,311 3,920 4,800 5,765 812 33,786	777 19 1,769 894 1,366 1,250 515 841 1,609 502 1,629 349 10,820	58 16 755 805 972 922 327 569 1,208 409 1,343 203	58 300 172 245 228 101 182 310 263 63 2,115
Elgin. Vill. Aldborough T'p. Bayham " Dorchester " Dunwich " Malahide " Southwark " Yarmouth " "	650 2,560 4,271 2,019 2,981 4,519 4,053 4,724 25,777	137 2,707 3,734 2,943 3,819 4,780 5,090 5,510	227 6,367 8,056 5,858 8,474 11,138 12,198 14,938	80 1,863 1,982 1,414 2,168 2,032 1,384 3,290 14,213	73 839 1,321 1,104 1,253 2,290 1,843 2,369	38 229 264 158 317 262 350 394

COUNTIES.	THE MUNICIPAL CENSUS	OF OI	NTARI	0, 186	8.— <i>Con</i>	ntinued	
Amherstburg	COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Ditches.
Sandwich	Essex.	1			i		
## Census of 1861. Frantenac.	Sandwich	999 3.949 1,363 2,784 2,419 1,688 1,494 2,143 1,600 3,277 *1,816 1,965	193 284 1,140 2,274 2,277 1,524 1,317 2,177 1,047 3,009 1,206 1,383	225 120 1,290 4,226 4,508 2,116 2,921 1,738 1,629 3,246 1,048 1,817	167 22 1.154 7.000 2.190 1,435 1,429 2,489 998 2,415 1,876 1,009	153 211 778 1,344 1,255 786 907 745 735 1,582 865 834	106 820 207 510 199 212 167 152 203
FRONTENAC.		27.174	17,964	24.894	22.294	10,330	2.250
Portsmouth		1				the same property	
#Grey. Owen Sound	Portsmouth	1,112 281 1,866 286 745 653 3,036 2,520 404 515 3,154 2,455 2,725	47 213 1,897 91 706 404 3,231 1,825 409 569 3,467 2,637 1,147	236 3,393 84 1,114 476 7,662 3,602 467 803 8,061 5,090 2,816	19 84 762 77 392 146 1,006 767 107 160 1,200 946 536	27 32 383 31 173 48 1,063 669 59 83 1,116 830 598	63 31 109 30 69 47 256 166 44 66 267 168 177
Owen Sound Town. 2,832 483 310 395 216 176 Artemisia. T'p. 2,762 3,585 2,790 1,892 495 302 Bentinck "4,132 3,085 4,427 2,283 562 392 Collingwood "2,785 2,391 2,976 2,092 506 273 Derby South "1,635 1,774 2,372 944 341 185 Egremont "3,475 2,911 4,002 3,447 428 319 Euphrasia "2,145 2,011 2,171 1,815 434 218 Glenelg "3,608 3,568 4,731 2,463 546 439 Holland "2,771 2,405 3,116 1,311 414 306 Keppel and Sarawak "1,689 1,490 1,008 524 132 165 Melanethon "1,550 1,689 1,891 1,454 265 216		23,303	18,538	37,558	7,120	5,992	1 1.684
	Owen Sound Town. Artemisia T'p. Bentinck " Collingwood " Derby South " Egremont " Euphrasia " Glenelg " Holland " Keppel and Sarawak " Melanethon " Normanby " Oaprey " Proton " St. Vincent " Sullivan "	2,762 4,132 2,785 1,635 3,475 2,145 8,608 2,771 1,659 1,550 4,224 3,400 1,920 3,308 1,608	3,585 3,085 2,391 2,911 2,011 3,568 2,405 1,490 1,689 3,110 2,630 2,006 3,503 2,229	2,790 4,427 2,976 2,372 4,002 2,171 4,731 3,116 1,008 1,891 5,314 2,870 2,248 5,265 30,017	1.802 2.283 2.092 944 3.447 1.815 2.463 1,311 524 1,454 2.847 3.800 1,419 2.337 1.441	195 562 506 841 428 434 546 414 132 265 774 670 253 851 354	302 392 273 185 319 218 439 306 165 216 464 265 268 258 203

^{*} Figures of 1867.

THE MUNICIPAL CENSUS	OF OI	NTARI	0, 186	S.— <i>Con</i>	ntinued.	
COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
HALDIMAND.						
Caledonia Vill. #Cayuga """ Dannville """ Carboro' Trp. Cayuga North """ Cayuga South """ #Dunn """ Moulton and Sherbrooke """ Oneida """ Rainham """ Seneca """ Walpole """	1,216 796 1,562 965 1,758 861 936 1,003 2,315 1,845 2,409 4,621	135 107 97 1,193 1,794 911 730 1,394 2,444 1,778 1,994 5,043	17 381 87 2,823 4,305 2,487 2,718 2,718 6,356 4,578 6,481 13,688	118 163 39 565 914 506 498 763 1,451 1,249 1,376 3,100	71 67 87 443 761 402 334 507 862 797 1,025 2,108	82 66 59 93 166 70 113 120 211 166 230 451
	1 20,287 1	17,620	46,635	10,745	7,464	1,827
Figures of 1867.						
Milton Town. Oakville Vill. Esquesing T'p. Nassagaweya Nelson	\$22 1,401 1,276 5,153 2,545 3,743 4,468 19,408	77 191 106 3,713 2,509 4,066 5,779	36 156 134 6,441 4,672 7,185 11,640	55 114 118 266 328 1,921 2,403	71 82 79 1,493 784 1,478 2,002	41 81 76 448 286 444 445
	1 13,103	10,441	1 50,204	1 0,200	0,002	1,021
HASTINGS Vill.	467 1,700 1,042 3,714 2,580 2,313 1,220 3,172 4,270 4,080 1,028 7,084	30 73 766 3,272 2,150 2,400 279 3,957 4,671 3,357 936 3,004	22 35 1,064 4,903 4,200 5,226 1,588 6,656 7,480 6,108 843 10,137	25 56 413 1,694 1,144 1,600 5:22 1,707 1,936 1,490 263 2,416	65 72 173 914 723 938 218 1,292 1,805 1,593 110 1,651	21 34 102 325 179 275 80 198 345 267 116 202
	32,670	1 24,835	48,362	12,266	9,474	2,120
Huron. Town Clinton Vill. Ashfield T'p. Colborne T'p. Goderich Grey Gre	3,534 1,601 3,223 1,995 3,256 3,193 3,062 4,176 2,824 2,091 3,076 3,235 2,623 2,872 2,497 3,451 2,091 2,091 2,011	270 163 2.483 2.156 3,728 3,362 3,362 3,550 3,229 2,102 1,802 1,802 1,741 4,551 2,425 4,455 1,242 2,399	34 44 6,643 2,683 7,083 4,546 6,052 5,158 5,330 4,276 3,888 7,370 3,231 5,799 2,799 7,542 3,5617	168 69 1,511 1,155 2,700 2,700 2,031 2,347 1,613 1,437 1,134 1,950 891 1,620 798 2,017 1,142 1,142 1,142	147 85 517 616 1,180 773 1,090 968 796 529 1,024 519 1,180 357 1,446 480 565	148 236 167 312 227 311 300 222 245 365 312 228 236 300 300 300 300 300 300 300 300 300 3
Wayadosh West	50,968		80,585	25,751	13,168	4.21
	1 00,000	1 30,111	. 00,000	20,001	1 10/100	7,21

COUNTIES.	Number of persons in the family of cach person reted as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
Kent.						
Bothwell. Tov Chatham. 5 Cumden T'p Chatham. 4 Dover 4 Harwiek 4 Howard. 4 Orford. 5 Raleigh - Romney'. 5 Tilbury East 6 Zone 6	4,046	107 274 1,750 3,605 1,524 2,666 2,849 2,689 2,673 805 1,672 773	36 96 3,800 5,996 4,383 8,953 10,203 6,574 6,567 1,163 2,609 1,448	77 168 1,332 2,957 1,806 2,318 2,914 1,627 1,205 659 1,615 532	76 302 757 1,477 1,200 1,236 1,255 756 1,401 282 849 277	52 269 295 369 277 357 280 169 387 68 155 66
	29,786	20,787	51,828	17,210	9,868	2,744
Lambton. Tow	1,278	211 66 77 3,263 1,036 932 1,233 1,629 3,097 4,812 1,655 2,160 1,628 21,799	\$ 8 9 36 7,249 4,164 2,016 1,683 5,369 7,830 11,362 3,844 3,169 9,522 56,261	36 70 65 1,413 860 627 606 955 1,497 2,341 621 1,340 2,180	104 70 104 1,005 451 320 312 628 920 1,291 500 777 1,129	95 65 69 302 160 119 94 181 325 408 182 267 2,425
Perth		214 256 135 2,277 2,602 1,960 2,943 891 1,404 1,500 2,333 3,476 1,925 2,527 576	148 776 84 5,5773 4,808 1,962 4,958 1,247 2,536 2,600 4,467 5,843 3,041 5,297 995 43,936	129 145 58 841 1,364 302 763 300 434 500 1,052 1,240 819 1,359 232	123 108 90 866 787 296 589 175 461 475 701 1,072 540 790 153	120 38 32 255 226 81 186 77 145 240 208 143 247 71

COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Ditches.
LEEDS AND GRENVILLE.						
Prescott Town Gananoque Vill. Kemptville " Merrickville " Augusta T'p. Bastard and Burgess " Crosby North " Edwardsburg " Elwardsburg " Elizabethtown " Elseott, Front " Gower South " Kitley " Leeds and Landsdowne, Front of " Leeds and Landsdowne, Rear of " Wolford " Young Front of " Young and Escott, Rear of "	2,679 1,666 824 665 4,184 3,297 1,688 1,948 4,629 4,908 1,045 1,308 2,593 2,947 1,986 3,136 2,489 1,337 1,837	167 184 122 139 4,337 3,896 1,059 2,085 4,577 5,484 1,770 1,117 3,540 3,856 2,373 3,575 2,744 1,643 2,010	4 313 128 129 1,255 10,925 3,234 5,165 7,594 11,095 2,961 3,142 1,767 7,221 8,079 5,320 5,745 5,409 3,458 3,928	86 64 65 91 1,294 1,403 769 816 61,296 1,722 546 401 349 1,161 1,218 950 1,194 957 486 666	113 112 64 50 1,446 1,247 395 604 630 1,801 949 428 336 1,038 1,225 729 1,187 563	144 88 47 42 220 141 118 375 466 103 58 284 236 6168 138 139 125 131
	1	1	1	i	1	
Lenox and Addington.	2,061 726 612 992 4,682 286 3,699 1,453 995 2,786 2,347 21,155	242 201 268 811 458 5,759 241 4,474 4,858 1,407 245 2,926 2,422 21,312	176 76 259 1,695 2,655 9,965 114 10,061 3,020 2,861 488 5,9559 2,923 40,252	31 101 89 344 420 979 115 1,162 653 590 213 975 992 6,664	85 147 121 390 362 1,822 26 1,695 741 691 72 1,089 626	128 518 57 108 313 399 289 70 77 49 172 124
Lincoln.	7.505	100		0.5		
Niagara Town St. Catharines """ Port Dalhousie Vill. Caistor T'p. Clinton """ Grimsby """ Grantham """ Louth """ Niagara """	1,527 6,755 1,005 1,761 2,487 2,408 2,465 3,577 1,752 1,706	122 259 56 2,053 2,206 2,493 2,216 1,867 1,495 1,708	1 26 30 5,159 4,586 6,028 5,400 3,682 3,884 3,555 32,351	25 203 156 997 1,511 1,155 1,046 1,420 936 993 8,442	99 230 115 791 976 998 1,017 1,963 754 927 6,970	55 232 59 134 181 153 204 264 130 193

			1000.	Concorn	ucu.	
COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hags.	Number of Horses.	Number of Dogs and Bitches.
MIDDLESEX. Vill. Wardsville "	1,466 580 2,187 3,349 3,468 1,551 3,240 2,490 2,897 12,856 3,919 2,190 2,549 3,300 5,632 2,422 2,416	34 75 2,758 1,349 3,448 1,474 4,216 3,461 3,404 10,712 4,423 2,957 2,672 2,434 5,491 3,124 2,346	85 27 6,124 4,824 8,160 3,964 8,469 8,425 7,462 21,416 9,470 5,772 5,278 8,559 12,638 6,225 5,770	30 33 1,512 1,644 2,499 858 1,783 3,695 1,369 8,571 2,617 2,040 1,933 1,236 1,236 1,178 1,237 1,178 1,459	35 58 970 677 1,353 648 1,530 1,079 1,235 4,286 1,650 861 994 1,196 2,589 943 711	58 34 200 176 246 124 269 213 237 688 419 200 223 231 470 240 230
*Norfolk. Simcoe Town Charlottenburg T'p. Houghton " Middleton " Townsend " Walsingham " Windham " Woolhouse "	1,665 3,432 1,794 2,574 5,654 4,280 3,825 3,677 26,306	199 2,315 1,525 2,181 4,622 3,216 3,638 2,179 19,875	60 6,836 3,266 3,632 13,580 7,876 7,978 8,163 51,391	231 1,983 1,102 1,325 3,936 2,770 2,694 2,024 16,158	149 1,180 524 621 2,186 1,228 1,342 1,180 8,410	87 311 140 218 389 456 331 318
# Return of 18\$7.						
Northumberland and Durham. Durham.	2,917 986 4,493 2,850 4,944 5,493 3,841 4,412	368 265 3,314 1,620 5,013 5,720 3,986 3,370	368 231 6,577 3,564 8,970 11,930 9,814 5,608	254 134 2,148 1,206 2,436 3,270 2,348 2,176	211 126 1,604 782 2,183 2,528 1,870 1,338	159 59 429 207 479 507 337 287
Northumberland. Vill.	1,142 768 885 3,111 3,015 *5,928 4,961 1,014 2,920 3,483 3,713	356 202 1,503 3,414 3,136 4,409 - 4,536 948 2,903 3,438 4,359	556 167 1,831 3,634 5,410 8,461 9,436 2,611 5,424 6,084 6,178	170 96 687 1,781 1,650 3,168 1,469 572 1,511 1,825 1,636	176 97 397 1,280 1,212 1,952 2,016 501 1,211 1,046 1,134	54 34 87 181 168 476 420 100 193 208 376

^{*} Figures of 1867.

53,360

96,854

28,837 21,664

4,761

THE MUNICIPAL CENSUS		NTARI	.0, 186	8.— <i>Co</i> 1	itinued.	
COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
ONTARIO.						
Whitby Town Oshawa " Broch T'p, Mara and Rama " Pickering " Reach " Scott " Scugog " Uxbridge " Whitby East " Whithy West "	2,427 2,461 5 2,690 7,012 5,919 2,545 606 1,536 4,015 3,318	354 220 4,282 1,642 7,096 4,724 2,540 517 1,742 3,034 3,043 3,224	370 217 5,911 2,857 13,137 7,524 4,991 971 2,954 5,492 4,579 4,559	127 87 2,671 1,373 3,578 2,536 3,082 335 1,143 2,091 1,403 1,372	110 80 307 266 596 429 272 35 146 348 222 257	214 143 1,588 504 2,927 1,904 934 214 761 1,280 1,353 1,201
	31,934	32,418	53,562	19,798	3,068	13,053
Oxford.						,
Myersoll. Town. Woodstock. " Embro. Vill. Blandford. " Blenheim. " Dereham. " Nissouri East. " Norwich North. " Oxford East. " Oxford North. " Oxford West. " Zora East. " Zora West "	3,418 3,974 505 1,861 5,492 5,493 3,483 2,735 2,735 2,739 1,565 3,650 3,022	325 324 129 2,349 5,319 4,359 4,404 2,745 3,458 2,588 2,042 4,369 4,609	471 152 141 4,874 12,864 7,023 7,221 5,464 4,125 7,677 3,598 4,419 12,162 9,898	145 148 26 1,013 2,924 2,497 2,242 1,360 1,196 1,418 979 571 2,178 2,207	299 196 49 794 2,214 1,688 1,414 1,250 812 1,183 684 595 1,414 1,491	131 190 21 191 426 387 252 125 196 171 158 134 348 278
Peel,	}					
Brampton Vill. Streetsville " Albion Tip. Caledon " Chinguacousy " Toronto Gore "	1,859 723 4,131 3,642 5,436 4,942 1,402 22,135	124 53 3,203 3,909 6,633 4,446 1,509	130 57 6,929 7,371 12,552 10,950 3,291 41,280	95 51 2,576 2,926 3,844 2,737 1,077	116 41 1,327 1,998 2,943 1,959 657 9,051	84 50 381 421 569 557 146
Ректи.	,100	10,011	11,200	20,000	3,002	=,200
Stratford	3,530 700 1,448 3,108 3,041 2,654 1,841 *2,300	346 200 222 3,729 4,604 3,969 1,892 1,404	155 120 103 7,676 6,120 5,081 2,785 3,528	207 200 58 2,490 1,677 1,872 1,149 1,547	182 80 93 1,199 1,379 1,350 768 661	216 30 71 266 318 320 204 220

^{*} Figures of 1867.

		T. I. I. I. I.	, , , , ,			
COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
Perth.—Continued.						
Elma T'f Fullarton " Hibbert " Logan " Mornington " Wallace "	2,890 2,616 3,252 2,570 3,127 2,692 35,769	1,922 3,672 3,533 1,782 2,631 2,072 32,281	2,925 6,132 5,472 2,315 5,904 3,348 52,664	917 1,388 1,989 1,344 2,133 1,424 18,405	450 1,202 1,168 649 971 586 10,738	262 244 217 263 325 226 3,212
- Figures of 1867.	1		1	l	1	
			į.		1	
Ashburaham Vill. Abstruther T'p. Asphodel "	1,129 71 2,643	126 2,154	3,127	110 1,566	83 648	63 14 163
Belmont, &c	960 143	850	950	350	207	79 17
Cardiff "Chandos "Cha	28 105 2,137	1,746	3,180	1,244	611	7 10 211
Dummer	2,006 276	2,060 122	3,188 22	934	530	171 29
Ennismore	819 484	691 375	1,033 276	630 154	216	107 03
Guildford " Harburn " Harcourt "						
Harvey	438 641 953	207 466 833	93 231 1,884	74 141 448	50 34 350	64 75 138
Monwouth " Gtonabee " Smith " Snowdon and Glamorgan "	3,389 3,013 299	4,001 3,140 230	6,008 4,903 146	2,122 1,721 79	1,258 1,118 19	333 329 34
Stanhope"	180	213	91	85	7	23
* Return of 1867.	19,714	17,220	25,163	9,716	5.163	1,930
	1		}		1	
PRESCOTT AND RUSSELL.* Hawkesbury	1,077		414	169 514	170 254	672
Caledonia "Cambridge "Clarenee "Cumberland "C	726 *669 2,099 2,036	464 *597 1,151 1,150	1,157 *181 1,146 1,590	509 *141 498 765	248 *111 422 508	112 195
Hawkesbury East	3,882 2,186 1,611	2,326 *1,837 933	3,752 *1,613 1,247	1,708 *728 568	1,042 *708 417	280 101
Plantagenet North " Plantagenet South " Russell "	2,463 1,135 1,645	1,163 810 715	1,848 830 1,339	1,046 615 534	624 362 330	171 102 133
	20,657	13,063	16,000	7,825	5,196	1,322

^{*} Eeturn of 1867;

		-				BOUNDALITY OF THE PARTY OF THE
COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs an I Bitcher.
PRINCE EDWARD.						
Picton Town. Wellington Vill. Ameliasburg T'p. Athol " Hallowell " Hillier " Marysburg " Sophiasburg "	1,917 620 2,524 1,398 3,366 1,835 2,086 2,137	95 97 3,072 1,567 2,683 1,674 3,424 2,079	94 70 4,896 3,420 5,793 3,775 7,260 4,481	45 53 1,049 650 980 675 1,278 806	138 92 1,258 747 1,473 1,075 1,425 1,219	46 21 166 67 200 165 231 153
	16,883	14,691	29,789	5,536	7,127	1,049
RENFREW# Armprior. Vill. Pembroke " Kenfrew " Admaston. T'p. Aligoma " Aligoma " Bagot and Blythefield. " Brougham " Brougham " Brudenell, Radeliff, Lyndock and Raglan. " Grattan " Grattan " Horton " MoNab. " Pembroke " Pettawawa " Ralph, Buchanan, Wylie and McKay " Ross " Sebastopol " Stafford " Westmeath " Candidate " Westmeath " Candidate " Cand	434 650 616 1,566 532 273 *1,728 1,500 180 1,050 *1,253 283 *1,192 2,060 630 275 341 1,456 473 119 2,100	90 %62 231 1,148 323 1,032 \$\frac{1}{1},340 \$\frac{5}{2}\$ 412 %833 187 *1,087 *1,518 287 1255 209 1,441 375 232 \$\frac{2}{1},475 197 198 198 197 198 198 198 198 198 198 198 198 198 198	45 *40 -67 -2,047 439 873 *1,237 1,200 401 *622 153 *1,117 *1,656 462 99 124 1,736 320 320 320	60 **76 141 595 179 448 **659 581 4 296 **523 131 **592 **855 221 577 83 744 742 190 **669	36 449 104 349 57 218 \$208 250 219 \$190 \$420 104 48 67 382 \$59 182 \$192	40 43 42 187 90 1 73 35 46 66 187 62 92
Wilberfore	1,535	1,223	1,618	682	331	
	20,246	14,435	15,615	1 8,095	3,950	984

^{*} Taken from the census of 1861.

SIMCOE.					1	
CollingwoodTown.	1,920	202	65	109	92	138
Barrie Vill.	*2,583	364	153	256	251	149
Bradford "	1,265	128	205	158	84	45
Orillia	714	, 92	2	23	57	47
Adjala T'p.	2,145	1,881	3,362	2,009	709 1	83
Essa	2,959	2,074	4,295	2,619	975	201
Flos	1,184	1,399	1,861	979	277	100
Gwillimbury	2,015	1,271	4,308	2,217	951	204
Innisfil "	4,161	4,618	4,970	2,358	1,260	446
Medonte	1,679	1,681	2,346	988	390	162
Mono	3,619	3 861	7,055	3,382	1,604	290
Morrison and Muskoka "	787	513	195	133	35	95
Mulmer	2,746	2,613	3,398	2,398	660	306
Nottawasaga	4,568	3,305	4,431	2,876	1,105	302
Orillia and Matchedash"	1,261	1,055	1.058	392	209	128

^{*} Figures of 1867.

THE MUNICIPAL CHARGE				- /			
	0, 4	oach person rated as a resident.		1	1	, 1	p
	CI	ate	· o	<u>.</u>	**	Number of Horses	and
	ors	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	=======================================	5	60	ors	to Eq.
	1 2.	OD	Cattle.	Sleep.	H	ii	°C
COUNTIES.	Jo	ars sid	J 1	4.0	Jo	J 0	3. 3.
	54	125	Number of	Number of	Number of Hogs.	4	Number of Dogs Bitches.
	12	la Sp.	50	oq!	2	- 6	tel
	Number	11D Ca	a ;	E	n 1	g !	E E
	Z		Z	Z	74	74	Z
	-						
Simcoe.—Continued.							
Oro T'p). }	3,504	3,608	4,904	2,228	969	397
Sunnidale		1,361	756	875	524	180	133
Tecumseth		3,619	3,861	7,055	3,382	1,604 l 351 l	290 212
Thy and Lay		2,956	$\frac{1,493}{706}$	1,373	1,182	300	96
Tessorontio		1,189 1,314	1,104	1,625	895	333	135
vespra	!	1,014	1,10%	1,020			
	1 1	7,542	36,635	52,641	28,828	11,702	4,009
STORMONT, DUNDAS AND GLENGARRY.		1 /00		0.00		CO	0.0
Cornwall	VD.	1,420	100	27	55 SJ	60 66	90 27
Iroquois Vill	12	#506 1,287	106	129 143	8.7 86	104	59
Morrisburg	D	5,114	177 5,959	8,852	2,631	2,195	421
Cornwall		3,825	4,237	6,796	1,896	1,627	285
Finch	20	2,485	2,329	2,842	1,075	735	194
Kenyon		4,721	4,733	7,483	3,040	2,070	440
Lancaster		3.920	4,133	5,088	2,039	1,515	318
Lockiel		4,057	3,632	6,791	2,241	1,484	314)
Matild 1	1	4,009	4,187	7,787	1,423	1,617	272
Mountain	į	2,200	3,333	5,276	1,125	1,022	160
Osnabruck	1 4	4,593	4,986	7,132	1,602	1,835	304
Roxborough	i	2,766	2,:135	4,427	1,260	1,036	224
" Illiadicodi ;	1	3,855	4.028	6,028	1,281	1,427	218
Winchester	1	3,381	3,513	3,572	1,214	1,121	199
	1 4	18,139	47,621	74,370	21.057	17,904	3,521
£13°0100~							
*Figures of 1867.							
Trompre	1			1		1	1
Victoria. Tow	T.D.	2,791	304	119	329	150	112
Bexley T'		306	297	266	133	35	37
Carden and Dalton	P.	827	651	727	314	89	81
Eldon	- 1 :	*2,364	2,087	2,334	2,025	703	1 189
Emily		£2,986	9.19	1 2,043	1,394	724	184
Fenelon		2,718	1,380	3,458	1,273	665	253
Laxton, Digby and London "	1	760	826	559	280	94	90
Lutterworth, Anson and Hinden "		391	294	145	86	22	35
Mariposa		4.680	6,830	8,628	3,566	1,911	378
O DO 10110101010101010101010101010101010101	- 1	2,787	1,418	4,015	1,275	857	247
Somerville " Verulam "		699 1,638	550 1,512	2,301	248	90 360	69 153
V CI Ulam	_	1,000	1,01-		100		133
		22,947	17,098	25,037	11,712	5,700	1,827
*Figures of 1867.							
2184100 01 10011							
WATERLOO.					1		
Berlin Tov	WII.	2,202	291	305	85	150	135
Galt		3,612	257	135	169	182	122
Hespeler Vi	11.	685	135	262	395	44	34
New Hamburg		1,091	290	160	116	93	85
Preston	- 1	1,324	= 207	1117	187	105	86
Waterloo		1,474	258	268	157	130	56
Dumfries North	D.	3,357	3,510	10,348	1,661	1,428	318
Waterloo	,	7,081 4,940	6,923 5,535	14,550	3,673	2,607	619
Wilmot. "		5,296	5,774	10,178	3,197	2,158	548
Woolwick	4	5,040	4,995		3,063	2,047	376
	-			-			-
ke.		36,102	28,238	56,958	16,016	11,040	2,853
		40					

COUNTIES.	Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
WELLAND.						
Clifton Town Chippawa Vill. For Erie " Thordd " Welland " Bertie T'p. Crowland " Humberstone " Pelham " Stamford " Thorold " Wainfleet " Willoughby "	1.121 913 676 2,190 959 2,128 1,154 2,752 2,402 2,591 2,190 1,041 22,503	124 96 109 1,621 146 2,055 1,239 2,013 1,994 1,404 1,621 2,220 1,157	18 30 143 4,733 172 6,382 3,207 3,370 5,488 3,023 4,733 4,733 4,596 2,400	31 95 89 864 86 1,088 561 1,136 1,043 779 864 1,214 628	93 64 29 951 120 1,101 567 732 966 848 951 914 491	98 61 68 153 46 2000 102 251 194 238 153 180 122
Wellington.						
Guelph Town Pergus " Nount Forest " Grangeville " Ameranth T'p. Arthur " Eramosa " Erin " Garafraxa " Guelph " Luther " Maryborough " Minto " Nichol " Peel " Pilkington " Puslinch "	5,901 1,368 1,182 1,498 1,581 3,726 \$3,354 4 542 4,422 2,580 1,219 5,896 3,604 2,426 \$3,745 2,381 3,296	415 146 181 172 4,331 1,106 3,577 4,044 4,102 1,828 1,304 2,705 3,555 3,031 4,331 3,257 5,610	291 221 169 58 8,352 2,293 4,758 6,461 8,557 1,298 6,113 4,742 3,753 8,352 5,939 8,327	377 406 128 50 3,075 1,125 2,361 2,026 232 1,138 1,812 658 2,466 2,233 1,280 3,075 1,643 1,795	307 92 100 96 1,243 339 987 1,242 1,326 1,480 1,076 227 1,173 721 834 1,243 721 877 1,590	218 655 577 386 1811 349 234 234 231 139 310 320 187 386 220 375
	50,822	48,990	81,190	25,880	14,903	4,422

^{*} Figures of 1867.

Wentworth.						
Dundas Town. Aneaster T'p. Barton " Beverley " Binbrook " Flamboro' East " Flamboro' West " Glanford " Saltifleet "	3,335 3,520 2,438 5,468 1,667 3,233 3,421 1,982 1,935	190 3.902 1,165 6,057 1,564 2.677 2.212 1,663 1,857	3 9,942 1.899 12,709 5,036 5,051 4,586 5,252 5,358	98 2,631 903 2,254 1,030 1,555 1,641 978 1,104	138 1,722 772 1,993 733 1,080 1,006 814 925	175 331 283 451 155 329 341 170 208
		<u> </u>	·		1	

	-	and the same of th					
counties.		Number of persons in the family of each person rated as a resident.	Number of Cattle.	Number of Sheep.	Number of Hogs.	Number of Horses.	Number of Dogs and Bitches.
York.				-			
Aurora Holland Landing Newmarket Yorkville Etobicoke Georgina Gwillimbury East Gwillimbury North King Markham Scarboro Vaughan Whitehureh	Vill	1,020 620 1,155 1,556 2,864 1,424 3,286 1,551 6,115 6,545 3,978 5,499 3,817 7,441	100 207 121 806 1,548 2,825 1,639 6,316 5,367 3,211 4,437 2,911 3,658	247 254 128 4,319 2,019 5,832 2,594 11,283 10,849 6,064 9,778 8,466 6,799 70,647	111 112 114 1,682 944 2,054 1,161 1,607 3,263 2,414 2,705	93 75 113 115 1,217 436 1.221 2,575 2,785 1,480 2,274 1,806 2,179	44 54 73 130 313 115 292 137 583 616 371 608 376 729
Cities, And Towns separated from Coun	TIES.				İ	and a state of the	
Hamilton Kingston London Ottawa Toronto ** Belleville Brockville Cobourg Peterboro Port Hope St. Mary's ** St. Thomas	City.	22,945 11,056 13,334 20,305 40,043 6,525 4,248 4,463 4,620 4,305 3,055 1,812	580 910 570 484 140 207 231 414 247 216 445 135	36 169 133 179 61 23 80 158 48 11 779 20	86 49 328 528 86 10 69 173 205 141 436 48	696 333 551 810 277 181 144 280 229 142 97 125	1,264 275 424 884 956 223 203 151 213 666 87 64
		136,711	4,579	1,707	2,169	3,865	4,910

^{*} Return of 1867.

SUMMARY OF MUNICIPAL CENSUS OF ONTARIO, 1868.

	persons nily of n rated nt.	.:			82	Number of Dogs and Bitches,
	perso mily on rat	Cattle.	Sheep.	200	Horses.	द्ध
	po nuin	,at	1 4	0	i 🔒	0.3
COUNTIES.	F. E. S. C.) Jo	1 5	Number of Hogs.	of]	Q
COUNTIES.	the the h per	0	Number of	0		es.
	umber in the each r	er)er	er	er	umber of Bitches.
	umber in the each as a	E	B	Ē	n l	m t
	i e e	Number	r c	, a	Number	E H
The fundamental supplication of the control of the					F-1	E-1
Brant	23,644	17,346	53,202	10,994	8,160	1,679
Bruce	41,504	34,902	55,538	23,132	8,205	3,76
Carleton	29,620	17,727	34,786	10,820	7,587	2.11
Elgin	25,777	28,720		14,213		2,015
Essex	27,174	17,964		23,294	10,330	2,250
Frontenac	23,303	18,583	36,791	7,057	5,992	1,68
Grey	47,316	43,041		32,307	8.013	4.832
Haldimand	20,287	17,620		10,748	7,464	1,827
Halton	19,408	16,441		5,245	5,992	1,82
Hastings	32,670	4,835		13,366	9,474	2,129
Hurop.	52,176	45,926		25,834	13,238	4.258
Keut	29,786	20,787	51,828	16,540	9,868	2,739
Lambton	27,897	21,799	56.261	12,611	7,611	2,425
Lanark	28,544	27,509	46,571	10,316	7,580	2,222
Leeds and Grenville	50,283	46,657	93,952	15,643	13,930	3,760
Lenox and Addingtou	21,155	21,312	40,251	6,664	7,886	1,397
Lincoln	25,443			8,442	6,970	1,604
Middlesex	56,512	55,439		33,984	20,870	4,258
Norfolk	26,306	19,875	51,391	16,158	S,410	2,250
Northumberland and Durham	69,878	49,910	96,754	28,945	21,565	4,761
Ontario	31,934	32,418	53,562	19,798	3,068	13,053
0xford	42,609	50,468	83,919	18,854	14,083	3,008
Peel	22,135	19,877	41,280	13,396	9,051	2,208
Perth.	38,307	32,331	52,664	18,395	10,738	3,212
Peterborough	20,138	19,052	27,938	10,116		1,861
Prescott and Russell	20,657	13,063	16,000	7,825		1,322
Prince Edward	17,483	14,691 14,435	29,789	5,536 8,095	7,427 3,950	1,049
Renfrew	20,246 47,092	34,951	15,615 52,641	28,528	11,702	964 4,009
Stormont, Dundas and Glengarry	48,139	47,621	74,370		17,904	3,521
	22,977	17,095	25,037	11,712	5,70	1,827
Victoria Waterloo.	36,102	28,238	56,958	16,016	11,040	2,853
Welland	21,832	14,255	33,565	7,720	6.9441	1,837
Wellington	50,822	48,990		27,780	4,903	4,402
Wentworth	26,999	21,287	49,839	12.294	9,183	2,443
York	46,811	34,831	68,697	23,364		4,541
Total, Counties	1,192,965	934.474	1,912,979	576,099	343,597	105,894
Total, Cities and Towns sep. from Counties	136,711	4,579	1,707			4,910
Grand Total, Ontario, 1868	1 329 576	989.052	1,914,686	578,268	347,462	110,804
Grand Total, Ontario, 1000	1,020,010	300,000	1,011,000	010,200	011,102	110,004

^{*} This must not be taken as the total population of Ontario. Until the general census is taken we cannot decide what percentage should be added to these figures for persons not of the family of resident ratepayers.

STATEMENT

Of the Returns forwarded to the office of the Provincial Secretary, of all Fees and Emoluments received by the Registrars of Ontario for the year 1870, made in accordance with the provisions of the Statutes of Ontario, 31 Vic., cap. 20, sec. 74.

By Command,

M. C. CAMERON,

Secretary.

STATEMENT of the Returns forwarded to the office of the Provincial Secretary of all Fees and Emoluments received by the Registrars of Ontario for the year 1870, made in accordance with the provisions of Statutes of Ontario, 31 Vic., cap. 20, sec. 74.

1
6
9
00
3
372
3
~
68
Ø.
\vdash
eb.
- 22
62
8-
×
72
nal
-
2
=
8
2
-3
4
50
sof
to of
irts of
cirts of
sceirts of
receipts of
d receipts of
ed receipts of
sted receipts of
asted receipts of
trasted receipts of
ntrasted receipts of
ontrasted recei
ontrasted recei
ontrasted recei
ontrasted recei
are contrasted receipts of
ontrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei
are contrasted recei

																	_	_			_			
.8381	ober,	Gross Amount of Fees Pr	50	÷ 50	2579	5113	1006		1587	2757	2016	739	1420	1644	1803	3947	5569	584	0186	9512	1300	2400	1952	7537
Gross Amount of Fees Proper, 1869.			12 80 80	64 90	3006 10	9009 65	1146 80	1.132 70	2909 02	3044 19	1965 50	693 59	1355 25	1899 15	1721 95	3237 90	2920 20	551 40	14 1004	700 92	1340 20	2729 77	2048 05	Zedł ko
1870.	ober,	Gross Amount of Fees Pr	11 Sects		3155 20	4072 20 9633 95	1164 15	1621 99	2700 90	3158 90	1695 30	770 33	1450 88	1865 78	2101 10	3612 51	6103 44	631 81	4872 07	1006 001	1377 05	2424 16	2200 85	104 09/7
ALLOWED ACT.	Receipts.	For work connected with transfer of instruments, and paid for by County Treasurer, Sub-sec. 7.	10 Sects	9		:		08 09				:	:	:		:		1034 05		:	0.2 9		:	***************************************
TARIFFAS A	Special 1	For Abstract Indices, S.	e 42	£ 0.00		:		200 00						200 00					:					
11 5 7	· S	For Affdavits and Oath	S 64	600	13 25	:	91.75			3 8						:	6 85				11 75			
UNDER S	°g	For Certificates, Sub-sec.	7 2			10		98 50		4 C										100	1		200	
RECEIVED UNDER THE ONS 1 TO 13 OF SECTION	•	For Abstracts, Sub-sec. 4	0 00	con con				96 70															199 10	
FRES	To the special state of the second state of th	Fos Searches, Sub-secs.	70 %	3				322 65														120 00		
AMOUNT OF BY SUB-	rder.	Total for Registrations un Sub-sees, 1, 6, 9, 12, 13	4 8	9	2433-15	8413 25 9021 20	1036 10	1104 14																
Suinb	ered o	No. of Instruments regist the year 1869.	က		1565	1941	750	840	1917	1627	1094	351	1008	1050	950	1667	3508	206	3517	441	726	1477	1276	10001
Sairub	ered (No. of Instruments regist the year 1870.	¢1		1745	1361	756	768	7016	1749	875	417	1207	1012	1179	2144	3530	374	2041	000	782	1440	1257	1034
.toirtei	pe Di	No. of Municipalities in t	-		L- ;	= 2	1 9	٠ -ب ١	20	÷	17		χ <u>ς</u>	Ç 21	7	14	18	7	12	2 0	10	13	25	107
	OFFICE. REGISTRAR.			John Savage	T. S. Sh	Holyang Shamood	John Pli	George C	Kobert Armour		Jas. Dura	A. Mel. McKenzie		Agnew P. Farrell	Thomas Re	W. H. Ponton	Jas. Dick	Geo. A. C	F. D. McKellar	. 4		Ormond Jones	M. P. Roblin	John Lowell
Control of the Contro				1. Algoma District	2. Brant		5. Dundas			9. Essex		- '	-	14. Haldimand					19. Kent.		-		24. Lennox and Addington, Mr. P. J	Zo. Lincoln

55 55 55 55 55 55 55 55 55 55 55 55 55	3 Soln coln eds,
1072 71 71 72 73 74 74 74 74 743 745 745 745 745 745 745 745 745	Over \$2,500 and under \$3,000 :—Carleton, Lincoln Over \$2,000 and under \$2,500 :—Halton, Leeds. J. L., Peterblorough, Waterloo and York, N. L.
	Name of the Name o
2000 2000 2000 2000 2000 2000 2000 200	138606 66 15 1869 Carleton, 00 :- Ifalton k, Northunn nd York, N.
11120 223 225 225 225 225 225 225 225 225 225	I Not
	13 13 13 13 13 13 13 13 13
89554876445887515688888888888888888888888888888888	3,000 S,000
1450 228 228 2488 2928 2928 2928 4566 1576 1539 1539 1539 1539 1539 1539 1539 1539	147791 1870 1870 der \$3 under on, Naterl
	Over \$2,500 and under \$3,000 : Over \$2,000 and under \$3,000 : Over \$2,000 and under \$2,500 : I. L., Peterblovugh, Waterloo and
00 66	Fees\$ 5 and u Adding
Č .	Fee O and A d
	2,50
1000 00	er \$2,5 Peel. cr \$2,0 ox an
	Lengo of Line
80	a FA
	On- Sssex, Bid.
8 : : : : : : : : : : : : : : : : : : :	ut,
4 88 <t< td=""><td>Kein South</td></t<>	Kein South
28 :: 17: 20: 40: 40: 40: 40: 40: 40: 40: 40: 40: 4	t, E
99 99 82 82 82 82 82 82 82 82 82 82 82 82 82	
42 14525282104 1819618	ind india
271 189 673 198 198 198 299 299 299 1111 1117 1117 1117 1117 11	55,000 nd :
28 : 458 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	er &
5862 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	unde W.
588 1111814418141819 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ind the
5220 123 123 1153 1100 1100 1100 1100 1100 1100 110	1869 1869 1,000 : Perth 3,000 a
. H 0 0404 H 4 04440044	3, 63, C
74457 74457 10857 10	1870 7 1870 Over \$4, Over \$3, Over \$3, Inastings,
-F %Prüll#Füß«rß48 n urli#e000	Norr.—[The offices may be generally classified as follows:- ### Norr.—[The offices may be generally classified as follows:- #### Norr.—[The offices may be generally classified as follows:- #### Norr.—[The offices may be generally classified as follows:- ##### Norr.—[The offices may be generally classified as follows:- ####################################
	ed as ed as To. ton,
O One	Instruments Registered. be generally classified s -Huron, Simcoe, To
- 	Tegis class imed Lau
M. Gill Guson Jalah Jalah Jaran	its I
dillipan dil	umco nera
V. C. L. as. Ferg. V. V. L. V. Loolun Door V. L. Wa V. H. Even V. H. Sui Annual San Annu	s gen
W. C. L. Gill. Jas. Ferguson C. W. Lount C. W. Lount C. M. Lount J. M. Grover J. M. Grover J. M. Grover J. M. Grover J. M. Grover John Ham Perry. Alex. Buritt John Ham Perry. John Higginson J. P. Roblin John Higginson J. P. Roblin John Higginson J. P. Roblin John Higginson J. P. Roblin John Higginson J. P. Roblin John Higginson J. P. Roblin John Copcland, months John Copcland, months John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Copcland, John Charles Lindsey J. M. Greer J. H. Greer John Ridout John R	7,7 Dec. 0000-
	s ma sex. \$7,0
조 사 등 : :	ffices falles der innd
P. S. S. S. S. S. S. S. S. S. S. S. S. S.	Mid I un Stenn
Signature W. C. L. Gill. Las. Ferguson District C. M. Lount District C. M. Lount John Doran John Harsen John Har Fery John Harmon John Harmon John Harmon John Harmon John Harmon John Copeland Markey Index John Copeland John Hardiey Dursfor John Hardiey Dursfor John Harding John Ridout	-[Tl
ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling ont colling colling colling ont colling co	A V V V V V V V V V V V V V V V V V V V
London City W. C. L. Gill	Totals
	Totals
3 数は数数の単端数率数数数数数数数数数 4 4 4 4 4 4 4	0 2 6
0	

may be is a conclusion that would not be arrived at by a return on the subject. It is known that some Registrars, (and that in offices above the average value,) themselves do all the work that is no more copying, and in other cases the higher duties are performed by a well path deputy. An outlay beyond the necessary minimarum may be owing to ill health or merely to distinctination to work on the part of the Registrar; but to a great degree is a matter-within his own option. The columns headed "Special Receipts," (Nos. 8 and 9.) are excluded from the calculation of fees proper, the stipulated parametrs for such services which are temporary, having been jased upon the The receipts of the remaining offices are below \$2,000. The expenses of the several offices are not asked for in this return of fees. In fact, the office expenditure of Registrars bears no fixed proportion to their work and receipts. A certain expenditure is necessarily incurred in all offices; but what the fair minimum applicable to each TURN OVER. estimated actual cost to the Registrars.

The total number of instruments registered in 1870, shows an increase of 5950 over the number for 1869. The total amount of fees received for 1870, shows an increase of \$9,184.84 over the amount for 1869. The purchase of right of way by Railway Companies continues to be the cause of increased revenue in some localities. Speculation in Oil, Salt or Mining lands is the alleged reason in others. In the great majority of cases the increase however is indicative of general prosperity resulting in the more active transfer of real estate, for building or agricultural purposes.

The returns from Algoma and Muskoka not having been received, the spaces for those districts are left blank, but in carrying out the totals are credited with the same amounts as in 1869, in order that the nearest possible approach may be made to correct aggregates and averages for the respective years.

THOS. C. PATTESON. Assistant Secretary.

PUBLIC ACCOUNTS

OF THE

PROVINCE OF ONTARIO,

FOR THE

YEAR ENDING 31st DECEMBER,

1869.

Laid before the Legislative Issembly, by Command.



Toronto:

PRINTED BY HUNTER, ROSE & CO., 86 & 88 KING STREET WEST.
1870.

INTRODUCTORY STATEMENTS.

1. STATEMENT of the Consolidated Revenue Fund on the 31st December, 1867.

ets.	830,559 28	830,559 28	285,935 58
ets.	598,436 40 6,704 02 1159,987 83 10 00 11,225 00 38,534 39 11,066 62 3,317 90 231 25 1,045 87		
CR,	By Subsidy Account, amount for half year transferred By Croammar School Lands, receipts for half year transferred By Crown Lands and Woods and Porests, receipts for half year transferred By Pines, Fees and Forfeitures, receipts for half year transferred By Municipal Loan Fund, receipts for half year transferred By Runsferred By Education Department, receipts for half year transferred By Lunatic Asylum, Toronto, receipts for half year transferred By Lunatic Asylum, Malden, receipts for half year transferred By Lunatic Asylum, Malden, receipts for half year transferred By Lunatic Asylum, Andlen, receipts for half year transferred By Taven and other Licenses, receipts for half year transferred By Taven and other Licenses, receipts for half year transferred		1868. Jan. 1 By balance brought down
ct.s.	544,623 70	830,559 28	
\$ cts.	57,935 73 55,724 67 16,637 51 39,164 94 41,367 54 2,940 89 16,569 03 7,264 93 39,483 80 14,155 47 911 70 259,602 34 12,865 15	•	
Dr.	To expenditure for Civil Government, during the half year transferred. To expenditure for Agriculture and Arts, during the half year transferred. To expenditure for Colonization Roads, during the half year transferred. To expenditure for Administration of Justice, during the half year transferred. To expenditure for Miscelancous, during the half of the stansferred with year transferred. To expenditure for Miscelancous, during the half year transferred. To expenditure for Miscelancous, during the half year transferred. To expenditure for Informatory, Penetanginshene during the half year transferred. To expenditure for Inmatic Asylum, Toronto, during the half year transferred. To expenditure for Inmatic Asylum, Malden, during the half year transferred. To expenditure for Inmatic Asylum, Malden, during the half year transferred. To expenditure for Public Works, Niscelancous, during the half year transferred. To expenditure for Chown Lands and Woods and Forests, during the half year transferred. To expenditure for Chown Lands and Woods and Forests, during the half year transferred.		

A—Concluded.

2. STATEMENT of the Balances of Open Accounts on the 31st December, 1867.

& cts.	285,935 58 37,958 74 26,672 34 7,353 19	357,919 85
Cn.	Consolidated Revenue Fund Municipalities Fund Common School Lands Law Society of Upper Canada	
s cts.	126,229 66 188,878 19 8,085 27 3,190 09 25,536 64 6,000 00	357,919 85
DR.	Cash. Dominion of Canada. Road to North West Territory Public Works, Corpital Account, viz: Court House and Gaol, Algoma. Government Buildings, Toronto. Lunatic Asylum, do	,

Note: —The details of the receipts during the half year, from Grammar and Common School Lands, from Clergy and Crown Lands, and from Woods and Forests, in the above Statement, differ from the printed Statement laid before the Legislature for the same period, but the difference is simply a re-arrangement of revenue, the total, \$221,322.93, being the same in both Statements.

E. B. WOOD,

Treasurer.

m

1.—Statement of Receipts and Expenditures during the year ended the 31st December, 1868.

Prof. Prof		
Cossonidated Revenue Purp. Sects.	cts.	1,070,504 32
Fig. 12 F. C. F. F. F. F. F. F. F. F. F. F. F. F. F.		22, 392, 24 33, 543, 36 17, 543, 36 1, 180, 62 30, 438, 22 30, 438, 22 30, 438, 23 31, 420 31, 420 31, 420 31, 420 31, 600 31, 600 31, 600 31, 600 41,
CONSOLIDATED REVENUE FUND. \$ cts.	XPENDITURE	CONSOLIDATED REVENUE FUND. For Reformatory, Penetarguishene Inspection of Asylum, Toronto Inspection of Asylum, Toronto Inspection of Asylum and Prisons Colonization Behavinent Crown Lands and Words and Forests Colonization Roads Crown Lands and Woods and Forests Crown Lands and Woods and Forests Crown Lands and Woods and Forests Crown Lands and Charities Administration of Justice Administration of Justice Administration of Justice Administration of Justice Add to Superior Education Chalic Works, Miscellancous Opening and Scientific Institutions Cratuities to widows of decease lofficers Expenses of Arbitration Open Account Cratuities to widows of decease lofficers Expenses of Arbitration Open Account Chorement Account Expenses of Arbitration Open Accounts Covernment Buildings, Toronto Government Buildings, Toronto Government House, do Lanatic Asylum, Deaf and Dumb Institution, Belleville
CONSOLIDATED REVENUE FUND. From Reformatory, Penetanguishene do Malden Municipal Loan Fund Municipal Loan Fund Orillia Ress on Private Bills Sales on Private Bills Pees on Private Bills Phile Works, sale of old Government House Taven and other Licenses Crown Lands and Woods and Forests Refunds of Unexpended Bulances, viz.: By Agriculture and Mechanics In- stitutes. By Agriculture and Mechanics In- chonization Roads (Cohonization Roads Chown Department Refunds of Warden Roads (Cohonization Roads Chown Department Refunds of Unexpended Bulances, viz.: By Agriculture and Mechanics In- stitutes. Cohonization Roads Chown Shrews Chown Department Chown Department To do Malden Chounian Department To do Childrenton Department To Dominion of Canada, for advances in 1867 on account late Pro- Vince.		542,402 11
CONSOLIDATED REVENU From Reformatory, Penetanguish Lumatic Asylum, Toronto Lumatic Asylum, Toronto do Orillia Municipal Loan Fund Municipal Loan Fund Fleas and Forfetures Ontero Greele Pleas and Forfetures on Private Bills Reas no Private Bills Reson Private Bills Algona Taxes Algona Algona Taxes		
		CONSOLIDATED REVENUE FUND. "" Lunatic Asylum, Toronto do Drillia do Orillia do Orillia do Orillia do Dutario Department the Balas do Orillia do Ontario Guerra Processand Forfeitures des on Private Bills Sales of Statutes Public Works, sale of old Government House Twen and other Licenses Crammar School Lands Sales (Crammar School Lands Sales) Statutes Cown Lands and Woods and Porests Crammar School Lands Sales (Crammar School Lands Sales) Statutes Sales of Drughtes de Grands of Unexpended Bulances, viz. By Agriculture and Mechanics' Institutes Communication Roads Salveys, &c. 2,765 04 do Orillia do Orillia do Malden Statutes do Malden Sales (Crown Lands Surveys, &c. 2,77 10 do Orillia do Orillia do Malden Statutes Sales do Malden Statutes Sales do Malden Statutes Sales do Malden Statutes Sales do Doninion of Canada, for advances in 1867 on account late Province.
	31 1	

			p.	(210.		
971,852 46 217,819 71 2,260,176 49	nts laid before			\$ cts. 285,935 58 542,402 11 1,196,872 80	2.025.210 49	954,706 17
678 90 1,157 74	he printed accou		.83.	., 1867 nsferred		
Survey and Drainage of Swanp Lands Muskoka Registry Office and Gaol Balance transferred to Cash account	tails in the above statement differ from t		B.—2. STATEMENT of the Consolidated Revenue Fund, 31st December, 1868.	By Balance from account, 31st December, 1867		Jan. 1 By Balance brought down
Balance t	everal det		ed Reve	1838 Jan. 1 Dec. 31.	- 1869	Jan. 1
1,717,774 38	the services, s		Consolidate	\$ cts. 1,070,504 32 954 703 17	2,025,210 4	
1,468,443 65 133,873 00 115,457 73	en made among	į.	ENT of the			
OPEN ACCOUNTS, From Dominion of Canada Municipalities' I'und Common School Lands	Nore.—In consequence of transfers having been made among the services, several details in the above statement differ from the printed accounts laid before the Legislature, but the total is unchanged.		B.—2. STATEM	1868 Dec. 31 To Expenditures per statement above		

STATEMENT of Balances of Open Accounts on the 31st December, 1868.

Ds	e cts.	CR.	& cts.
-	244 040 27	G. A G G	500
Cash	0.11,013 01	Consolidated bevenue rand	304,706 L7
Investment Account	850,000 00	Municipalities' Fund	171,831 74
Road to North-West Territory	8,085 27	Law Society of Upper Canada	7,353 19
Departmental and Legislative Contingencies	3,118 86	Dominion of Canada	82,692 66
Public Buildings, Capital Account, viz.:-		Common School Lands	142,130 07
Lunatic Asylum, Toronto	53,640 84		
Government Buildings, Toronto	66,633 12		
Government House, do	27,709 64		
Deaf and Dumb Institution, Belleville	450 00		
Survey and Drainage of Swamp Lands	678 90		
Muskoka Registry Office and Gaol	1,157 74		
Court House and Gaol, Algoma	3,190 09		
	1,358,713 83		1,358,713 83
		E. B. WOOD, Treasurer.	wer.

To His Excellency the Honorable William Pearce Howland, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the *Public Accounts* of the *Province of Ontario*, for the year ending this day.

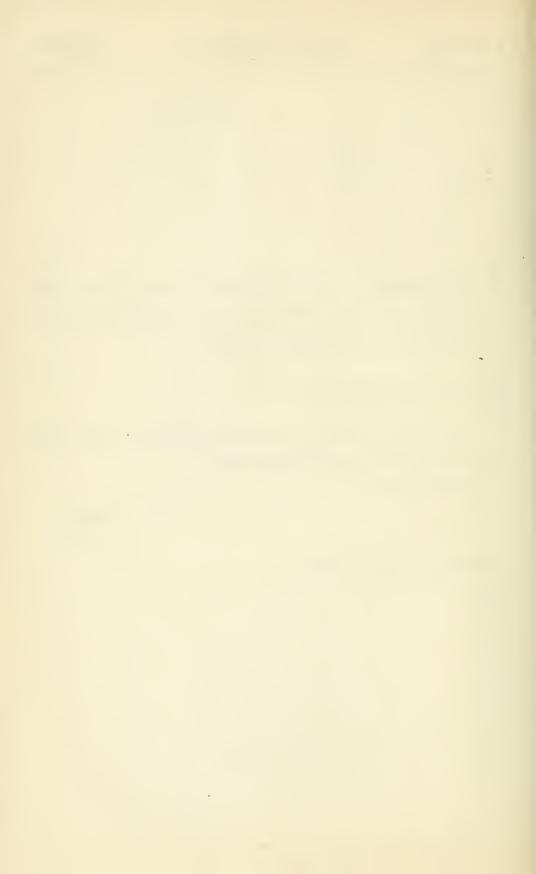
Respectfully submitted.

E. B. WOOD,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,

Toronto, December 31st, 1869.



CONTENTS.

Pag	ge.		rge.
Administration of Justice:—		Contingencies—Continued.	00
Court of Chancery—Salaries	31	Court of Chancery	63
Do of Queen's Bench do	31	Do Queen's Bench	
Do of Common Pleas do	32	Do Common Pleas	64
Deputy Clerks of the Crown and Pleas-		Legislation	64
Salaries	32		
Criminal Justice, Criminal Prosecutions	32	CROWN LANDS EXPENDITURE:—	
Do Administration of	33	Salaries and Expenditure of Travelling	
Do Administration of			20
Do Special Services	37	Agents	22
Miscellaneous Justice	35	Surveys	
Expenses re Driscoll Murder	38	Refunds	22
Do Newbecker do	38	Board of Examiners Land Surveyors	20
Seals and other Contingencies	38	Agents' Salaries, Commission and Dis-	
· ·		bursements	20
Arbitration	49		
a Later a Late	1	Colonization Roads:—	
ASYLUM MAINTENANCE:-		Expenditure	27
Provincial Lunatic Asylum, Toronto	45		
	67	CONSOLIDATED REVENUE FUND:-	
Details of		Statement of account on 31st Dec., 1867	ii
Malden Lunatic Asyium	45		
Details of	69	Do do 31st Dec., 1868	
Orillia Lunatic Asylum	45	Do do 31st Dec., 1869	4
Details of	71		
		Expenditure:-	
AGRICULTURE:-		Statement of	16
Electoral Division Societies, grants to	46		
Agricultural Association	48	Education:	
Fruit Growers' Association	48	Education Office—Salaries	* 50
Trait Growers Association		Do Contingencies	61
ALGOMA TAXES:-		Normal and Model School-Salaries	51
	12	Do do Contingencies	62
Statements of monies received	Li	Do do Contingencies Depository—Salaries	52
Th.		Libraries, Apparatus and Prizes – De-	01
BALANCES:	-1	Libraries, Apparatus and Titles De	99
Balance Sheet, 1869	1	tails of expenditure	
Unexpended	T05	Grammar School Inspection	
Ovcrexpended	105	Journal of Education	
Open accounts on 31st December, 1867	111	Common and Separate Schools	52
Do do 31st December, 1868	vi	Do do Details	83
Do do 31st December, 1869	6	Do do Details	53
· ·		Do Details	91
CIVIL GOVERNMENT:-		Grammar Schools	53
Lieutenant Governor's Office-Salaries	16	Do Details	90
		Superannuated Teachers	53
Attorney General's Office do	16	Do Details	92
Executive Council Office do Attorney General's Office do Treasury Department do	17	Museum and Library	53
Secretary and Registrar's Office do	17	Do Details	. 98
A eniceltary and Registrar's Office (10	1.4		
Agriculture and Public Works Depart-	1.77	Hospitals and Charities:-	
ment-Salaries	17	Aid to	. 49
Crown Lands Department—Salaries	18	Loan to Toronto General Hospital	
S.		170an to Toronto General Hospital	
Contingencies -		Trescon into a	. 45
Lieutenant Governor's Office	55	Immigration	. 10
Executive Council Office			. 15
Attorney General's Office	56	Investments	
Treasury Department	57	Interest on	
Secretary and Registrar's Office	57		
Agriculture and Public Works Depart-		JUDGES:-	pr. c
ment	58	Of Superior Courts-Salaries	. 53
Crown Lands Department	59		
Education Office		Licenses:-	
Normal and Model Schools		Statement of	. :

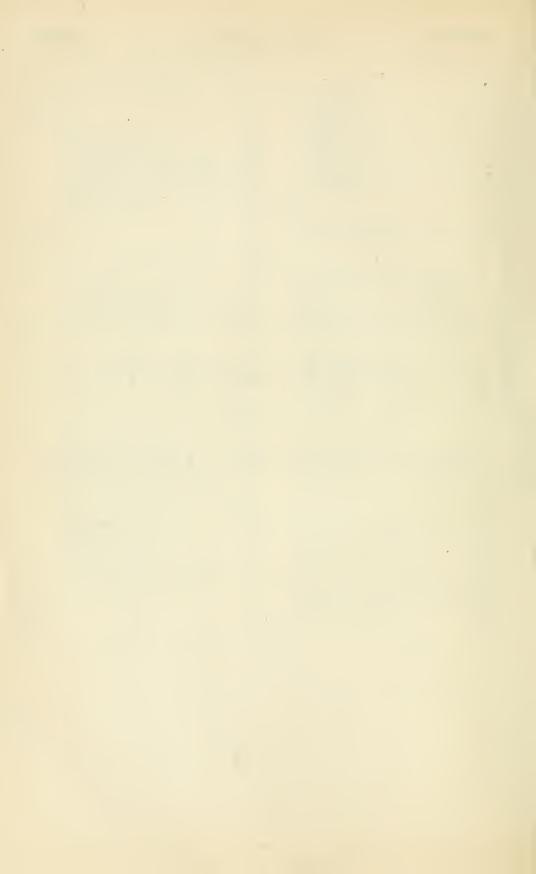
P	age.		Page
LITERARY AND SCIENTIFIC INSTITUTIONS:-		REVENUE—Continued.	
Grants to	50	Fines and Forfeitures	
T		Lunatic Asylums	
Legislation:— Salaries	28	Education	
Indemnity to Members	29	Dominion of Canada	
Mileage of Members		Crown and Clergy Lands	
Sessional Messengers, Writers and Pages		Licenses	. (
Postages and Cost of House Post Office	29	Consolidated Municipal Loan Fund	
Stationery, including Printing Paper, &c.		Algoma Taxes	
Printing, Binding and Circulating the		Interest on Investments	
Statutes		Law Stamps	. 10
Expenses of Elections	30	STATIONERY:-	
Contingencies		Account-Statement of	. 54
Contingencies	~ ~	Supplied the different Departments and	
LAW SOCIETY:-		Ôffices	. 104
AccountStatement of	103		
		STATEMENT:-	
MISCELLANEOUS:-	40	Consolidated Revenue Fund on 31st De-	
Arbitration	49	cember, 1867Balances of Open Accounts on 31st De-	. 11
Inspection of Asylums and Prisons Cost of Official Gazette	49	cember, 1867	
Inspection of Registry Offices	49	Receipts and Expenditures for the year	
Gratuities	49	ended 31st December, 1868	
		Consolidated Revenue Fund, 31st De-	
MUNICIPALITIES' FUND	54	cember, 1868	
Do Details	76	Balances of Open Accounts on 31st De-	
35 I D		cember, 1868 Balance Sheet—Receipts and Payments	vi
MUNICIPAL LOAN FUND:—	7	during the year	
Receipts	- 1	Consolidated Revenue Fund on 31st De-	
MECHANICS' INSTITUTES:—		cember, 1869	
Grants to	48	Balances of Open Accounts, 31st Decem-	
		ber, 1869	6
PUBLIC WORKS AND BUILDINGS:-		Consolidated Municipal Loan Fund—	
Departmental and Parliamentary Build-	00	Receipts	
ings	38	Interest on Investments	
Government House, Toronto Lieutenant Governor's Residence	40	Casual Revenue	
Deaf and Dumb Institution	40	Algoma Taxes	
New Wings, Provincial Lunatic Asylum	41	Law Stamps	
Insurance on New Wings, Provincial		Education Office	
Lunatic Asylum	41	Investments	
· House for Caretaker, Provincial Lunatic	40	Expenditure	
Asylum	42 42	Contingencies	$\frac{55}{67}$
New Pumping Engine, P.L.A	42	Malden Lunatic Asylum	
Lunatic Asylum, London	43		
Lock on Rosseau River	43	Orillia do Reformatory Prison.	73
Lock at Young's Point	43	Municipalities' Fund Account	75
Navigation Balsam and Cameron Lakes	44	Do Distribution	
Survey and Drainage of Crown Lands	44	Education Expenditure details	83
D	4 =	Law Society.	103
Reformatory Prison	45	Stationery supplied various Departments Balances of Appropriations	104
Do Details	73	Darances of Appropriations	100
REVENUE:-		Unforeseen and Unprovided,	53
Casual Revenue	11		

PUBLIC ACCOUNTS

OF THE

PROVINCE OF ONTARIO.

1869.



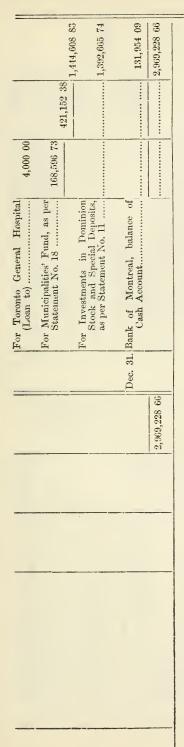
No. 1.

BALANCE SHEET, shewing the entire Receipts and Payments of the Treasurer of Ontario, during the year 1869, with the Cash Balances on the 1st January and 31st December.

e cts.	•
& cts.	8,787 34 11,085 97 11,085 97 11,885 39 12,446 55 8,780 58 2,459 46 2,57 20 3,145 46 1,222 27 1,023 456 45 2,808 59 2,808 59 2,808 59 1,023,456 45
e cts.	61,085 97 81,885 39 102,446 55 8,780 58 2,459 46 2,459 46 23,557 50 17,595 00 67,551 41 21,222 27 40,000 00 3,735 03 2,808 59 2,808 59
PAYMENTS.	Consolidation Revenue Fund. (As per Statement No. 12.) For Civil Government For Crown Lands and Woods and Forests For Colonization Roads For Legislahion For Administration of Justice For Logislahion For Departmental and Parliamentary Buildings, maintenance for Logische Hall Repairs, maintenance For Medomatory, Penetanguisher, Mancellance For Reformatory, Penetanguisher, Machance For Indignation For Machine and Mechanics For Institutes For Institutes For Hospitals and Charities For Literary and Scientific Institutions For Literary and Scientific Listinations For Unforescen and Uniprovided. For Unforescen and Uniprovided. For Unforescen and Uniprovided. For Unforescen and Uniprovided. For Unforescen and Uniprovided. For Unforescen and Uniprovided. For Departmental and Paliamennentary Buildings, capital account.
s ctr.	314,049 37
\$ cts.	
\$ cts.	6,462 39 211,163 55 435,630 78 191,463 28 80,230 43 58,924 74 11,683 78 2,664 11 42,989 55 24,976 07 937 43 7,046 67
RECEIPTS.	Jan. 1 Cash Balance as per Statement B of 1868, No. 3

No. 1.—Balance Sheet, shewing the entire Receipts and Payments of the Treasurer of Ontario, during the year 1869, with the Cash Balances on the 1st January and 31st December.—Concluded.

es cts.										
& cts.	2,808 59 1,023,456 45									-
ets.	2,808 59		39,695 84	40,993 25	68,709 51	75,161 07	6,978 26	10,788 45	495 63	2,925 05
PAYMENTS,	Brought forward	OPEN ACCOUNTS.—Continued.	For Goverament House, Toronto, capital account	For Deaf and Dumb Institution, Belleville, capital account	For Lunatic Asylum, Toronto, capital account	For Lunatic Asylum, London, capital account	For Lock on Rosscau River, capital account	For Lock at Young's Point, capital account	For Navigation between Balsam and Cameron Lakes, capital account	For Survey and Drainage Swamp Lands, capital account
es Se	314,019 37								2,625,179 29	
& cts.							1,076,162 28		1,549,017 01	
& cts.	1,074,179 18		460 32 336 23				1,186 55	1,322,731 79	128,269 92	
RECEIPTS,	Brought forward	CONSOLIDATED REV. FUND Con.	From Lunatic Asylum, Malden, per Statement No. 15 From Lunatic Asylum, Orillia,	per Statement No. 16 From Refunds, viz.:—	Education Department, Refund of unex- pended balance1,074 00 J. Ardach Refund	• •		OPEN ACCOUNTS. From Dominion of Canada		
					2					



E. B. WOOD, Treasurer.

No. 2.

STATEMENT of the Consolidated Revenue Fund, including the items transferred to it, to the 31st December, 1869.

e cts.	1,076,162 28 1,076,162 28 344,698 88	
æ. Sta	1,073 57 4,02 00 2,900 69 4,702 16 1,355 50 22,500 98 22,500 98 7,819 22 44,171 74 22,856 17 18,167 65 126,999 87 65,939 00 25,484 13 74,847	
	1,023,456 45 45 45 45 45 45 45 45 45 45 45 45 45	
1869.	.Fan. 1.	
.s ots.	20,073 52 20,073 52 308,916 81 866 01 14,300 00 30,546 37 3,118 86	
s.	145,833 33 145,833 33 145,833 33 145,833 33 145,833 33 1,385 58 1,385 58 1,385 58 1,444 33 1,444 34 1,444	Dec. 31. To expenditure, as per Statement No.1 To Dominion of Canada, half year ending 31st Administration of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol And to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Aid to County of Frantenac Gaol Circy Anariage Licenses—Contingent expenses. To Dominion of Canada, half year ending 31st December, 1868: For half year's interest on Outario's proportion of excess of debt, Jan. 1, 1869 Asylums expenditure—maintenance—1, 1865 Asylums expenditure—maintenance—1, 1885 Asylums expenditure—maintenance—1, 1885 Asylums expenditure—maintenance—1, 1885 Asylums expenditure—Particle Canada Agriculture—Particle Canada Agriculture—Administration of Linenses—Contingent expenses—Fock and Debreuture Account, for premium "Stationery Office—To Dominion of Canada Agriculture—To Dominion of Canada
1869.	D D D D D D D D D D D D D D D D D D D	

363,391_23		4,504 56	03 623 80		4,136,996 86	
4,173,32	4,504 96		598,436 40 598,436 40			2,416,424 19
" refund of advance on account of Surveys	By Canada Land and Emigration Company: For expenditure by Crown Lands Department for 1868. For expenditure by Crown Lands Department for 1869.	By Municipalities' Fund; Per 20 per cent. on amount collected during that year, for cost of management	Half year's subsidy and special payments, January 1	Receipts from Marriage Licenses do Law Stamps By Interest, Premium and Discount	0220	Jon. 1 By Balance brought down
	291,666 66	2,416,424 19			4,136,996 86	
145,833 33	14,033 48	**************************************				
For half year's interest on Ontario's excess of debt, July 1	To Law Society: For receipts for Law Stamps sold in 1868 do 1869	To Balance carried down				

E. B. WOOD, Treasurer.

No. 3.

Statement of the Balances of Open Accounts, 31st December, 1869.

\$ cts. 35,018 07 2,416,424 19 81,647 25 8,023 41 270,399 99	2,811,512 91
Law Stociety	
	2,811,512 91
Dominion of Canada Bank of Montreal Torouto General Hospital Special Deposits, Bank of Montreal Investment account. Innustric Asylum, Toronto, capital account Government House, do do Baildings, do Deal and Pumb Institute, Belleville Drean and Toronto, Monna Lock, Balsan and Camoron Lakes London Lanatic Asylum Lock on Rosseau River do at Yonge's Point.	

E. B. WOOD,
Treasurer,

No. 4.

STATEMENT shewing the several amounts received by the Treasurer of the Province of Ontario, on account of the Consolidated Municipal Loan Fund, during the year ended 31st December, 1869.

FROM WHOM RECEIVED.	SERVICE.	\$ cts.	\$	cts.
A. M. Ross F. Mc Anany F. Mc Anany F. Mc Anany F. Mc Anany F. Mc Anany F. Le Pan Hon. A. Vidal G. P. M. Ball F. Le Pan Hon. Receiver General do John Folmsbee A. W. Hawn Robert Reid C. R. Biggar Joseph Johnston J. Blacklock Charles Fletcher G. W. Lawrence J. Edwards John Smart Thos. N. Boswerth W. D. Ardagh James Kilgour D. McKay W. H. Thompsoe County of Perth U. C. Lanark and Renfrew Hon. Receiver General do	do do Hastings do do Essex	 00 00 59 00 00 00 00 00 00 00 00 00 0	192,038 573 191,463	5 00

E. B. WOOD,

Treasurer.

No. 5.

STATEMENT of Interest received on account of Investments, during the year ended 31st December, 1869.

Twelve Twelve Six Mon Less	FROM WHOM RECEIVED.	NATURE OF INVESTMENT.	cts.	& cts.
Six Mon Less		Twelve Months' Dividend on \$350,000, 6 per cent. Dominion Stock to 30th September Twelve Months' Interest on \$509,000, 6 per cent. Dominion Bonds to 30th September	21,000 00	
-		x Months! Interest on £150,000, 5 per cent. Dominion Debentures to 1st \$18,250 00 July	18,045 95	
Municipalities' Fund	- ! !	Interest on \$800,000, 4 per cent. Special Deposits to 31st December	8,471 16	80,236 43

E. B. WOOD,
Treasurer.

No. 6.

REVENUE received by the Treasurer of Ontario on account of Licenses, during the year 1869.

DIVISION.	ISSUER.	Tavern and Shop Licenses.	Vessel Licenses.	Total.
				0
Algoma Brant Bruce Carleton Durham, East Durham, West Dundas Essex Elgin	Jno. Cameron	\$ cts. 135 00 1,828 64 1,122 24 3,003 38 288 00 455 10 346 70 1,212 50	\$ cts.	\$ ct. 135 00 1,828 64 1,122 24 3,003 30 288 00 455 10 346 70 1,212 50
Frontenac Glengarry Grenville	G. A. Cumming A. M. Mackenzie W. J. Scott Peter Inglis	1,188 60 2,512 22 479 40 832 28 1,534 54 925 53 761 40	18 80	1,188 60 2,512 22 479 40 851 08 1,534 54 925 53 761 40
Haldimand Halton Hamilton City Hastings Do	W. L. P. Eager Jno. H. Greer Smith Bartlett 30 00 A. Diamond 1,412 19	2,638 92	169 20	2,808 12
Huron Kent Lambton Lanark, North Lanark, South Leeds Leepon and Addington	D. Lizars Wm. Douglas Julius P. Bucke Jno. Menzies Chas. Rice Ormond Jones. J. B. McGuin	1,442 19 1,774 78 1,625 66 1,005 60 194 38 519 82 1,055 99 641 00		1,442 19 1,774 78 1,625 66 1,005 60 194 38 519 82 1,055 99 641 00
Lincoln London City. Middlesex Muskoka Norfolk Northumberland, East Northumberland, West.	Rol. Macdonald W. C. L. Gill. Chas. Hutchinson Chas. W. Lount. C. C. Rapelje C. M. Grover	1,641 98 1,922 46 1,791 44 79 70 755 76 327 00 410 00	18 80	1,641 98 1,922 46 1,791 44 98 50 755 76 327 00 410 00
Nipissing Ontario Oxford	H. J. Macdonell	86 35 1,184 00		86 35 1,184 00
Peel	James Ingersoll 106 22	177 38		177 38
Do	M. Hayes	975 04 1,700 00 1,074 22 408 77	18 80	975 04 1,700 00 1,093 02 408 77
Prince Edward Renfrew Russell Sincoe	Jno. P. Roblin Andrew Irving James Keays Jas. R. Cotter	259 44 946 64 72 00 1,875 72	18 80	259 44 965 44 72 00 1.875 72
Stormont and Cornwall	R. Macdonald	540 76	13 80 94 00	559 56 6,268 40
Victoria. Waterloo Welland Wellington	Wm. Grace	$\begin{array}{c} 6,174 \ 40 \\ 810 \ 62 \\ 1,715 \ 30 \\ 1,520 \ 72 \\ 2,423 \ 12 \end{array}$	18 80	810 62 1,715 30 1,539 52 2,423 12
		56,396 69	376 60	56,772 69

Revenue received by the Treasurer of Ontario on account of Licenses, during the year 1869.—Concluded.

DIVISION.	ISSUER.	Tavern and Shop Licenses.	Vessel Licenses.	Total.	
Brought forward	S. H. GheutJames J. Pearson	\$ cts. 56,396 69 1,238 08 641 67 58,276 44	\$ cts. 376 00 	8 cts. 56,772 69 1,238 08 660 47 58,671 24	
PAWNBROKERS' LICENSES. G0 00					

E. B. WOOD, Treasurer.

No. 7.

STATEMENT of Casual Revenue received by the Treasurer of the Province of Ontario, during the year ended 31st December, 1869.

From Whom Received.	SERVICE.	\$ ets.	\$ cts.
N. McDougall	Sheriff of the County of Victoria, fines and forfeitures	9 50	
R. Martin		76 00	
Joseph Woodruff		200 45	
James Flintoft		19 38	
F. W. Jarvis			
E. Deedes	do do Norfolk, do	1 90	
ames Thompson	do do Lanark, do	47 50	
E. C. Thomas	do do Wentworth, do	42 75	
R. Moderwell		408 50 5 70	
J. J. Grange	do do Wellington, do do do Carleton, do	95 00	
V. F. Powell	do do Carleton, do do Counties of Leeds and Grenville, fines and		
F. G. Dickinson	do Counties of Leeds and Grenville, fines and forfeitures	385 70	
Andrew Ross		47 25	
		41 20	
J. E. Meintyre	Sheriff of the Counties of Stormont, Dundas and Glengarry, fines and forfeitures	8 55	
ohn McEwen	Sheriff of the County of Essex, fines and forfeitures	1 00	
J. P. Treadwell	do Counties of Prescott and Russell, fines and		
. I. Headwell	forfeitures	10 00	
Vm. Sutton	Sheriff of the County of Bruce, fines and forfeitures		
V. Fergusson	do do Frontenac, do	1 00	
D. Morden	Deputy Sheriff of the County of Prince Edward, fines and		
	forfeitures	4 75	
ohn Radeliff	Justice of the Peace, fines	6 00	
		[1,491 59
ohn Notman	Assistant Clerk, Legislative Assembly, fees received by		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	him for Private Bills		2,646 41
. M. Savage	Registrar, Algoma, fees received by him		81 05
. C. Patteson	Asst. Secretary.—Fees received in Secretary's office, viz. :		
	1 Queen's Bench Certificate, at 1.00	1 00	
	4 do 4.00	16 00	
	41 Commissions under Great Seal, at 13.00	533 00	
	13 do Privy do 8.00	104 00	
	97 Notarial Certificates, at 1.00		
	10 Declarations of Companies advertised, at 5.00	50 00	
	3 Charters of Incorporation, at 25.00	75 00	
	2 do 30.00	60 00	
	1 Co-operative Certificate, at 20.00	20 00	
	4 Magisterial Certificates, at 1.00	4 00	
	1 Discharge Crown Bond	5 00	965 00
1 Cl D-44	Destruction Destruction of the contract of the		909 OU
. C. Patteson	Deputy Registrar.—Fees received in Registrar's Office, viz.:	247 50	
	30 Exemplifications of Patents, at 8.25	205 00	
	S2 Certified Copies of Patents, at 2.50	1 50	
	3 Certificates of do 50	8 00	
	32 Searches, at 25 cents	12 00	
	1 Special Exemplification of Fatent, at 12.00	12 00	474 00
Jenry J. Hartney	Queen's Printer, on account of Gazette	3,347 04 1	
dex. Gordon	do do	980 90	
Iunter, Rose & Co	do do	250 00	
			4,577 94
Ienry J. Hartney	Queen's Printer, on account of Statutes	1,135 04	
dex. Gordon	do do	260 25	
Rice	On account of Statutes sold	8 00	
. P. Crysler	do do	17 50	
. LaCourse	do do	27 00	
			1,447 79
		-	11 000 50
			11,683 78

E. B. WOOD,

Treasurer.

No. 8.

Statement shewing the several amounts received by the Treasurer of the Province of Ontario, on account of Taxes on Patented Lands in the District of Algoma, during the year ended 31st December, 1869.

	s cts.		7,004	urer.
	es cts.	2,523 29 4 00 33 42 74 32 29 08		E. B. WOOD, Treasurer.
one Discrete of Adgoma, during the year ended 31st December, 1869.	SERVICE.	Collector of Taxes, Algona District: on account of Taxes		
	Рвои Wном Весегуер.	John M. Hamilton		Treasury Department, Ontario, Toronto, December 31st, 1869.

No. 9.

STATEMENT of Revenue received on account of Law Stamps from 24th July to 31st December, 1869.

соимту.	DISTRIBUTOR.	Paid for Law Stamps.	Paid on account of old Credit.	Total.
		\$ ets.	\$ ets.	\$ ets.
Brant	Geo. R. Van Norman		1	
Bruce	D. W. Ross	1,075 40 630 15	140 39	1,075 40 770 54
Do	do New Issue, 137 75	1,380 35		1 220 25
·Elgin		475 00		1,380 35 475 00
Essex Frontenac	S. S. Macdonell	142 50 800 45		142 50 800 45
Grev	John Creasor, Jr John R. Martin	623 69 199 50	173 22	796 91 199 50
Halton	John Dewar, Jr	285 00	32 35	317 35
Huron	Chas. L. Coleman	942 40 1,018 40	95 00	942 40 1,113 40
	William Douglas Julius P. Bucke	599 68 491 62	174 25 81 42	773 93 573 04
Lanark	D. Fraser	427 50 495 00	179 10	427 50
Leeds and Grenville	W. A. Reeve Saml. Reynolds, Jr	490 00	179 10	674 10
Do	,	815 10	76 71	891 81
	Rolland Macdonald Chas, Hutchinson	$760 00 \\ 1.387 00$	368 30	1,128 30 1,387 00
Norfolk	L. H. Hunt	731 50 1,016 50	18 30 649 60	749 80 1,666 10
Ontario	John D. Armour S. H. Cochrane	923 00	707 35	1,630 35
Do	Francis R. Ball			
Paal	Geo. Green	669 75 420 85	254 02 143 90	923 77 564 75
Perth	M. Haves	855 00	95 00	950 00 959 03
Prescott and Russell	C. A. Weller	708 23	250 80	399 03
Do		162 18	170 00	332 18
Prince Edward	Philip Low Wm. Duck	269 32 171 00	352 36 295 00	621 68 466 00
Simcoe	James R. Cotter	1,153 30	257 40	1,410 70
	James Bethune W. H. Bowlby	902 51 855 00	339 30 130 00	1,241 81 985 00
Welland	L. D. Raymond. H. W. Peterson.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	128 10 220 15	418 80 1,472 82
Victoria	A. LaCourse	59 85 1.852 50	616 93	59 85 2,469 43
	S. B. Freeman W. W. Baldwin	1,852 50 12,198 00	010 39	12,198 00
		37,040 60	5,948 95	42,989 55

E. B. WOOD,

Treasurer.

No. 10.

STATEMENT of Receipts from Education Department, for the year ending 31st December, 1869.

SERVICE,	, PARTICULARS.	ets.	& cts.	ects.
Normal and Model Schools	Normal and Model Schools Fees, pupils	3,823 00		
	Books sold Students	4 26		
	Interest on \$1,100 Dominion Stock, one year, to 30th September, 1869	00 99		
	Panes of glass broken	5 66		
	Interest on (Prize) Debentures	18 00	3.916.92	
Depository	Depository		20,562 31	
Superannuated Teachers	Superannuated Teachers Subscriptions during year	269 12		
	Interest on \$2,000 Dominion Stock to 30th September, 1869	120 00	389 12	
Journal of Education	Journal of Education Subscriptions and Advertisements		46 20	
Contingencies, Education Office	Contingencies, Education Office Old Stamps per P. O. Department	37 68		
	Postage Stamps paid for	23 84	61 52	
	Total			\$24,976 07

14

E. B. WOOD, Ţreasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869,

No. 11.

STATEMENT of Investments made during the year ended 31st December, 1869.

То Wном Рато.	NATURE OF INVESTMENT.	Amount.	Total Amount.	
Bank of Montreal For	per cent. debentur	\$ ets. 658,519 06	& cts.	
For	For the purchase of £10,000 do do in Montreal, at 96 per cent	46,952 62	705,471 68	
Spe	Special deposit bearing interest at 4 per cent		00 000,000	
Royal Canadian Bank	ор ор		87,194 06	
Am	Amount of investments made in 1868 \$850,000 00		1,392,665 74	
	do do 1869 705,471 68		*	
Am	Amount of special deposits made in 1869			
	2,242,665 74			

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 12.

STATEMENT of the Expenditure made by the Provincial Treasurer on account of the Province of Ontario, during the year ending 31st December, 1869.

	\$ cts. \$ cts.		1,441 03		1,400 32	-
The second secon	ots.	00 001 00 008	241 63	75 26 324 74 250 00 250 00 365 00 1,015 00	385 32	4,000 00 225 81 974 19 700 00 250 00 6,150 00
	SERVICE.	CIVIL GOVERN MENT. Lieutenant Governow's Office. Salaries. Twelve months' salary as Sceretary to 31st December, 1869, at \$800 per annun do Messenger do 31st December, 1869, at \$400 do	Contingencies. For the year ended 31st December, 1869, as per detailed Statement No. 13	Salary as Clerk from 1st January to 8th March, 1869, at \$400 per annum do do 9th March to 31st Dec., do at \$400 do	For the year ended 31st December, 1869, as per detailed Statement No. 13	Twelve months' salary as Attorney General to 31st Dec., 1869, at \$1,000 per annum. Salary as Chief Clerk, from 1st January to 8th March, 1839, at \$1,200 do 9th March to 31st Dec., 1869, do do Twelve months' salary as Clerk to 31st December, 1869, at \$700 do do Messenger do at \$250
	TO WHOM PAID.	E. G. Curtis Matthew Bailey	16	J. S. Smith James Ross A. McDonnell M. J. Smith		Hon. J. S. Macdonald. J. S. Smith James Ross H. Kinloch Angus McDonnell

		——————————————————————————————————————	11. 1010	=
466 25 6,616 25	3,200 00 1,200 00 400 00 400 00 650 00 550 00	3,200 00 1,200 00 1,200 00 1,200 00 1,200 00 1,200 00 1,200 00 1,00 00 1,10 00	3,500 00 1,378 21 3,200 00 1,600 00	4,800 00 28,085 67
For the year ending 31st December, 1869, as per detailed Statement No. 13	Twelve months' salary as Provamnun Twelve months' salary as And Bight do Acc Four do Corr Twelve do Juni do do Messi	For the year ended 31st Docember, 1869, as per detailed Statement SECRETARY AND REGISTRAR'S OFFICE. Salaries. Twelve months' salary as Secretary and Registrar to 31st Deceming a Assistant Secretary to 31st Deceming a Assistant Secretary to 31st Deceming the doctor of the doctor o	For the year ended 31st December, 1869, as per detailed Statemen Bepartment of Agriculture and Public Woi Salaries. Fivelye months' salary as Commissioner of Agriculture and Publeenber, 1869, at \$3,200 per annum. Fivelye months' salary as Architect and Engineer to 31st December, annum.	Carried forward
	Hon. E. B. Wood George Mathews Worsley Blobs William R. Harris. Jas. Kerr Chas. H. Sproule John Little	T. C. Patteson J. R. Bekart D. Stevenson J. R. C. Csher D. Stevenson J. R. C. Csher H. S. Creve.	Arthur Burtchall Hon. Joha Carling	

Civil Government—Continued.

cts.		¥			
€₽					
cts.	28,035 67		9,691.58		
% cts.	4,800 00	1,000 00 800 00 800 00 151 00	7,765 00	3,200 00 1,733 32 945 03 1,057 66	1,800 00 1,280 00 738 00 1,500 00 116 66 88 33 41 66
SERVICE.	Beorght forward Department of Agriculture and Public Works—Continued.	William Edwards	Contingencies. For the year ended 31st December, 1869, as per detailed Statement No. 13	Twelve months' salary as Commissioner to 31st Dec., 1869, at \$3,200 per annum Eight months' salary as Assistant Commissioner to 31st August, 1869, at \$2,600 per annum. Salary as Assistant Commissioner, from 21st August to 31st December, 1869, at \$2,600 per annum Salary as Clerk, from 30th March to 31st December, 1869, at \$1,400 per annum	Twelve months' salary as Head of Snrveys to 31st Dec., 1869, at \$1,800 per annum do do Land Claims and Seles in old Tourship's Branch. Ten month's salary as Chief Clerk, to 31st October, 1869, at \$100 do One do do do do do do do do do d
то whom paid.		William Edwards		Hon. S. Pichards	Thomas Devine Edward Fox G. B. Kirkpatrick. Thos. Hector F. A. Hall G. B. Lindsay.

18

ن -	+ Victoria	il.		رم 	essiona	1 Paper	'S (1	No. 3).			-	A. 1870-	11
-						,	•						37,777 25
=	1,800 00 1,460 00 1,200 00 1,160 00 1,160 00 10 00		1,400 00 900 00 730 00		00 003 00 003 00 008	933 32 1,166 66 200 00 266 68		1,240 00 1,200 00 300 00 10 00 148 00		1,400 00		1,600 00 666 66 58 33 500 00 450 00	34,872 31
Cleryy and School Lands and Crown Lands in New Township's Branch.	Twelve month's salary as Chief Clerk, to 31st December, 1869, at \$1800 per annum do do do do do do do do do do do do do	Letters Patent Branch.	Twelve month's salary as Chief Clerk, to 31st December, 1869, at \$1400 per annum do do do do do do o o o o o o o o o o	Aeconnts Branch.	William Ford	Two do do to 31st December, 1869, at \$1200 per annum. Two do to 28th February, 1869, at \$1200 per annum. Two do to 28th February, 1869, at \$1200 per annum. Four do do to 31st December, 1869, at \$000 do.	Woods and Forests Branch.	G. B. Cowper Cowper Twelve month's salary as Chief Clerk, to 31st December, 1869, at \$1240 per annum. J. C. Miller do do do do do do do do do do do do do do do do do do do do d	Registrar's Branch.	Twelve month's salary as Registrar, to 31st December, 1869, at \$1400 per annum	Colonization Roads Branch.	Twelve month's salary as Chief Clerk, to 31st December, 1869, at \$1600 per annum Ten do do Clerk and Draughsman, do do 800 do One do do Clerk, unattached, to 31st January, 1869, at \$700 per annum. Twelve do Office keeper, to 31st December, 1869, at \$500 per annum do do Messenger, do 31st December, 1869, at \$500 per annum	Carried forward
	J. C. Tarbutt Twelve m A. J. Tarylor do J. M. Grant do H. G. Langlois Nine do D. D. Anglois Arrears		H. J. Jones		William Ford	LJno. Tolmie Tean Ten 1 CDonald A. Grant Two J. Scott. Four		G. B. Cowper. J. C. Miller. W. H. Cowper. Do J. E. Kirby		John Morphy		J. W. Bridgland. A. L. Russell. Thomas Hammond. John Bradshaw.	

Civil Government—Concluded.—Crown Lands Expenditure.

cts,		78,787		
cts.	255	10 09	19 82 00 98	
6	37,777 25	10	1,7,7	
s cts.	34,872 31	6,137 78	40 00 131 GH 120 00 120 00 120 00 120 00 130 00 140 00 150	1,305 24 37 42 37 42 56 02 50 00
SERVICE.	Brought forward	Contingencies. For the year ended 31st December, 1869, as per detailed statement No. 13	EROWN LAND EXPENDITURE. F Salaries and Expenses of Travelling Agents. To pay J. C. Miller's expenses to Marmora at Belleville. do do for attending sale of timber limits, Peterboro', and land at Belleville. do R. Bray, professional services and expenses to Lake Superior. do J. M. Johnson, travelling expenses &c., connected with timber inspection. J. C. Miller, Tor stryics and expenses in Bruce. do J. C. Miller, Travelling expenses in Orillia and Muskoka, and other districts. do J. C. Miller, Travelling expenses to Orillia and Muskoka, and other districts. do T. H. Johnson, land inspection in Carleton. Board of Land Surreyors. To pay expenses of April and July Sessions, 1869 do October do do do do do do do do do do do do do	N. F. Wakchedt N. P. Wakchedt Do account his salary as Crown Land Agent, Muskoka Postage for 1868-9 A. McNabb A. Marris W. Jackson do do do do do do do do The Agent anging
TO WHOM PAID.			Ho. Russell	N. F. Wakerlead Chas W. Lount W. Jackson A. McNabb W. Harris Go P. K. Koberts and P. C. Campbell., Forest rang

									_			_								-										-		===					-					
																																		-	_							
200 000	857 83	594 45	149 94	90 54	2,022 53	3,068 19	305 07	154 62	367 83	791 18	872 98	1,474 30	208 66	200 05	00 000	17. 85	277 05	303 32	21 ·	8 7	32 15	4 50	1 07 100	10 007	576 63	13 50	100 00	21 20	230 00	52 00	00 1%	997 15	268 08	172 15	00 00		00 00	00 002 000 002	1 19	00 8	75 00 504 00	
ent	Commission for December, 1868, March, June and September, quarters, 1869		do	ob ob	op		400	000	900	000	QO	97	qo	F. C. Schalbuch Oli account working the February of the Company of	DISOURISHIEM III COHRECCION WIDH WOODS MID FORESES	Statement 101 C. V. Louint's agency	On account word angling	Captionam on assistance magning love	Post control y with assistanting increase 1058	L OSCURGES LALLANDER TO NY OF	Turken Debugger State St	LIST FECULIS TOUR	do and commissions	92	Salary as Crown Land agent, Peterborough	T. Gubert, Jr. Guarding timber in Artemesia	Six months' salary of the late J. F. Elliott.	Unspecting fots in Sheripfooke.	Savary and expenses as crown man agent		do do	Commission	op	(10)	1 Inspection 1 Inspection (1980) A Contract	napering	o o o l	Services woodranging	Postages	Anspecting	Disbursements do do Belleville	
N. P. Wakefield. E. Perty	A. A. Campbell	H. S. Huber	W. Harris	C. Holterman	W. Jackson	A. McNabb	To Demonstrate Southern Southe	C. M. Bosho	T The concentration	J. Ross	o, Sharman	C. Wlader	7 O C Classifich	T. C. Campbell	A Deadre & Co	P. Poloute	T Chour	W (! Amatrone	Tomas Ross	THE Powersh	M. Jackson	THE S. Huber	J. P. Moffatt	G. M. Roche	W. C. Armstrong	T. Gilbert.	Annie and Harriet Elhott	John Nogers	W. B. Byrne	R. Roberts	E. B. Borron	J. R. Tait	J. D. Beatty	Thomas MoBath	A Lones	Win. Russell	A. Russell	A. C. McDonell	C. F. Holternan	Hon S Richards	J. F. WayDisbursements	

Crown Lands Expenditure—Continued.

		Substitut 1 apois (10. 0).	
so cts.	78,787 34		
e cts.	1,869 81	23,048 17	AL) Third or
e cts.	19,215 81	20 000 000 000 000 000 000 000 000 000	11 26
SERVICE.	Brought forward	Salvereme Salvereme Salver as Con a count in the second in	Repunds. Hon, S. Richards
TO WHOM PAID.		J. R. Nash g. J. P. Way J. P. Way J. Macinnes J. G. Crezier J. G. Crezier R. Springer W. Pall W. Freeman W. Pall W. Freeman W. Preeman Walter Beaty J. W. Fitzgerald Hector Cameron John Melutyre H. O. Wood H. O. Wood Hugh Wilson A. B. Ross W. Beaty John Grant A. B. Scott G. B. Kirkpatrick Michael Deane Wilson W. Beaty John Grant A. B. Scott G. B. Kirkpatrick Michael Deane W. Beaty John Grant A. B. Scott G. B. Kirkpatrick W. Beaty John Grant A. B. Scott W. Beaty John Grant A. B. Scott W. Beaty John Grant A. B. Scott W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty John Grant W. Beaty W. Beat	Hon, S. Richards

																																											10 100
																																											100 210 011
105 00	45 75	2 6 2 72 25 25 25 25	40 00	45 37	27 83	200 002	S 7	41 63	00 /T	08/7	8 8 8	30 T/	20 46	43 22	18 30	00 02	10 00	12 00	12 00	25 TS	26 6	02	00 00	12 07	21 06	25.5	17 00	16 22	16 28	13 30	20 00	======================================	00 00	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 38		7 00 F	1	1,274 73	108 06 108 06	12 60	37 06	
99	refund of	J. F. Way (to timber dues	Young do	op	Kennedy do lot in	do do	olindo do S	te do do	do do	op op		op op 1		P. McGregor cost of suit Attorney-General vs. Shaw	J. Raun, refund on lot in Gray	do do	do do]	d do do (do do J	do do 1	.e.	op op	an do do L	00	100 (10 7)		olo olo	-9	do do	do do I	do J	gton, do do	9 - G	Such Shift do do Storrington	do do	tank do do	W. Simmons do do do	J.C. Bloomfield for the Canada Land and Emigration Company, refund of	timber dues	wes refund on lot in I	W. Beatt do do Pastincash	op op	
368	දි	9-9	99	op	qo	op	op	ş	op	op P	£	g	op G	qo	op	do	go	op	qo	ele	op	9	0 ,	9-	9-	9 5	9-5	9-5	do	qo	do	op,	g-	000	9-5	9	3-8	op _	-	9-	97	9	

Crown Lands Expenditure—Continued.

cts.	1 69 78,787 34	
60	46,341 69	
\$ cts.	3,496 73	######################################
SERVICE.	Brought forward	To pay W. Sweeney, refund on lot in Take do B. Tarbutt do do T. Fleming do do T. Fleming do do T. Fleming do do T. Fleming do do T. Scott do Blake, Kerr & Wells do do T. McDaniell do do Carrick do G. McPhail do do G. McPhail do A. MePhail do do T. Probest do A. MePhail do do Haxon do G. M. Lorendy do J. Rayo do J. Camady do J. Rayo do J. Carrick do do Haxarch do do J. Rayo do J. Rayo do J. Carrick do do J. Rayo do J. Carrick do do J. Rayo do J. Rayo do J. Grandy do J. Rayo do J. Grandy do J. Rayo do J. Grandy do J. Rayo do J. Grandy do J. Rayo do J. Grandy do J. Rayo do J. McAlastan do do J. Rayo do J. Grandy do J. Mayo do J. McAlastan do do J. Rayo do J. McAnter do do J. McGlastan do do J. McKlastan do do J. McMullin do H. Bowens do J. McMullin do D. McGlastan do D. McGlastan do D. McGlastan do do J. Rayo do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do J. Dowy do G. Thompson do G. Thompson do G. Thompson do E. Ward do J. Dowy do G. Thompson do G. Thompson do G. Thompson do G. Thompson do G. Thompson do G. Thompson do G. Thompson
TO WHOM PAID.		Hon. S. Richards D. D. Dolo Dolo Dolo Dolo Dolo Dolo Dolo
TO T		H

24

Color King Color		
Color Colo		78,787 34
1. 1. 1. 1. 1. 1. 1. 1.		46,341 69
13 P P P P P P P P P P P P P P P P P P P	######################################	11,730 35
	1 101 101 101 101 101 101 101 101 101 1	Carried forward

Crown Lands Expenditure—Concluded.—Colonization Roads.

\$ cts.	78,787 34	
\$ cts.	46,341 69	
& cts.	11,729 35	8.68 4.58
SERVICE.	Brought forwardRRFUNDS—Continued.	To pay H. B. Rathburn & Sou reducted by George Thompson refunded by Janvis R. Jarvis refunded by Jarvis R. Jarvis refunded by Jarvis R. Jarvis refunded by Jarvis R. Jarvis refunded by W. D. Pollard do do A. Slanw do do D. Purfer do do D. Purfer do do D. Purfer do do C. Rouney do do C. Rouney do do C. Rouney do do C. Rouney do do J. Marsell do do J. Marsell do do J. Marsell do do J. Marsell do do J. Marshburn & Sou do do J. Rathburn & D. J. Rethburn & D. J. Methburn
то wном ратр.		Hon, S. Richards 100 100 100 100 100 100 100 100 100 1
TO		Hon. S.

						1											
٠		61,085 97															139,873 31
15,114 95	61,456 64																
23 00 12 80 426 80 10 99				1,539 57 431 22 237 50 1,060 11	628 25 98 32 166 68	213 19 19 90 09 09	6 7 S	280 00	9,242 55	4,800 00	2,499 82	1,468 00	1,000 50 600 00 230 00	218 90	110 90 220 00	100 00 700 00 179 38	32,711 46
do A. J. Russell do dues. do G. Kirby do lot in Stephenson. do Sundry persons refunds do W. Gunter refund on lot in Tudor.	Less amount of unexpected balances of warrants transferred from the Crown Lands Department account at time of, and in consequence of suspension of Payed Canadian Pane	Total Crown Land expenditure	COLONIZATION ROADS.	Account works on Brunel Road. do Me Lean do. do Lake Joseph Road do do do do do	the do do do Canointo road Balance the on account works on Canointo road do do to Pembroke and Matawan road.	do repairs on I	Hardware furnished overseer on south Muskoka road.	Property of the second of the	Account works South Muskerses do do Rongins to Savern buildes Muskels do		Account work on do	do Carlow branch r do Rosseau	do Victoria Provisions smoothed to P C Com	W. & Criffith Grovenies any produce of the composition of the do do do W. M. Hewitt & Co	John Macdonald & Co Blankets furnished, P. C. Campbell, Rosseau road. J. B. Boustead Provisions furnished overseer, Monek	Account works Lapinean Drugge do Rosseau, Nipissing road Hardware furnished overseer, Rosseau road	Carried forward
				ls]cy	L. Moore . D. Taylor . H. Johnson					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				(troceries	& Co	A. Campbell	
Do Do Do				R. Stewart Do Do William Bensley	M. Moore T. D. Taylor T. H. Johnson	S. O. McGuire. Chas. W. Lount	W. T. Mason	J. W. Bridgland P. C. Camalar		J. II. Beatty W. & R. Criffth	C. F. Aylsworth W. H. Carney	C. F. Aylsworth. P. C. Campbell	S. C. Wood J. B. Boustond		John Mucdonald J. B. Boustead	A. Campbell	

Colonization Roads-Concluded.--Legislation.

& cts.	139,873 31		35,589 94		
s cts.		35.589			
es cts.	32,711 46	172 50 1,000 00 169 55 15 00 300 00 186 67 1,018 76 16 00			1,400 00 1,200 00 1,200 00 800 00 600 00 500 00 365 00 342 00 345 00 345 00 345 00
SERVICE.	Brought forward	Account works Muskoka road. do Washago wharf, &c. do Peterson Road. do Myschen do do Myschen do burleigh do Provisions supplied J. Graham, Monck road Expenses attending Toronto on business connected with this service.	Total Colonization Roads	LEGISLATION. Salaritës.	Twelve months' salary as Clerk of the annum. Twelve months' salary as Assistant (do annum. Twelve months' salary as First Oliforation months' salary as Junior Cl. Welve months' salary as Junior Cl. In Twelve months' salary as Junior Cl. Twelve months' salary as Junior Cl. Twelve months' salary as Junior Cl. Twelve months' salary as Mescanger Seven do Nescanger Eleven do Nescanger Eleven do Watchman, Seven do Watchman arrears
TO WHOM PAID.		D. Wright. A. Hamiton. C. Aylaworth J. Wilson G. Hunt. J. Grahan. W. & R. Griffth. W. L. Turney	28		Chas. T. Gillunor. John Notanan J. J. Vance H. J. Hartney. A. H. Sydere A. Morrison. Thos. Phillips D. Byrne J. Bowman Wu. Johnson C. A. Mædenald W, R. Tiompson

OI (IOCOIAM			, , 1
			175,463 25
	11,010 53	1,856 25	57,386 68
400 00 332 87 83 34 1,000 00 83 32 1,000 00	400 00	26 68 68 68 68 68 68 68 68 68 6	2,200 49
Twelve mat \$40 Salary as January One month Salary as Five month Salary as Salary as	do To pay in	Services as Assistant to Law Clerk. do as extra writer 52 days at \$3.00 per diem do do do 52 do 2.00 do do do 52 do 2.00 do do do 52 do 2.00 do do do 52 do 2.00 do do do 52 do 2.00 do do do 52 do 2.00 do do do 53 do 1.25 do do do 63 do 1.25 do do do 65 do 1.25 do do do 65 do 1.25 do do do 65 do 1.25 do do do 65 do 1.25 do do do 65 do 1.25 do do do 54 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 53 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.25 do do do 52 do 1.5 do Sa do 1.5 do 1.00 do do do 52 do 1.5 do Sa do 1.5 do 1.00 do do Hossenger, 52 do 1.00 do do do 1.5 do 1.00 do Sa do 1.7 do TOSTAGES AND COST OF HOUSE P. O. and Postace from 1st of Jamary P. Navember 1869.	Carried forward
S. J. Vankoughnet. D. Bethune A. Leith. Alies O'Reilly Alex. Gordon John Stevenson	Fred'k W. GlackineyerJohn Notman	J. King E. Stevenson E. H. Thompson E. F. Mills T. Essen T. A. Kent T. A. Joseph Co. J. Joseph C. J. McLennan F. Clarke A. McMullen T. Olem McCulla Henry Thompson D. Kaman D. Lalor A. R. Sager J. A. Macdonell M. J. Hurd T. O'Reily	

Legislation—Concluded.—Administration of Justice.

s cts.	2,200 49 57,386 68 175,463 25	208 00 40 00 104 00 25 43	2,511.92	9,569 64 5,668 51 9 87	13,240 05	1,580 63 68 50 1 649 13		401 21 200 69	00 100	738 64 176 65 64 75 66 8 7 7 4 8 50 17 8 81	1,142 21	3,279 53
SERVICE.	Brought forward	Services as Clerk do attendin do 52 days Stamping pad an	Stationery, including Printing, Printing Paper and Binding.	Printing and Binding Printing paper supplied Stationery	PRINTING, BINDING AND CHRULATING STATUTES.	Printing and Binding the Statutes Charges on Statutes.	EXPENSES OF ELECTIONS.	Expenses of election, South Lanark	INCREASE OF LIBRARY.	Adam, Stevenson & Co 12. G. Atlen G. E. Desbarats J. T. Rolph Seals J. Thompson Freglit charges on books Express Company Part payment for file of Toronto "Clode."	Contingencies.	For the year ended 31st December, 1869, as per detailed statement, No. 13
TO WHOM PAID,		W. Bristowe. Do Bristowe E. R. Maedonald Express Company		Hunter, Rose & Co Joseph Barber, jun. James Campbell & Son	30	Hunter, Rose & Co. Express Company		James Thompson		Adam, Stevenson & Co L. Alten G. E. Desbarats J. T. Rolph J. T. Rolph Fxpress Company J. S. Smith		

					,					
									,	257,348 64
	'			15,249 69					7,068 64	22,318 33
	2,240 00 760 00 1,600 00 1,000 00 1,000 00 1,000 00 1,000 00 500 00 500 00 334 00	1,600 00	14,755 00	494 69	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,340 00 1,200 00 1,000 00 1,400 00 233 33	160 00	6,493 33	575 31	
ADMINISTRATION OF JUSTICE. COURT OF CHANCERY. Salwies.	Twelve months' salary as Master, to 31st December, 1869, at \$2,240 per annum Arrens for 1868 Arxing Officer, to 31st December, 1869, at \$2,240 per annum do do do do do do do d	Twelve months' salary as Clerk of the Surrogate Court, to 31st December, 1869, at \$1,600 per annum	Contingencies.	For the year ended 31st December, 1869, as per detailed statement, No. 13	Twe	amnum Twelve months' salary as Senior Clerk, to 31st December, 1869, at \$1,3 do do Clerk of Process do 1, Soven do (Terk from 1st January to 1st August, 1869, as Twelve do Househeeper and Messenger, to 31st Decemb	Twelve months' salary as Usher and Crier, to 31st December, 1869, at \$160 per annum. do Assistant Messenger do 160 do	Contingencies.	For the year ended 31st December, 1869, as per detailed Statement, No. 13	Carried forward
	A. N. Buell Jo Geo, Hemings Watter M. Ross Watter M. Ross Alex Grant A. Holmsted Thoms Gray W. Cummings F. Arnoldi A. F. McLean J. Sutherland J. Humphrey W. D. Crofton	Sir James Lukin Robinson	31		Robt, G. Dalton	John Small W. Lynes Alan Cameron A. H. B. Wadsworth James Alexander	A. Plenning D, O'Connell			

31

Administration of Justice—Continued.

	e cts.	257,348 64				
	& cts,	22,318 33			4,433 50	
	& cts.		1,840 00 1,200 00 1,000 00 160 00	4,200 00		92 00 552 00 652 00 653 00 653 00 653 00 653 00 654 00 655 00 656 00 657 00
	SERVICE.	Brought forward	Defeares. Twelve month's salary as Clerk of the Crown, to 31st December, 1869, at \$1,840 per annum. Twelve month's salary as Senior Clerk, to 31st December, 1869, at \$1,200 per annum. do do Junior Clerk, do do 1,000 do crier and Usher, do 160 do	Contingencies. For the year ended 31st December. 1869, as per detailed statement No. 13		Total McNab
DAS	TO WHOM PAID.		M. B. Jackson		32	John McNab J. H. Cameron Do Thomas Galt Do Do R. Macdonald Do R. A. Harrison Do James O'Reilly Do L. D. Raymond Albert Prince Do Do Do L. D. Raymond Albert Prince Do Do Do Do L. D. Raymond Albert Prince Do Do Do Do L. D. Raymond Albert Prince Do Do Do Do Do Do Do Do Do D

	A. 1870	-7 L
		257,348 64
	9,482 69	36,234 52
124 00 6 20 00 122 00 00 123 00 100 00 144 00 154 00 154 13 155 13 157 1	2.63 15 4.6 00 1.550 40 1.550 40	15,730 01
69	ring do do do do do do do do do do do do do	Carried forward
Hashings Fall Assizes 1869 Grey Grey Grey Wellington Spring Go Ontario Fall Wellington Fall Wellington Fall Go Fronteniac do Lecus & Grenville Spring Ontario fall Go Fronteniac do Lecus & Grenville Spring Lecus A Deterbore A		Carried forward
<mark>ଞ୍ଚ</mark> ିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟିକ୍ଟ	Treasurer of the County of By quarters, 1869	
John Duggan Soln Do Do Do Do Do C. B. Fellowes A. N. Richards Do Do Do Do Do Do Do Do Do D	Wm. Duck H. C. Becher Do Bob Do Do J. Creasor, jun. S. B. Freeman Chris Robinson Chris Robinson Do Do Do Do Do Do Do Do Do Do Do Do Do Do Do Do Do Do Chris Robinson Chris	

Administration of Justice-Continued.

cts,	257,348 64	
e cts.	36,234 52	
cts.	15,730 01	765.00
SERVICE,	Brought forward	do Haldimand, do do March, Jun. & Sep. do do hard, Jun. & Sep. do do harden, do do harden, do do harden, do do harden, do do harden, Jun. & Sep. do do harden, do do harden, Jun. & Sep. do do landron, do landron, do harden, Jun. and June do landron, do harden, Jun. and September do landron, do hindlesex, do March, Jun. and September do lo hindlesex, do March, Jun. and September do do hindlesex, do March, Jun. and Sep. do do lo hindlesex, do hee. '58, Mar., Jun. and Sep. do do lo hune do Northumberland and Durham, do hune and September do lo hune ledward, do hune and September do do lo hune la hune do lo hune la hune hune do lo hune la hune hune do lo hune la hune hune hune do lo hune la hune hune hune do lo hune la hune hune do la hune la hune hune hune do la hune la hune hune do
TO WHOM PAID.	7. T. 7.	F. Le Fan. A. P. Farrell F. McCallium F. McCallium G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. G. Charteris G. P. M. Ball Adam Murray Henry Chaft G. P. M. Ball Adam Murray Henry Chaft G. P. M. Barnham M. Paxton, jun. H. Paxton, jun. J. W. Montoth W. Sheridan J. W. Marston G. J. Chapman A. Ivenia G. G. Wood G. J. Chapman G. J. Chapman G. J. W. Marston G. J. K. Macdonald J. M. Hewat John Hewat John Private G. J. K. Macdonald John Private G. J. K. Macdonald John Private G. J. K. Macdonald John Private G. J. K. Macdonald John Brown John Brown G. W. Kerr

																					257,348 64
	97,424 51																			12.075 78	145,734 81
5,133,43,48,95,50,50,50,50,50,50,50,50,50,50,50,50,50			400 00 300 00 400 00	00 00 00 00 00 00 00 00 00 00 00 00 00	400 00 300 00	\$00 000 \$00 000	3008	400 00	400 00	400 00 400 00	400 00 166 66	25. 25. 25. 25. 25.		300 00:	00 00	400 00	30 00 00 00 00 00 00 00 00 00 00 00 00 0	300 00	00 008	400 00	
A. T. McCord	MINCELLANBOUR JUNTICE. Deputy Clerks of the Crown and Pleas. Schowe as December Clorks of the Court of December 1 Decem	do do do do do do do do do do do do do d		ob ob		999		on,		Northumberland and Durham, do	Ontarro, Oxford, from 1st January to 31st May, at \$100 per annum	from 7th June to 30th Sept., '69 do from 15th Oct. to 31st Dec., '69 do	ber, 1869		Prescott and Russell.	d Glengarry, do	00 00		ορ Οθ	do	Carried forward
do Dec. '68, sheriff of County York, expense connected with W do Carleton, services of grand, and other expense Special services as Crown Attorney, Perth	MISCELLA Deputy Clerks of	31st Dec; 1869	\$ \$ \$ \$	do Grey, do Haldimand, do Halton.	lead lead t					9 e,	දුර අ	do as Acting	6 6	-de	8-P	do	ep op	d o	do do	do	Carried forward
A. T. McCord	TAY December	W. Gunn Janes Frazer	T. D. Warren D. A. McMullin P. O'Reilly	P. Inglis, P. V. Griffth W. L. P. Bager	A. G. Northrup Hugh Johnstone	T. A. Ireland J. R. Gennnell	co Charles Mee	J. B. McChin	John McBeth	C. C. Kapalpe	J. V. Ham Junes Kintrea.	W. A. CampbellJames Canfield	James A. Austin	John Twigg	Thomas Fortye J. W. Marston	Tk. McDonald	William Grace	James Colquhoun	James Hough	S. H. Gheut	

Administration of Justice—Continued.

		1		-					_				=		_		-		=	=	-		-		_		_	=
	cts.	257,348 64																										
	65	257,																										
Adjust Control of the	cts.	18 81																										
-	€	145,734 81			,																===							
	cts.				246 34	41 00	18 50	19 00 49 00	17 50	47 00 03 50	15 00	84 80 80 80 80 80 80 80 80 80 80 80 80 80	27 50	43 00	200	28 20	31 00	00 73	28 71	53 27 97 93	69 69	00 89	3= 88	26 30	06 9I	40 50	20 00	88 84 84 87
	6⊕				61						•																_	
					ourt of					:		:		:	:		:	Assizes	:	:		:			:			
Acres de la constante de la co				ces.	Tork, attending Court of Brror and Appeal and Queen's Bench	0												Wentworth, do Pleas. Brant. stationery. postage, and attending Assizes	D									
-				Administration of Justice in Alyoma, Nipissing, and other Services.	of York, attending Court of Brror and Appeal and Queen's Bonch Wellington, services of himself and Constables attending sithings.	0 -	ද ද	op op	qo	qo P	3 e	do do	<u></u>	do 1	9 9	qo	do	ao mdatte	op.	cp Sec	eg op	do	9 9	qo	do J.	ရ ရ	do	දිදි
		.d	ed.	end oth	Queen's													stage, s										
		Brought forward	Jontinu	ssing,	al and tables													erv. Do	4									
COMPANDON N	CE.	rought	TICE	t, Nipi	Apped Cons	-	99	98		දිදි	el el	9	ခွင့	ę,	9-6	දිදි	do do	do station										ille,
To the second se	SERVICE	7	is Jus	Alyome	ror and self an			Tana.		Ga d	, ,,,,,							Brant.				•		,				Grenv
PRODUCTION DO	23 E. E.		LANEOU	tice in	t of Err			nd Gle	5	1 D.m.	T TO CIT							Pleas.	Bruce,	Carleton,	Essex,	Frontenac,	Grey, Haldimand	Halton,	Hastings,	ruron, Kent.	Lambton,	Leeds and Grenville,
The Property of			MISCELLANEOUS JUSTICE—Continued	of Ins	g Cour	Chaneery		Leads and Grenville, Stormont. Dundas and Glenconv.		Frontenac,	,							wn and	Bru		Ess	Fre		Ha	Ha	Ye	Inst	Leg
			-	tration	ttendin	uncery	n,	and Gr	o, ,	mac,	Peterborough,	_^-	k, on,	,8'S		•	i.e.,	vorth, he Cro										
ON INTERNATIONAL PROPERTY.		A. A. A. A. A. A. A. A. A. A. A. A. A. A		dminis	Zork, a	C C	Brant, Lincoln,	Leeds a	Ontario,	Frontenac,	Peterb	Oxford,	Lambton,	Hastings,	Essex,	Perth,	Victoria,	Wentworth, ork of the Cre	op.	6 7	go go	op,	9,6	qo	qo H	9-9	qo	ුද
Section on the section				V	riff of J	-	99	op op	do	ခုခ	ရှ	မှ	e e	do 1	9,9	do do	do J	do utv Cl	•									
					She		: :	: :	:	<u>:</u>	: :	:	: :	:	; ;	: :		Der	:		: :		: :		:			
0.00	9.	The second secon																								T		
	TO WHOM PAID.									:																		
Name and Address of the Owner, where	WHON				ris	b	lruff .	enson.	olds .	lson			toft	/lor	wen onald .	rell	gall	o		zer	1ullin.		fith	dager .	shrup.	nd	mell	ee. B, jun
	TO 1				F. W. Jarvis Geo. J. Grange		A. Woodruff	. G. Dickenson.	N. G. Reynolds	W. W. Ferguson	James Hall	A. Koss	James Flintoft	George Taylor	John McDonald	R. Moderwell	N. McDougall	W. Rubidgo Deputy	Wm. Gunn	The Desirent	D. A. McMullin	P. O'Reilly	. V. Griffith	L. P. 1	A. G. Northrup Hugh Lebaston	. A. Ireland	R. Genmell	S. Reynolds, jun
					F. M.	T.1.	J. A.	7.A	Z Z	3/2 3/2	Jame	45. 45.	Jame	Creon	John		47 48	 	Wm	T am	D. A	다. 이 :	: :2	W.]	A. C.	1. A	J. R	S. E.

21 10001tm	_
	257,348 64 M
14,219 66	159,984 47
84888884888888888888888888888888888888	1,205 73
do Limonh, do Limonh, do Limonh, do Limonh, do Northumberlan Co Ontario, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Peth, do Raferloo, do Waterloo, do Waterloo, do Waterloo, do Waterloo, do Waterloo, do Waterloo, do Auterloo, do Auterloo, do Auterloo, do Control Sist, 1869 Simoco, do Auterloo, do Control Sist, 1869 Stationery, 1869 Stationery, blank forms, &c., for his Office, lear of Court House at Sault Ste Marie. Stationery, blank forms, &c., for his Office, Scrvices as Clerk of Assizes, Toronto, Quee do Clerk of Listrict do Court House at Sault Ste Marie Stationery, blank forms, &c., for his Office, Scrvices as Clerk of Assizes, Toronto, Quee do Clerk of District do Clerk of District do Special Services re Seaforth murder case. Toronto Toronto Toronto Toronto, and expenses re Mel County Attorney, Essex, special services Services as Acting Deputy Clerk of the Cr Expenses opening County Court at Woods	Carried forward
J. B. McGuin F. A. B. Cleuch John McBeth C. C. Rapaljie G. C. Rapaljie J. V. Ham J. V. Ham J. A. Austin J. M. Anston J. W. Marston John Twige J. W. McDonald William Grace James Colquboun I. P. William Grace James Colquboun I. P. William Grace James Confedd James Colquboun J. P. William J. Lane James Canfedd J. Lan	

Administration of Justice—Concluded,—Public Works and Buildings.

	es cts,	257,348 64					162,446 55											
No. of the last of	ets.	159,984 47	1,316 23	20 199	401 78	83 00												
STATE OF THE STATE OF THE PARTY AND THE PARTY OF THE PART	ets.	1,206 73	88 00 14 00 8 50	661 07	401 78	00 22			1,387 11 1,289 34 1,229 94 4,229 94 1,711 45 1,78 35 1,78 45 1,78	TO WHOM PAID.	Brought forward	G. McMicken P. McGregor Law costs, Tracy r. Attorney General Lo Lo Lo Lo Lo Lo Lo Lo Lo Lo Lo Lo Lo	A. F. Kirkpatrick	Wichael Laporte	Thomas Smith	Total Administration of Justice	PUBLIC WORKS AND BUILDINGS. DEPARTMENTAL AND PARLIAMENTARY BUILDINGS.	Consumers Gas Co Nater Composition Water Join Chements Gars fittings Chaffey Bros Wan Myles Chaffey Bros Wan Myles Chaffey Bros Chaffey Bros Chaffey Bros Analysis chairs, repairs, &c. Join Boxall Donald Grant Robert Bell Painting, Glazing and Whitewashing D. Devlin D. Devlin Efilling up and levelling grounds

	419,795 19
. 11,589 17	11,589 17
191 25 25 25 25 25 25 25 25 25 25 25 25 25 2	37,401 75
F. H. Heward Janus E. Smith On Treasman Janus E. Mille Janus E. Janus E. Mille Janus E. M	Carried forward
F. H. Heward J. & J. Taylor J. & J. Taylor J. & J. Taylor J. & J. Taylor J. B. Henry Lowis J. J. Henry Lowis J. J. Henry Lowis J. J. Holl Smith J. J. Holl Smith J. J. Henry Lowis J. J. Henry Lowis J. J. Henry Lowis J. J. Henry Lowis H. Henry Lowis J. O'Brien M. J. O'Connor H. O'Connor H. O'Connor H. O'Connor H. O'Connor H. O'Connor H. O'Connor J. O'Brien J. O'Brie	

Public Works and Buildings-Continued.

=						6
	e cts.	419.775 19				
	eg C¢ts	11,589 17		39,695 84	2,459 46	
	cts.	37,401 75	1.288.98 2.288.98 2.388.98 2.388.98 2.388.98 2.388.98 2.388.98 3.388.98		923 68 1,145 06 390 72	1,000 00 34,000 00 393 00 14 50 17 60 17 60 17 60
	SERVICE.	Brought forward	Stove-pipes, &c	Charged to Capital Account	LIEUTENANT-GOVERNOR'S RESIDENCE. To pay for wood coal, water &c., for the quarters ended 31st December, 1869. To pay for wood, coal, water, &c., for the quarters ended, 31st March and 31st December, 1869. To pay for wood, coal, water, &c., for the quarter ended 30th June, 1869. Charged to Maintenance Account	James Smith. C. W. & T. L. Kempster. James Price. Five months' salary as Clerk of the Works Advertising A
	TO WHOM PAID.		John Boxall Hon, John Carling Do Geo, Jain Daniel Devlin Express Company M. Konch M. J. Smith P. Wash T. Nightingale Phobbic & Carrie Clins. Lalor Ridout, Alkenhead & Crombie John Bradford		Hon, John Carling	James Smith C. W. & T. L. Kempster James Price Jacques & Hay Jacques & Hay James Beaty Hunter, Rose & Co.

				419,775 19
	40,993 25	62,860 38	245 75	157,843 85
4,300 00 67 73 27 5 51 40 00 8 9 00 8 8 9 00 8 8 9 00 8 8 9 00 8 8 9 00 8 8 9 00		2,155 00 00 1,112 00 00 1,112 00 00 1,112 00 00 1,112 00 00 1,112 00 00 1,112 00 00 1,112 00		
Hon. John Carling Ross, Bell & Holden Conveyancing re purchase of ditto R. Mylea & Co. Advertising re purchase of ditto R. Advertising for tenders in sundry newspapers. W. Edvards. W. Edvards. Frayeling expenses ditto of self, Attorney-General and Commissioner of Public Travelling expenses ditto of self, Attorney-General and Commissioner of Public Service in connection with this work W. Edwards. R. Yully Services as draughtsman.	Capital Account	Stating and materials Soft & Stollery Stating and materials S. Keith G. Pearcey & Son G. Pearcey & Son Higher G. Pearcey & Son Higher Higher D. R. J. Macdonald Material furnished for use of masons D. R. J. Macdonald D. R. J. Macdonald Material furnished for use of masons Soott & Stollery Soott & Stollery D. R. J. Macdonald Material furnished for use of masons Normal Sons Soott & Stollery Soott & Stollery D. W. J. Macdonald Material furnished for use of masons Normal Sons Soott & Stollery D. W. Woods Soott & Stollery Soott & Stollery D. W. Woods Soott & Stollery D. Material furnished for use of masons Normal Sons Soott & Stollery D. Material furnished for use of masons Soott & Stollery D. Material furnished for use of masons Soott & Stollery M. Woods Soott & Stollery D. D. D. D. D. D. D. D. D. D. D. D. D. D	Insurance and carpente	Carried forward
Hon. John Carling. E. Myles & Co. E. Myles & Co. W. Edvards. I To pay purchase money of Advertising tenders. W. Edvards. I W. Langmuir. T. W. Molesworth W. Edwards. T. N. Molesworth W. Edwards. Expenses to at and from the form of the f		Scott & Stollery George Ringham D. S. Keith D. S. Keith D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Macdonald D. & J. Machael D. & J. M. Charles D. & J. M. Cha	James E. Smith	

Public Works and Buildings-Continued.

sto cts.	419,775 19			-		
\$ cts.	157,843 85	00 009		3,505 73	1,497 65	
s cts.			200 201 201 201 201 201 201 201 201 201	00 04	1,189 02 79 80 219 60 9 23	2,345 67 2,345 67 26 82 715 00 43,350 00 685 00
SERVICE.	Brought forward	House for Caretarer P. J. A., Toronto. Work as per contract	Robert Barber, jun. Thomson & Burns. Planketz furnished Thomson & Burns. Plankware furnishings N. L. Piper Henry Graham & Co. Hardware furnishings Henry Graham & Co. Principleess No. Edwards. Expenses to Oshawa to select furniture and freight on same Salawa (Salawards). Sofas, furniture, &c. Oshawa Cabinet Company Sofas, furniture, &c. Carpetings R. C. Gurney R. W. Land. Bryce, McEurrich & Co. Mirrors and Picture Frames. R. W. Land. Bryce, McEurrich & Co. Sheeting, &c. Mirrors and Cottons Miffat, Murray & Co. Ribecting, and Gottons	NEW PUMPING ENGINE P.L.A., TORONTO.	Dickey, Neill & Co	Chas. Potter D. & J. Macdonald. (Carpenter Work T. M. Cousins D. E. J. Michael Excavating, & C., per contract Il muter, Rose & Co. Printing Thomas H. Pracey Stalary as Glerk of Work and Draughtsman. Hoyt & Strickland. Con account contract building Talbot & Cousins On account contract building
TO WHOM PAID.		John Harper	Robert Barber, jun Table entlery and hardwar P. Paterson & Son Hardware Chas. Carnegie Theory and hardware Chas. Carnegie Thurs-pieces Theory Graham & Co. Hardware furnishings M. L. Piper Chas. Carnegie Henry Graham & Co. Hardware furnishings M. Astenson & Co. Hardware Sofas, furniture & Co. Winks & Co. Carpetings Sofas, furniture & Co. Winks & Co. Carpetings Sofas, furniture & Carpetings McMarka Channy & Co. Carpetings Sofas, furniture & Carpetings McMarka Channy & Co. Carpetings McMarka Co. Carpetings & Carpetings McMarka Co. Stocker, hardware Fram Bryce, McMarray & Co. Sheeting, & Co. McMarka Mirrors and Picture Fram Moffat, Mirrors and Picture Fram W. H. Rue in M. Rue in M. Marchadose	Tr. Ferce, Jun.	Dickey, Neill & Co	Chas. Potter D. & J. Macdonald Carpenter Work J. M. Cousins Illuster, Rose & Co Thomas, R. Tweey Printing Hoyt & Strickland On account contract building Tabot & Cousins

	15	13 11
	200	419,775 19
75,161 07	6,978 26	245,843 76 11
11,500 00 24,000 130 00 130 00 130 00 130 00 130 00 130 00 130 30 140 00 120 10 140 00 150 10 160 10 170 10 180	न कर्षा १ वर्गन	19 63 1
Hon. Jno. Carling To pay purchase money of land for Asylum. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. H. Barret. J. J. Moleyeld Control of Jan Special of Special of John Challed Control of John Children J. C. Bennett. J.	Printing States of Works States as (Terk of Works States) as (Terk of Works Dredging liver————————————————————————————————————	Carried forward
Hon. Jno. Carling To pay purchyse J. H. Barret. Michoel Shea Dames Briely Gravelling Roads James Briely In payment of Jan Won at outbuildi John Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Don Christie Charles connect Kivas Tuly. J. C. Bennett Expenses connect Conveyancing France Hon. Jno. Carling Christian Go Services in connect John. Cameron Carling Christian Edwards Don Christian Edwards To pay for adverting John Clements. Jacques & Hay Matting John Carlonder work John Clements. Jacques & Hay Matting Carlonder work John Clements. Jacques & Hay Matting To pay Jacques & H. Graham & Co. To pay Jacques & Matting To pay Jacques &	Hunter, Rose Co	

Public Works and Buildings—Concluded—Asylum Maintenance.—Reformatory.—Immigration.

e cts.	419,795 19							260,052 89
cts.	245,843 76		10,788 45		405 63		2,925 05	
s cts.	19 63	438 00 780 00 780 00 113 52 469 00 16 33 10 00 50 22 6 00		357 55 36 00 102 08		1,177 14 1,471 01 10 00 154 00 45 00 8 40 8 40 43 00 16 50		
SERVICE.	Brought forward	Salary as Clerk of Worl of mecount of contract In payment of land Expenses connected with Services in connection very fropay for use of bost, I ravelling expenses to if to pay for advertising in langrossing conveyance		Services and expenses in connection with this work do as Draughtsman To pay for advertising for tenders in sundiy papers.	Charged to Capital Account	Surveying, assistants and expenses. Services of himself and assistants, and travelling expenses in connection with this work. Camping box Services as Dyaughtsman, &c. Blankets Canvas tents Buildio vobes	Charged to Capital Account	Total Public Works and Buildings
TO WHOM PAID.		James Ross McDonell & McDonald John Burnham A. G. Hobinson T. N. Molesworth A. G. Ross Kivas Tully Wm. Edwards F. Finel	44	T. N. Molesworth, C. E. W. B. Gennnell.		R. Gilmor. T. N. Molesworth, C. E. H. Piper & Co. V. Holwell A. N. Molesworth F. Morrison James Adams J. Galbrath & Co.		

Z	123.145.46		06)66,62		17,595 00	844,146 04
	73,813 86 32,450 98 16,880 62			2.22 2.22 2.22 2.22 2.22 2.22 2.22 2.2		
ASYLUM MAINTENANCE.	Maintenance and Salaries of Officers, Provincial Lunatic Asylum, Toronto, and Firanch, for the year ending 31st Dec., 1869, as per Statement No. 14. Maintenance and Salaries of Officers, Malden Asylum, for the year ending 31st Dec., 1869, as per Statement No. 15. Maintenance and Salaries of Officers, Orillia Asylum, for the year ending 31st Dec., 1869, as per Statement No. 16.	Maj	IMMIGRATION.	Hunter, Rose & Co. Printing pamphlets, &c. Bostage on do By Lessife Charges on do Roberson & Cook Charges on do Roberson & Cook Alvertising Grand Trunk Kaliway Company Fasses for immigrants Grand Trunk Kaliway Company Gopies Canada fermer Northern Raliway Company Copies Canada Gramer Northern Raliway Company Copies Canada Gramer Northern Raliway Company Copies Canada Gramer Row We Hels Services Thomas McMuray Rev W. Trease Agent, Foronto, expenses menred for provisions, &c., for immigrants Agent, Foronto, expenses menred for provisions, &c., for immigrants A publisherson A york of the Market Row W. F. Clarket Bergense and services as Empirited and Printing majes Row W. F. Clarket Bergense and services as Empired and Printing majes W. C. Chewett & Co. Integraphing cange and printing majes R. H. Rae Services as messenger A Mochlerson V. A Mochlerson V. Chewett & Co. Sarvices as messenger Sarvices as messenger A Mochlerson V. J. Rolph Row of Chice stamp Sarvices as messenger Sarvices as messenger Sarvices as messenger Sarvices as messenger Sarvices as messenger A Mochlerson V. T. Rolph Farrice to the charges Sarvices as messenger Sarvices as me		Curried forward
	Śundry persons Henry Lander J. Ardagh	Wm, Moore Kelly		Hunter, Rose & Co. Printing pamphlets, & C. J. Lesslie Postage on do Baperses Company Charges on do Robertson & Cook Parges on do Robertson & Cook Advertising Grand Trunk Railway Company Passes for immigrants Greet Western Railway Company Passes for immigrants Greet Western Railway Company Passes for immigrants Greet Western Railway Company Passes for immigrants Thomas McMurray Parphets as extra Clerk Thomas McMurray Pamphlets Pamph		

Agricultur

es cts.	844,146 04	
& cts.		
ets.	700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00	98988888888888888888888888888888888888
SERVICE.	AGRICULTURE. Addington Alguna	Cardwell Cardwell Cardwell Cornwell Durdas Durdas Durdas Dign, East Figur, West Figur, West Frontenae Clengary Grey, North Grey, South Hashings, South Hashings, South Hashings, South Hashings, South Hashings, South Hashings, South Kingston Lauland, North Kingston Lauland, North Kingston Lauland, North
TO WHOM PAID,	Hon. Jno. Carling	

Lincoln Middlesex, North Middlesex, Bast Middlesex, West Middlesex, West Moreland, Fast Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Northumberland, West Peel Outavio, South Ottavia, Peel Peet, North Peel Peet, North Peel Peet, North Peel Peet, North Peel Peet, North Peel Peet, North Peel Peet, North			
Renfrew, North Install Shacee, North Shacee, North Shacee, North Shacen Victoria, North Victoria, South Waterloo, South Waterloo, South Welland Wellington, Gentre Wellington, Gentre Wellington, South Wellington, South Ventrouch, North Wentrouch, South Ventrouch, South	7750 00 00 00 00 00 00 00 00 00 00 00 00 0	53,894 00	

Agriculture—Concluded.—Miscellaneous.—Hospitals and Charities.

& cts.	844,146 04					67 551 41
es cts.	53,894 00	350 00	10,000 00			3,307 41
ets.					200 00 00 00 00 00 00 00 00 00 00 00 00	
SERVICE.	Brought forward	To pay Legislative Grant to the Fruit Growers' Association	To pay grant to Ontario Agricultural Association	To pay Legislative Grant to the following Institutes:	Paris Seaforth Townto Schomberg Meaford Berlin Bamilton Bamilton Bowmanville Galt Oshawa New Market Whitby Streetsville Mitchell Smith's Falls Smith's Falls Smith's Falls Smith's Mitchell Mitchell Mitchell Mitchell Smith's Falls Streetsville Mitchell Mitchell Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Shifton Mitchell Mitchell Mitchell Shifton Mitchell	
то wном рагр.		Hon, Juo, Carling	Do	Hon. Jno. Carling	48	

J.	+ Victori	iil.		Sessional Lapers (10. 5). A. 1870-71	L
				21, 202 27	COMPOSE IN
	6 6 6	2,550 85	2,000 00 2,000 00	1,400 00 250 00 250 00 250 00 530 00 1,400 00 3,250 00 3,250 00 1,400 00 1,400 00 1,400 00 1,400 00 6,400	
	2,000 00 505 43 15 00 10 42	3,094 09	275 00 100 00	250 00 00 00 00 00 00 00 00 00 00 00 00 0	ייי טיייי
MISCELLANEOUS.	J. W. Langmuir	Cost of printing the Official Gazette	Hon. Sidney Smith	Gratuity on dispensing with his services do do do do do do do do do do do do do d	Celtter for wat warming and an an an an an an an an an an an an an
	J. W. Langmuir	Do Joseph Leslie	Hon, Sidney Smith	T. Hammond F. A. Hall C. M. Grant, G. E. Lindsay A. II. B. Wadsworth J. Alley W. Bbbs A. Russell A. Russell A. Russell A. Russell Do Do Do T. Woodside T. Woodside T. Woodside T. Woodside Do Do Do Do Do Do Do Do Do Do Do Do Do	

Hospitals and Charities-Concluded.-Literary and Scientific Institutions.-Education.

	& cts.	932,919 72	90	40,000 00	3,600		
	cts.		40,000 00	3,600 00			=
	e cts.	26,640 00	1,200 00 2,250 00 750 00 320 00 640 00 2,400 00 1,000 00	750 00 750 00 750 00 750 00 750 00 300 00 300 00		4,000 00 2,290 00 1,400 00 1,000 00 800 00 600 00 600 00 48 00	11,313 00
	SERVICE.	Brought forward	nan Cat ant in a did of Hc Rc Ge	Aid to Medical Faculty, Victoria College, Cobourg. do School of Medicine, Kingston do do do Tronto do Ganadian Institute, do do Athenæum, do do Athenæum,			
The state of the s	TO WHOM PAID.		T. Woodside	G. Rolph T. Woodside Do Do Do Do Do	Rev. Dr. Ryerson	J. George Hodgins Alexander Marling A. Williamson. F. J. Taylor J. R. Strison V. H. Atkiuson James Moore Do	

_				- ` '	
					976,519 72
	13,540 27			17.876 54	31,416 81
	2,227 27			2,000 000 1,500 00 240 00 240 00 1,000 00 1,000 00 150 00 150 00 150 00 252 00 150 00 252 00 150 00 252 00 252 00 252 00 252 00 252 00 252 00 252 00 252 00 252 00 252 00 253 00 253 00 253 00 254 00 255 00 256 00 256 00 257 00 258 00 258 00 258 00 258 00 258 00 258 00 258 00 258 00 258 00 259 00 259 00 259 00 259 00 259 00 250 00	
Contingencies.	For the year ended 31st December, 1869, as per detailed statement, No. 13	NORMAL AND MODEL SCHOOLS,	Salaries.	Twelve months' salary as Head Master of the Normal School, to 31st December, 1869, at \$2,000 per annum. Twelve months' salary as Second Master do Drawing do do do do Drawing do do do do do Drawing do do do Drawing do do do Misser. Boys' Model School do 1,000 do do Ninster. Boys' Model School do 1,000 do do First Assistant Master of the Normal School, 31st December, 1869, at \$500 per annum. Three months salary as Second Assistant Master of the Normal School, 31st December, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, 31st December, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, 31st December, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, to 31st March, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, to 31st Beptember, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, to 31st September, 1869, at \$600 per annum. Three months' salary as Second Master of the Normal School, to 31st September, 1869, at \$600 per annum. Three months' salary as Assistant do do do do do do do do do do do do do	Carried forward
				J. H. Sangster Rev. H. W. Davies Sanuel Clare Wm. Armstrong H. F. Sefton J. Carlyle James Hughes Do William Scott C. Archibald C. Archibald John John John John John William Hodgson John John John John John John John Jo	

Note.—The difference between the Appropriation for Normal School Salaries and the amount, as above shewn, actually expended, is covered by an Order in Council increasing Teacher's Salaries, dating from 1st April, 1869, \$350 per annum.

cts. \$ cts.	31,416 81 976,519 72	7,260 00 500 00 400 00 112 50 15 00	120 00 320 00 252 00 2,919 50	36,068 57	2,000 00	1,474 32 5 20 6 50 1,886 02	
00		-		33,149), at \$2,000		
SERVICE.	Brought forward	Depositions. Salaries. Twelve months' salary as Clerk of the Libraries, to 31st December, 1869, at 81,200 per annum. Twelve months' salary as Assistant Clerk of Libraries, to 31st December, 1869, at \$500 per annum. Twelve months' salary as Depository Salesman, to 31st December, 1869, at \$100 per annum. Nine months' salary as Assistant Depository Salesman, to 31st December, 1869, at \$150 per annum. Two months' salary as Assistant	Twelve months' salary as Junior Assistant, to 31st December, 1869, at \$120 per annum. Packer and Messenger, do 320 do do Laborer	To meet expenses of this service as per detailed statement No 20	Twelve months' salary as Grammar School Inspector, to 31st December, 1869, at \$2,000 per annum. JOURNAL OF EDUCATION.	Twelve months' salary as Editor to 31st December, 1869, at \$400 per annum. Printing, &c. Subscription do	COMMON AND SEPARATE SCHOOLS.
TO WHOM PAID,		S. P. May	R. J. Bryce Geo, Barber Wm. Lemon	Sundry persons	Rev. J. G. D. Mackenzie	J. George Hodgins Hunter, Rose & Co. Glole, Toronto Leader, do	

34 Victoria.		Sessional Lapers (110. 9).		23, 3		
	275,717 84		6,039 51	4,000 00		1,262,277 07
1,690 00	6,332 13					
		221 00 22 00 122 00 173 10 10 10 10 10 10 10 10 10 10 10 10 10			1,000 00 1,000 00 1,000 00	3,000 00
To meet expenditure as per detailed statement No. 20	To pay Superannuated Teachers as per statement No. 20	Pev. Dr. Ryerson Travelling expenses attending School Conventions Travelling expenses attending School Conventions Travelling expenses attending School Conventions Expenses of investigating Agricultural Affairs Expenses of investigating Agricultural Affairs Expenses of investigating Agricultural Affairs Expenses of investigating Agricultural Affairs Expenses of investigating Agricultural Affairs Expenses of investigating for North Control of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses of Investigating Expenses	Total Unforeseen and Unprovided	Loan to Toronto General Hospital	Hon. W. H. Draper, C.B Chief Justice, Court of Error and Appeal, twelve months' salary	Carried forward
Hon. E. B. Wood	Do	Rev. Dr. Ryerson Hon. J. Carling James Campbell & Son. Hunter, Rose & Co. Alex. Grant, Fegistrar Hon. E. B. Wood Do Do Ca. Hunter, Rose & Co. Joseph Jeslie Hon. W. Cayley Mrs. A. B. Seulivan Hon. Y. Cayley Altrest Company W. B. McVity Hunter, Rose & Co.		J. W. Brent	Hon. W. H. Draper, C.B Hon. W. B. Richards Hon. J. H. Hagartv	

Salaries, Judges of Superior Courts—Concluded.—Municipalities' Fund.—Stationery Office.

11 .	1 .							1	
es cts.	1,262,277 07		10,000 00	168,596 73	-		3,735 03	1,444,608 83	D, Treasurer.
. ets.				133,652 07					E. B. WOOD
& cts.	3,000 00	1,000 00 1,000 00 1,000 00 1,000 00 1,000 00 1,000 00 1,000 00 500 00				601 79 604 08 2,550 83 40 73	3,797 43 62 40	0	
SERVICE.	Brought forward	Hon. P. M. Vankoughnet Chancellor, Twelve months' salary. Hon. J. C. Morrison Judge, Court of Queen's Bench, Twelve months' salary Hon. Adam Wilson do Common Pleas, six months' salary Hon. J. W. Gwynne do Common Pleas, do Common Pleas, do Common Pleas, do Common Pleas, do do do do do do do do do do do do do	MUNICIPALITIES' FUND.	Treasurers of Municipalities Distribution for the eighteen months ending 31st Dec., 1868, as per detailed Statement No. 18 No. 18 No. 18 Crown Lands Revenue	STATIONERY OFFICE.	Buntin, Bros. & Co. Stationery supplied Stationery Clerk. Alex. Gordon. To pay freight duty, &c., on stationery imported to the A. P. Potter for stationery supplied Q.P. B. Wood do McPherson, Ross & Co., freight and charges on stationery supplied Q.P.	Less refund	Total	
TO WHOM PAID.		Hon. P. M. Vankoughnet Hon. J. C. Morrison Hon. John Wilson Hon. Adam Wilson Hon. J. W. Gwynne Hon. J. G. Spragge Hon. O. Mowat Hon. O. Mowat Hon. Thos, Galt	5	Treasurers of Municipalities		Buntin, Bros. & Co			

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1869.

No. 13.

STATEMENT shewing details of Contingencies referred to in the annexed Statement, for the year ended 31st December, 1869.

	cts. \$ cts.	241 03	241 03
	€>		=
Name and Address of the Owner, where	e cts.	####################################	293 60
CHARLES AND AND ADDRESS OF THE PROPERTY OF THE	SERVICE.	Tieutenant Ge 30th November, 1869. "perises and advertising hire. Executive (30th November, 1869. Interes (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Carried forward
	TO WHOM PAID.	Joseph Lesslie Hurter, Rose & Co. Hurter, Rose & Co. Hurter, Rose & Co. E. G. Cirrtis Daily Telegraph Company Printing Partiting Party Company Advertising Daily Telegraph Advertising Daily Telegraph Advertising Daily Telegraph Advertising Advertising Daily Telegraph Advertising Daily Telegraph Advertising Co. Hamilton Spectator Express Company J. Adams J. Adams J. Adams J. Adams J. Robph E. G. Curtis James Bain Map Map Joneph Loslie Hurter, Rose & Co. James Bain Montreal Heratte Joneph Loslie Hurter, Rose & Co. Subscription Joneph Loslie Hurter, Rose & Co. Subscription Joneph Louler T. C. Patteson T. C.	

 		2005 (10. 5). 11. 1070-71
& cts.		
& cts.	241 03	385 33
ets.	293 60	811 845 888 888 888 888 888 888 888 888 888
SERVICE.	Brought forward	Subscription Candles. Scrubbing Removing furniture, and do do do do do do do do do do do do do
TO WHOM PAID.		Ayhner Tünes Fulkon & Michie Mrs. Sipelhacy M. Smith J. Silmach J. Silmach Pality Telegraph Dality Spectrator John Notman John Boxall Berlin Telegraph S. Walker & Sons Jondon Willson Jonn Willson Jonn Willson Jonn Willson James Beaky Ganada Lew Journed Conwall Telegraph Conwall Predoduce J. Gamphell & Sons J. Camphell & Sons J. Camphell & Sons J. Camphell & Sons J. Camphell & Sons J. Boxall M. Roach J. Boxall M. Reach J. Boxall M. Melville Sypress Company Frikon & Michie Express Company Frikon & Michie

466 25	2,003 86	3 008 46
27.6	\$\frac{1}{8}\frac{1}{8	54 75
Scrubbing	Postages to 31st do do do lo los la la la la la la la la la la la la la	T. C. Pattoson Expenses to Ottawa re transfer of books, &c
J. Silmser	1. Lesslie 1. J. Hartney 1. J. Hartney 1. J. Hartney 1. J. Hartney 1. J. Hartney 1. J. Hartney 1. J. Hartney 2. J. T. Hoph 1. John Boxall 3. T. Hoph 2. Campoll Company 3. T. Hoph 3. Campoll Company 4. Call Lesslie 5. Campoll December 6. Jamilton Theory 7. Campoll December 7. J. Hartney 7. Candian 7. J. Hoph 7. Candian 7. Campoll December 7. J. Hartney 7. Candian 7. Lartney 7. L. Hall 7. J. Hartney 7. L. Hall 7. Lesslie 7. J. Hartney	T. C. Patteson

Contingencies—Continued.

cts. 8 cts.	16	21
÷	3,096 46	1,378
e cts.	1,261 69	52 - 52 - 52 - 52 - 52 - 52 - 52 - 52 -
SERVICE.	Brought forward Secretary and Registrar's Office- Continued.	Statutes Principle System writing Principle System States Charges Ice pitcher Subscription Gazetteer Travelling expenses Subscription Fravelling expenses Patent file Whisks Nhisks Subscription D Postages to 30th Nov Printing, &c Travelling expenses Statemers Felgymus Statemers Fravelling expenses Statemers Fravelling expenses Statemers Fravelling expenses Statemers Fravelling expenses Statemers Fravelling expenses Travelling expenses
TO WHOM PAID.		S. Hackett Miss Arnoldi H. Alley Miss Arnoldi H. Alley Miss Arnoldi H. Alley J. E. Ellis & Co Travelling expenses on depa Spress Compony Jone Offole Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Conted Service Gractle Content Telegraph Conted Telegraph Conted Telegraph Company James Campbell & Son Conted Conted Content

	=
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1,926 58	6,401 25
=	9
6808888 88088888 8808888 8808888 880888 880888 880888 880888 880888 88088<	96
● Section 2 Sec	832
	=;
enses count of services locks al and wood al and wood as charges, and cartage so charges, and cartage so city of the Department, to and at London by Scientific magazines Crown Lands Department. can alway as temporary Clerk, at \$1.00 per diem o do o sis Fireman, at \$1.00 per diem.	Carried forward
and at Loudon ment. por diem o	
penses penses penses account of services thocks coal and wood as charges, and cartage ses charges, and cartage ses of Officers of the Department, to and at London ries two years two years Crown Lands Department. Crown Lands Department. by Wo years Crown Lands Department. charges the Standary as temporary Clerk, at \$1.00 per diem do do do do do do do this as Fireman, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem do the Standary as temporary Clerk, at \$1.00 per diem the Standary as temporary Clerk, at \$1.00 per diem the Standary as temporary Clerk, at \$1.00 per diem the Standary as temporary Clerk, at \$1.00 per diem the Standard All the Stan	
s st of services ad wood ad wood orgas, and cartage orgas, and cartage orgas, and cartage orgas, and cartage orgas and cartage orgas organis orga	erd
o o o o o o o o o o o o o o o o o o o	d forw
nemt, t	Carrie
Lands Clerk, 0 per d	
es f the Department, to and gazines Crown Lands Department. orary Clerk, at \$1.00 per do do do at \$1.00 per diem	
wood wood wood cs, and cart fifteers of th rifife magazi ars Cros	
spenses account of services al locks coal and wood ers sis charges, and cartage sis to scientific magazines two years two years Crown Lands Department. als salary as temporary Clerk, at \$1.00 per diem do do this as Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem and this is Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem this is Fireman, at \$1.00 per diem	
alling expenses righton righton and observices and ocks and locks and ocks and locks righton righton righton righton righton righton righton righton righton cappenses of Officers of the Department, to and at London sundries cappenses of Officers of the Department, och two years righton cappenses of Officers of the Department, and subscription cappenses cappens	
Travelling expenses Subscription Subscription Travelling expenses Seal Advance on account The boxes and locks Subscription Water-pitchers Watertising coal and Cab-line On express clary do do d	
	—
olesworth	
th te te treete. ke Co ke Co mig Co mig Co mig co to the co	
Holeswon Action Property Action Acti	
T. N. Molesworth. Travelling expenses. Tondom Free Press. Subscription John Backborn Subscription Former Series Alteraction Former Series Present Series Part Clayer Alteration on recount of services Dail Docad In Present Series Adm. Brakley Alteraction of Series An Interpretation of Series Alteraction of Series Only Edwards Alteraction of Series Only Charaction Alteraction of Series <t< td=""><td></td></t<>	
FRARETHER PRACTED PARTIES FRANCE FRANCE	

Contingencies—Continued.

\$ cts.		
& cts.	6,401 25	
ets.	832 00	型表现在未经过的图案过户员预览等过。可以处理的可信器已有的4 000数的器图图图表现图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图
SERVICE.	Brought forward	atford Herald atford Herald above the Everyte of the color of
TO WHOM PAID.	700	Stratford Herald do do Diemee Standard do Samia Caradian do Samia Caradian do Samia Caradian do J. Mart. J. Mart. J. Mart. J. Mart. J. G. Moylan J. G. Moylan Motreal Telegraph Co J. G. Moylan J. G. Moylan J. Joxall W. C. Chewett & Co J. Javall J. Javall A. Russell A. Russell Joseph Lesslie Joseph Less

	12,539 03
6,137 78	
8.88 8.88	1,792 97
W. Ford To pay costs of Protest Royal Canadian Bank Lawies Coupany Charges C	Carried forward
W. Ford To pay costs of Protest Royal Canalization Bxpress Company Charges Bx Jacks Bell hanging Berjstara Registration at Guelph B. Brown Brocks and keys J. C. Parbut Canadian Naturalist B. Paterson Sons J. C. Parbut Advertising F. H. Johnson To pay law costs J. C. Parbut Shalescription J. C. Parbut Shalescription J. J. H. Johnson Advertising J. H. Johnson Advertising J. J. J. J. J. J. J. J. J. J. J. J. J. J	

*Note.—The postage expenses were considerably more than was anticipated, arising not only from an increased correspondence, but from charges on official reports, which were formerly franked by the Government.

Contingencies—Continued.

\$ cts.	12,539 03	7.6 7.6.6.6	
ets.	1,792 97		288 150 150 150 150 150 150 150 150 150 150
SERVICE.	Brought forwardEducation Office—Continued.	Gorrie & Parish. Daily Globe Montreal Kees Montreal Kees Montreal Kees Montreal Kees Sundry neveranges Lo Advertising for Council for the Kees Binding Gorduration and copy right Brown, Bros. Binding Gorduration and copy right Brown, Bros. Binding Gorduration and copy right Brown, Bros. Binding Gorduration and copy right Binding Gorduration and copy right Binding Gorduration and copy right fees Copyright fees	The color of the
TO WHOM PAID.		Gorrie & Parish. Daily Globe Tribune Americal News. L. Jurish Sundry newspapers Josudy persons Sundry persons Sundry persons Sundry persons Sundry persons Sundry persons Sundry persons Sundry persons Sundry persons Sundry persons Cameron & McMichael Binding Binding Sundry persons Captres Potter Captres Potter Captres Sound Advectising for Council Captres Sound Advection H. Rowsell H. Rowsell James B. Ellis Chek repairs Chalena & Co. James B. Ellis Subscription Hostage stamps (paid in McDonough & James Carpet	Rev. Dr. Ryerson Printing Printing

9,344 31	21,883 34 [[
10 211,2	
25	471 19
pooks, &c com roofs s and windows. dage. d, and cartage es. asfitting rition). less duge's Library clip, gas-fitting, &c eith, gas-fitting, &c eith, gas-fitting, &c lis, clock	Carried forward
B. A. Wood J. B. Carter Stationery and books, &c Stationery and books, &c Stationery and books, &c Stationery and books, &c Goods J. Shart J. G. Beard & Sons J. Shart J. G. Beard & Sons J. Shart J. Sha	

Contingencies-Continued.

\$ cts.	21,883 34			1,303 50
\$ cts.		494 69	575 31	233 50
\$ cts.	471 19	\$ 4 8 8 8 00 00 00 00 00 00 00 00 00 00 00	2452522777254572444525228 25452545245444525528 2545254524524452528	130 00 3 50 19 60 250 46
SERVICE.	Brought forward	Stationery Postages Lithographing Ice for 1869	Hunter, Rose & Co. Printing F. Campbell & Son Stationery Stationery Stationery Court of Common Court of Common Court of	1 h. Jacob & Co. Attourer of strict
TO WHOM PAID.	And the state of t	James Campbell & Son Joseph Lesslie F. Finch Ontario Lee Company	Hunter, Rose & Co. Printing Printing Campbell & Son. Allowance to Judge's Library Do. Do	Jinter, Rose & Co. Junes Campbell & Son. Toronto Telegraph.

2	## 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	## st to sundry happers 105 48 105	Talegrams Talegram Talegram	The total and the tensor of th	
8 # # # # # # # # # # # # # # # # # # #	## st o sundry papers ## st o sundry papers	## st o sundry papers 11	## st o sundry papers 11		93 186 84
8 # # # # # # # # # # # # # # # # # # #	## st o sundry papers ## st o sundry papers	## st o sundry papers 11	## st o sundry papers 11		İ
8 # # # # # # # # # # # # # # # # # # #	## st o sundry papers ## st o sundry papers	## st o sundry papers 11	## at a sundry papers 11 12 13 14 14 14 14 14 14 14		
	as to sundry papers ng and dusting the of parcels the sund December, 1869. The newspapers of Parliament to newspapers to	s to sundry hapers s to sundry papers age of parcels ages, cartage and cab-hire ing clocks ing cl	s to sundry papers sg and dusting age of parcels the contract and cab-hire ing clocks	888888888888888888888888888888888888888	8
I dusting I dusting I dusting Darcels artage and cab-hire December, 1869 Weppapers By and closing of Parliament Sand closing of Parliament One a Select Committee Core a Select Committee Core a do do do do do do do do do do	s to sundry papers ug and dusting ge of parcels up elocks rep ing clocks rep rep rep rep rep rep rep re	s to sundry papers ug and dusting ge of parcels ug eof parcels ug clocks up clocks to newspapers to newspapers opening and closing of e Bills do do do do do do do do do d	s to sundry papers ug and dusting ge of parcels up eof parcels rep rep rep rep rep rep rep re	1500314811204280116048181616189189818628188286888888888888888	0 440
	Telegrams To pay subscriptions to standard ashing and cleaning ash pit. To saking and cleaning and Advertising. Advertising. Advertising. Advertising. Advertising. Cab hire, and carriage of Advertising. Advertising. Salary for November and Cab hire. Advertising. Salary for November and a carriage of	Telegrams nor Telegrams nor Telegrams To pay subscriptions to shift ps To pay subscriptions to shift ps To pay subscriptions to shift ps To pay subscriptions to shift ps To pay subscriptions to shift ps To pay subscriptions to shift ps To pay subscription to no shift ps To pay charges To pay subscription to no shift ps To pay chimneys To pay chimneys To pay chimneys weep. To pay chimneys showed. To pay chimneys shares To pay chimneys shares To pay chimneys shares To pay chimneys have pr To pay chimneys charges To pay chimney and carriage of charges To pay chimney and carriage of charges To pay chimney and carriage of charges To pay cab hire. T	In Doxelland Telegrams In Callmor Treal Telegrams I. Gillmor Treal Telegrams Treal Telegrams Treal Telegrams Treal Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Telegrams Trean Sevence Thompson Trean Huderon Trean Telegrams Trean Tele	and typapers ladusting parcels cartage and cab-hire 1 December, 1869 wwpapers wwpapers for a Select Committee do do do do do do do do do	

Contingencies—Concluded.

No. 14.

THE PROVINCIAL LUNATIC ASYLITM, Toronto, in account with the Province of Ontario, for the year ended 31st Dec., 1869.

Total.	\$ cts. 7,046 67	2,879 31		20,328 02	14,150 55	57,521 19
Branch Asylum.	\$ cts. 23 31 287 70	1,126 43 1,126 21 783 75 535 92 106 28 8 50	30 82 6 45 19 57 21 60 225 02 225 55	163 72 438 00 68 94 28 00 29 90 29 89	18 16 11 35 1 75 145 52	176 78
Provincial Asylum.	\$ cts. 245 80 2,321 50	8,805 22 6,810 70 6,810 70 3,934 60 953 36 488 75	344 35 94 35 94 02 138 13 35 20 1,817 05 1,920 75	3,952 54 10,904 20 1,505 43 328 90 3 20 843 37	251 90 251 90 250 46 260 34 76 17 125 00	885 91
Ch.	By deposited to the credit of the Treasurer By expenditure during the year, viz.: For meditines and medical comforts For simils and who	Potatoes and vegetables Butchers' meat. Flour Butter Barley, rice, peas and meal.	Finit and eggs and fowl. Fruit Saft, pepper, mustard and vinegar. Syrup. Syrup. Tea.	Clothing, bedding and shoes Fuel Gas, oil and candles Brushes, brooms, mops, blacklead, &c Matches, brooms, mops, blacklead, &c Laundby, soap.	Advertising, printing and stationery Furniture Crockery and glassware Postages, telegrams and express. Feed and foddor	Carried forward
	73, 84 cfs.	411 66 170 00 99				80,860 53
DR.	To warrants issued during the year 1869 To receipts for the year, viz.: Lightly patients A Arisons, sold	Value to military Branch Asylum Found on deceased patient				Carried forward

THE PROVINCIAL LUNATIC ASYLUM, Toronto, in account with the Province of Ontario, for the year ended 31st Dec., 1869.—Con. |

Dr.	Ì	CR.	J'rovincial Asylum.	Branch Asylum.	Total.
Brought forward	\$ cts. 80,860 53	Brought forward	\$ cts. 885 91	\$ cts. 176 78	\$ cts. 57,521 19
		Farm Repairs Repairs Revory of elopers Removal of patients Lee and water Farm buildings Incidentals In	793 43 1,242 56 6 6 6 6 6 6 6 16 6 5 16 6 5 17 08 31 77 08 31 77 08 31 77 08 43 09 43 09 43 09 1,000 00 1,000 00	28 05 106 93 5 45 17 05 1 10 00 5 61 2 5 61 17 60 17 60 31 1 60 31 69 286 67 286 67	5,684 79
Total	80,860 53	Total			80,860 53

THE MALDEN LUNATIC ASYLUM in account with the Province of Ontario, for year ending 31st December, 1869.

ects.	460 32	460 32
s cts.	2882 1,871 83 1,871 84 4,51 64 4,51 64 4,5 60 1,008 89 1,008 19,807 34	
Cn.	By deposited to the credit of Treasurer By expenditure for year, for: Alterations and repairs. Alterations and repairs. Battey Battey and rice Bedding and clothing Boots and shoes Breakwater Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and tinware Cultery and to have From stock Fram implements Frumiture Frumiture Frumiture Instruction and amusement Instruction and amusement Instruction and amusement Instruction and amusement Instruction and amusement Instruction and amusement Instruction and answer Medicines Jobbing tools Colficers' travelling expenses Jobbing tools Fruming and seath Fruming and water Fruming and water Fruming and stationery and advertising Soap Searubbing and cleaning Sugar and symp Tobacco and pipes	Carried forward
es cts:	33,002 43 460 32 2 00	33,464 75
es cts.	451 45 32,450 98 402 93 57 39	
Du.	To balance on hand, 1st January, 1869 Warrants issued during year To receipts from :— Raying patients Articles sold To balance carried down	Carried forward

THE MALDEN LUNARIC ASYLUM in account with the Province of Ontario, for year ending 31st December, 1869.—Continued.

William Colonian and State of	& ets.	460 32	33,364 75
The state of the s	s cts.	19,807 34 89 39 1,002 84 6 60 476 17 2,442 01 122 25 60 67 36 67 152 24 30 72 112 25 1	
	·a,,	By Postage and telegrams Beer, wine and spirits Blopements Feed and foder Fuel I ce Apples Beans, Peas, &c Fish Lanndry Crockery and glassware Mustard and vinegar Suraw Suraw Surah biscuit. By salaries and wages, viz: Medical Superintendent Book-keeper Look-keeper Keepers, guards, &c	By balanee brought down
	ets.	33,464 75	33,464 75
	& cts.		
	DR.	Brought forward	
		70	

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARRO, TORONTO, December 31st, 1869.

No 16.

THE LUNATIC ASYLUM, ORILLIA, in account with the Province for the year ending 31st December, 1869.

			=
& cts.	336 23 47 09 1,122 24 1,238 11		9,745 11
ets.	1,104 15 2,339 12 1,751 38 1,751 38 1,951 44 149 62 145 51 1,65 48 16 53 67 67 69 28 161 83 161 83 161 83 161 83 18 90 213 13 28 50 4 50 4 50	217 66 40 00 8 72 1 50 46 29	2,244 34
CR.	By deposited to the credit of the Treasurer of Ontario Retained unexpended balance of warrants. By expenditure during the year for:— Nedicines and medical comforts. Beer, wine and spirits. Butcher's meat. Fruit Pour, meal and bread. Bapiley, rice, peus and beans Fruit Portatoes and other vegetables. Salt, pepper, vinegar and mustard. Coffee and tea. Sulgar and syrup. Fish, Begs and Poultry. Clothing, bedding and shoes. Finel Laundry, soap, brooms, &c. Laundry, soap, brooms, &c. Advertising, printing and stationery Interments Removal of patients. Removal of patients. Tobacco Furniture Officers' travelling expense.	Steam pump and water supply Live Stock Postage, telegrams and express Tools Freight	
e cts.	43 12 16,923 74 336 23		17,303 09
ets.			
DR.	To balance from last year		Carried forward

THE LUNATIC ASYLUM, ORILLIA, in account with the Province, &c .- Continued.

S cts. S cts. S cts.	17,303 09 Brought forward	By Scrubbing and cleaning 47 95		17,303 09	1 00
DR. & cts.					To balance due

E. B. WOOD,
Treasurer

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 17.

THE REFORMATORY PRISON, Ontario, in account with the Province of Ontario, for the year ended 31st December, 1869.

\$ cts.		00 061,61
\$ cts.	3,669, 1,569, 1,	
GR,	By deposited to credit of Treasurer By expenditure during the year for: Provisions Bedding and clothing Furniture Stap Light Tools Fran Stable Stationery Postage Maintenance of buildings Freight Height Height Hospital Rent Cooper Carponer Carponer Carponer Carponer Carponer Carponer Carponer Carponer Carponer Carponer Corvicts' travelling allowance Carponer Convicts' travelling allowance Carponer Carponer Convicts' travelling allowance Carponer Carponer Convicts' travelling allowance Carponer Carpone	Carried forward
. cts.	23,557 50 937 43	24,494 93
Ън,	To receipts from shops, &c	Curried forward

THE REFORMATORY PRISON, Ontario, in account with the Province of Ontario, for the year ended 31st Dec., 1869.—Concluded.

s cts.	15,190 66		0 204 97	24,494 93
s cts.			1,600 00 1,600 00 720 00 400 00 406 00 4,581 27	
CR.	Brought forward	By salaries and wages, viz.:—	Warden Two Chaplains Deputy Warden Surgeon Steward Keepers, guards, &c	Total
s cts.	24,494 93	16		24,494 93
DR.	Brought forward			Total

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 18.

STATEMENT of the Municipalities' Fund, 18th Vic., Cap. 2, and 19 Vic., Cap. 16, from the 1st July, 1867, to 31st Dec., 1868.

P	PAYMENTS.	ets.	RECEIPTS.	s cts.
anount paid to the diffication for eighteen morate of 51 cts. per head	To amount paid to the different Municipalities on account of distribution for eighteen months ending 31st December, 1868, at the rate of 51 cts. per head	132,200 53	By gross receipts of Crown Lands Department, for the eighteen months ending 31st December, 1868 By gross receipts of Crown Lands Department for the year 1869	171,831 74
do	do Perth	3,667 92		
do d	do City of Hamilton	2,719 32		
Expenses of management on receipts,	receipts, December 31st, 1868	34,944 66		
clo	do 1869	19,603 06		
mce	Balance	81,647 25	, 1	200 040 000
		269,847 04	By balance available for distribution in 1870.	81,647 25

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 19.

STATEMENT of payments made from Municipalities' Fund, C. W., (Ontario) 18 Vic., Cap. 2 and 19, Cap. 16, in the year 1865, being distribution for 1868.

MUNICIPALITY	COUNTY.	Rate- payers.	Amount.
			\$ ct
rora Village	. York	214	109 1
pion	Peel	985	502 3
elaide Iborough	Floin	553	282 0
an	Rruce	629 593	$\begin{array}{c} 320 \ 7 \\ 302 \ 4 \end{array}$
derdon		311	158 6
emesia		657	335 (
aranth		349	177 9
caster	Wentworth	807	411 8
nfield	Huron	632	322 8
jala	Simcoe	526	268 2
able and Albemarle	Bruce	243	123 9
wick	Northumberland	187	95 3
hburnham Villageherstburg Town	Reserve 1	188 489	95 8 249 3
phodel	Peterborough	571	249 a 291 2
herst Island	Addington	200	102 0
iol	Prince Edward	325	165 7
olphustown	Lennox	136	69 8
shur seliasburgh	Wellington	684	348 8
eliasburgh	. Prince Edward	600	306 0
red	. Prescott	308	157 (
gusta	Grenville	924	471 2
mpton Village	Peel	376	191 7
leville Town	Hastings	1,554	792 5 60 1
th Village	Rmaa	$\begin{vmatrix} 118 \\ 923 \end{vmatrix}$	470 7
mont and Methuen	Peterhorough	265	135
sanquet	Lambton	688	350 8
ghton Village	Northumberland	231	117 8
antford	Brant	1,255	640 (
dford and Palmerston	Frontenac	350	178
ıce		603	307 3
ock	Ontario	741	377
ghton	Northumberland	657	335 (
indford		285 927	$\frac{145}{472}$
ntinck yham		971	495
xley	Victoria	80	40
stard and Burgess	Leeds	767	391
verly	Wentworth	1,115	568
enheim	Oxford	1,084	552
rton	Wentworth	510	260
rlin Village		451	230 (
ooke		422	215
rrie		1 028	45 3 524 3
rfordadford Village		$\begin{vmatrix} 1,028 & \\ 271 & \end{vmatrix}$	138
wmanville Town		761	388
thwell Village		120	61
ldulph		752	383
nbrook	Wentworth	327	166
rtie	Welland	511	260
rleigh, Anstruther, Chandos, Cardif	f,	100	0.2
rleigh, Anstruther, Chandos, Cardif Monmouth, Harcourt and Bruton	Peterborough	123	62
amane	Northumberland	627	319
ifton Town inguacousy	Weiland	305 1,132	$\frac{155}{577}$
inguacousyinguacousy	Lincoln		256
rnwall			383
	Leeds		192

STATEMENT of payments made from Municipalities' Fund, &c.—Continued.

MINIODATIMY	COLINAX	Rate-	
MUNICIPALITY.	COUNTY.	payers.	Amount.
Brought forward			\$ cts. 16,911 60
Camden, Township and Gore	Kent	658	335 58
Camden East	Addington	1129	575 79
Caledonia Village	Haldimand	289	147 39
Charlotteville Caradoc		801 724	408 51 369 24
Colborne	Huron	376	191 76
Clarke	Durham		535 50
Carrick Chatham and North Gore		759 891	387 09 454 41
Collingwood Town	Simcoe	351	179 01
Cayuga South	Haldimand	163	83 13
Caledonia	Prescott.	184 542	93 84 276 42
Charlottenburgh	Glengarry	1046	533 46
Clarendon and Miller	Frontenac	83	42 33
Clarence	Russell	412	210 12
Canborough Cayuga North			111 69 195 33
Culross			287 13
Crowland	Welland	264	134 64
Cartwright	Durham	538	274 38
Caledon Caistor			384 03 190 74
Cavan	Durham	1003	511 53
Colchester	Essex	507	258 57
Cornwall Town			366 18
Colborne Village		159 328	81 09 167 28
Cumberland	Russell	435	221 85
Carden and Dalton	Victoria	178	90 78
Cayuga Village			80 07 191 25
Crosby North Cambridge	Russell	375 104	53 04
Derby	Grey	345	175 95
Dawn	Lambton	177	90 27
Dereham Dunn	Uxiord	976	497 76 133 11
Delaware			161 67
Dorchester South	Elgin	504	257 04
Dumfries South	Brant	575	293 25
Dover East Dummer	Peterborough	544 306	277 44 156 06
Dorchester North	Middlesex	669	341 19
Dunwich	Elgin	712	363 12
Darlington			628 32 133 62
Dunville Village	Victoria	194	98 94
Draper, Macaulay, Stephenson and Ryde Dumfries North	Waterloo	706	360 06
Denbigh, Abinger and Ashby	Addington	81 i	41 31
Dysart, Gilford, Dudley and Harburn Douro	Peterborough	70 417	35 70 212 67
Elora Village	Wellington	366	186 66
Eldon	Victoria	531	270 81
Ernesttown		$\begin{vmatrix} 1024 \\ 320 \end{vmatrix}$	522 24 163 20
Elzevir Embro Village			46 41
Egremont	Grey	690	351 90
Euphrasia Ennismore	Grey	437	222 87 89 25
Ennismore Enniskillen			118 83
Euphemia			232 56
Eramosa	Wellington	600	306 00
Endorship			314 67 332 01
Elderslie Edwardsburg	Bruce		474 30
Carried forward	77		33,223 95

STATEMENT of payments made from Municipalities' Fund, &c.—Continued.

COUNTY	Rate-	Amount.
OCCATI.	payers.	Amount.
		33,223 9
Leeds	240	122 4
Halton	1006	513 0
York	549	279 9
. Wellington	824	$\begin{array}{r} 420 \ 2 \\ 312 \ 1 \end{array}$
Middlesex		257 5
Leeds	947	125 9
Victoria	566	288 6
· Welland	150	76 5
Carleton		228 4 260 1
ILunnov		182 0
Tannor	294	149 9
Wellington	236	120 3
Wentworth		376 8 143 8
Wentworth		363 1
Lincoln	568	289 6
Vork	697	355 4
Lincoln		266 2
. Wentworth		201 4: 380 4:
Lincoln		336 0
Wallington	871	444 2
Weterloo	833	424 8
Peterborough		56 6
Halton		121 St 351 9
Fover		267 7
Simcoe	520	265 2
Harron	580	295 8
York		164 7
Lands	976	244 8 140 7
Carleton	759	387 0
Bruce	499	254 49
Wellington	511	260 6
Carleton		199 9 61 2
Grenville		85 1
Vork		146 3
Huron	912	465 1
Carleton		208 0
Crev		81 6 301 9
Hasings	511	260 6
Waterloo	166	84 6
. Hnron	577	294 2
Huron		520 7 282 0
Prescott	211	107 6
Kent	842	429 43
Norfolk	349	177 99
D.:		330 99 352 43
Northumberland		549 27
Welland	621	316 71
York	130	66 30
1 LC COOU		170 8
Prince Edward		400 80 250 41
Prescott	723	368 73
Peternoro'	124	63 24
Kent	1092	556 92
Dungas	92	46 92
	Leeds Halton York Wellington Simcoe Middlesex Leeds Victoria Welland Stormont Carleton Lennox Lennox Wellington Wentworth Simcoe Wentworth Lincoln York Lincoln Wentworth Grey Lincoln Wellington Wetworth Simcoe Wentworth Lincoln York Lincoln Wentworth Simcoe Huron Wellington Wellington	Leeds

STATEMENT of Payments made from Municipalities' Fund, &c.—Continued.

		1	
MUNICIPALITY.	COUNTY.	Rate- payers.	Amount.
Brought forward		\$ ets.	\$ cts. 50,135 55
Ingersoll Town	Oxford	000	
Innisfil	Simcoe	988 980	503 88 499 80
Kalador and Anglesea		150	76 50
Kinloss Kenebec	Frontenac	542 144	276 42 73 44
Kitley	Leeds	563	287 13
Kingston Kemptville Village		774 152	394 74 77 52
Kincardine	Bruce	685	349 35
King Kincardine Village		1,220	622 20 156 57
Kingston City	Frontenac	3,572	1,821 72
Kenyon Keppel	Glengarry	712 399	363 12 203 49
Leeds and Lansdowne Rear. Longueil	Leeds	456	232 56
Longueil	Prescott	232	118 32
Lindsay Town.	Wellington	510 266	260 10 135 66
Leeds and Lansdowne Front	Leeds	665	339 15
Loughborough Laxton, Digby and Longford	Victoria	1 464	236 64 88 23
Laxton, Digby and LongfordLobo	Middlesex		300 90
Lancaster Louth	Glengarry	800 362	408 00 184 62
London		2,143	1,692 93
Lutterworth, Anson and Hindon	Glengarry	759	387 09
Mersea		111 496	56 61 252 96
Morris	Huron	673	343 23
Medonte	Wellington	422 797	215 22 406 47
McKillop	Huron	624	318 24
March Moulton and Sherbrooke	Carleton	200 334	102 00
Monaghan North	Peterboro'	222	170 34 113 22
Milton Town	Halton	171	87 21
Mariposa Melanethon		908 303	463 08 154 53
Murray	Northumberland	675	344 25
Malden Madoc	Hastings	284 696	144 84 354 96
Mount Forest Village	Wellington	246	125 46
Mulmer	Simcoe	564 543	287 64 276 93
Metcalfe	Wellington	683	348 33
Mountain	Dundas	558	284 58
Marmora and Lake		317 418	161 67 213 18
Mono	Simcoe	648	330 48
Moore Mosa		717 507	395 67 258 57
Marrehuro	Prince Edward	803	469 53
McGillivray Morrisburg Village	Middlesex	819 197	417 69 100 47
Malahide		965	492 15
Markham	York	1,303	654 53
Merrickville Village	Durham Grenville	635 + 159	323 85 81 09
Monaghan South	Durham	215	169 65
Minden Marlborough		357	73 41 182 07
Matilda	Dundas	790	402 90
Morrison and Muskoka. Mara and Rama		247 613	125 97 312 63
Middleton		543	276 93
Carried forward			69 779 90
Currieu forwara	79		69,778 20

STATEMENT of Payments made from Municipalities' Fund, &c.—Continued.

MUNICIPALITY.	COUNTY.	Rate- payers.	Amount.
Brought forward			\$ c ¹
apanee Town	Lennox and Addington	558	284
assagaweva	Halton	529	269
ottawasaga	Simcoe	1,108	565
issouri Westichol		626 503	$\frac{319}{256}$
issouri East	Oxford	634	323
ewcastle Village	Durham	204	104
enean	Carleton	636	324
ew Hamburg Villageiagara	Waterloo	213 420	108 214
ewburgh Village	Addington	242	123
ew Edinburgh Village	Carleton	89	45
elson	Halton	784	399
ormanby	Grey	927	472
ewmarket Village nondaga		290 319	$\frac{147}{162}$
sprey	Grey	560	285
kford East	Oxford	460	234
angeville Village	Wellington	221	112
ford		563	287
den xford Township		141 717	$\frac{71}{365}$
°0	Simcoe	713	363
onabee	Peterborough	780	397
kland		196	99
kville Town		425	216
rillia and Matchedash	Carloton	$\begin{bmatrix} 269 \\ 731 \end{bmatrix}$	137 372
goode 1 Springs Village	Lambton	229	116
ven Sound Town	Grey	748	381
wen Sound Town shawa Village	Ontario	698	355
neida		562	286
rillia Village		458 181	233 92
xford North		315	160
nabruck	Stormont	1,040	530
	Frontenac	94	47
ercy	Northumberland	677	345
lkington ympton	Lambton	467 848	238 432
ortsmouth Village	Frontenac	282	143
ttsburgh and Howe Island	Frontenac	753	384
ckering	Ontario	1,261	643
reston Village		298 657	151 335
el		1,070	545
antagenet North	Prescott	518	264
antagenet South	Prescott	289	147
cton Town		463 548	236
lhamslinch	Wellington	706	279 360
trolia Village		273	139
ortland	Frontenac	502	256
oton	Grey	404	206
ort Dalhousie Village		201 299	$\frac{102}{152}$
ainham		363	185
ommey	Kent	115	58
aleigh	Kent	737	375
oxborough		547	278
chmond Villagessell	Russell	83 345	42 175
each.	Ontario	1,243	633
ichmond	Lennox	673	343
awdon		616	314

STATEMENT of Payments made from Municipalities' Fund, &c.—Continued

MUNICIPALITY.	COUNTY.	Rate- payers.	Amount.
Brought forward			\$ c 86,822
			00,022
andwich Town	Essex	201	102
andwich West	Floor	388	197
ophiasburgh	Prince Edward	535	235 272
outhampton Village	Bruce	152	77
ephen	Huron	602	307
nugeen			245
. Vincent	Val-		402
erboro'	Heldimand	882 502	449
ernia Town	Lambton	581	256 296
nowden and Glamorgan	Peterboro'	8.1	42
ırawak	Grey	116	59
altfleet	Wentworth	592	301
amford	Welland	573	292
rniaorrington		427 554	217 282
ymour	Northumberland	752	383
nith	Peterboro'	567	289
reetsville Village	Peel	153	78
ngog	Ontario	108	55
ombra		496	252
anley rathroy Village	Iluron	623	317
mnidale	Simone	476 275	242 140
denham	Grev	637	324
dnev	. Hastings	1,101	561
omerville	Victoria	166	84
indwich East	Essex	618	315
ıllivan	Grey	532	271
outhwold			304
irling Village			538 68
aforth Village	Huron	381	194
neffieid	Addington	559	285
anhope	Peterborough	40	23
horah			183
renton Village	Hastings	337	171
ndor, Wollaston and Limerick pronto Gore			136 139
rafalgar	Halton	927	472
norold	Welland		261
lbury West	. Essex	376	191
norold Village		301	184
ossorontio			102
ıckersmith yendinaga	Hactings	585 1,214	298 619
ecumseth	Sincoe	742	378
Ibury East	Kent	336	171
pronto Township	Peel	1,167	595
nurlow	. Hastings	954	486
orbolton iny and Tay pronto City	. Carleton	119	60
ny and Tay	Simcoe	731	372
ownsend	Norfolk	14,857	7,577 525
urnberry	Huron	502	$\frac{325}{256}$
xbridge	. Ontario		394
sborne	. Huron	620	316
espra	. Simcoe	389	198
aughan	. YOPK	1,086	553
ienna Villageerulam_	Victoria	160 420	81 214
Whitby Town	Ontario	565	288
Tellesley	Waterloo	920	469
Vellesley Vinchester	Dundas	661	337

STATEMENT of Payments made from Municipalities' Fund, &c.—Concluded.

MUNICIPALITY.	COUNTY.	Rate- payers.	Amount.
Provatt forward			\$ et 111,633 8
		!	
ellington Village	Prince Edward	132	67 - 3 $348 - 3$
hithy East	Ontario	683 575	293 2
olfe Island	Frontenac Middlesex	92	46 (
ardsville village	Welland		135 (
enand vinage	[Waterloo	1,263	644 1
amarich .	Lambton	828	400
Talaingham	Norfolk	931	474 8
arran osh West	fluron	401	248 3
ainfleet	Welland	468	238 (
'illiams East	Middlesex	528	269
ilmot	Waterloo	868	442
estminster	Middlesex	1,178	600 403
illiamsburgh	Dundas	792	372
hitby West	Ontario	730 948	483
alpole	Haldimand		119
Houghby	Waterloo	345	175
aterioo vinage	Essex	834	425
Thitaburah	York	805	410
Coolwich	Waterleo	840	428
Illiams West	Middlesex	625	318
awanosh East	Huron	395	201
Colford	(frenville	515	262
onge and Escott [rear]	Leeds	446	227
onice front	Leeds	333	169
armouth	Elgın	1,254	629
orkville Village	York	318	162 740
ork	York	1,452	306
orra West	Oxford Oxford	776	395
orra Enst	Kent	196	99
)116	11011		
		239,603	122,200
ounty of Perth	For municipalities therein, by transfer	= 100	0.005
	to Municipal Loan Fund	7,192	3,667
. C. Lanark and Reufrew	For municipalities therein, by transfer	0.020	5.003
	to Municipal Loan Fund	9,930	5,064
amilton City	Its proportion transferred to interest account	5,332	2,719
	account		
		262,063	133,652
	Cash payments 133,652 07		
	Transferrred to credit of		
	Crown Land Revenue		
	for cost of management. 34,944 66		
	168,596 73	3	

E. B. WOOD, Treasurer.

Treasury Department, Ontario, Toronto, December 31st, 1869.

No. 20.

DETAILED STATEMENT of Expenditure on account of Education, for the year ending 31st December, 1869.

& cts.	
e Ct.	2, 2, 8, 00 3, 2, 202, 00 3, 2, 202, 00 3, 2, 202, 00 2, 3, 3, 3, 10 2, 4, 10 2, 4, 11, 3, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 13, 00 6, 1, 10, 00 1, 10, 10, 10 1
& cts.	2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2
COUNTIES, CITIES, TOWNS, VILLAGES.	County of Brant do Bruce do Carleton do Digni do Bissex do Brace do Bissex do Hathen do Hathen do Hathen do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Addington do Leanox and Resell do Leanox and Resell do Derch do Oxford do Oxford do Perch do Perch do Perch do Perch do Perch do Varianous, Dundas and Glengarry do France Edward do Victoria do Victoria do Wellangton Corried Jorgany do Wellington do Wellington
TO WHOM PAID,	192
E	83

Education Statement—Continued.

-	, g	:
	ets.	
	\$ cts.	
And the second of the second o	& cts.	3,1732 00 2,521 00 1,376 00 1,376 00 1,376 00 1,110 00 1,376 00 1,110 00 1,376 00 1,
TEM (中国の A MA) A MA MA MA MA MA MA MA MA MA MA MA MA M	COUNTIES, CITLES, TOWNS, VILLAGES.	Country of Wentworth
Control of Manager St. Control of St	TO WHOM PAID,	Treasurer Chambertain Do Do Treasurer Treasurer Do Do Do Do Do Do Do Do Do Do Do Do Do D
-		Treasurer Chamberland Book Chamberland B

(
8	118 00 118 00 127 00 100 00 98 00 40 00 121 00 125 00 135 00 137 00
do Sandwich do Sandwich do Sandwich do St. Catharines do St. Mary's do St. Mary's do St. Thomas do Strafford do Windson do Windson do Windson do Ashburnham do Ashburnham do Ashburnham do Ashburnham do Ashburnham do Ashburnham do Caledonia.	do Morrisburgh do Mount Forest do Newburgh do Newburgh do New Edinburgh do New Hamburgh do New Hamburgh do Oil Springs do Oil Springs
	AAAAAAAAA

		1 /
	\$ cts.	
	s cts.	160,622 00
	s ots.	157,610 00 231 00 153 00 154 00 155 00 155 00 156 00 157 00 158 00 159 00 150 00 15
Education Statement—Continued.	ID. COUNTIES, CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	Willings of Oshawa. (Villings of Oshawa. (a) Ponthonical Detroin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Perboin Personal Pers
	TO WHOM PAID.	
	TO SECOND	Treasurer Treasurer Do Do Do Do Do Do Do Do Do Do Do Do Do

=						-																				•	-,-										_											=
=								_																_	_:																							- 9
																																																160 699 00
35,00	00 98	90 25	56 00	00 22	29 00	37 00	15 00	34 00	30 00	88	25 00	00 67	00 17	20 00	00 01	00 18	152 00	38	31 00	20 27	14 (3)	11 00	8 8	- 00 77	15 00	14 00	19 00	90 27	31 00	96 66	00 /	17 00	45.00	12 00	17 00	15 00	13 00	25 25	00 07	1 00 II	00 27	00 07	3000	120	15 00	15 00		3 210 00
do Brantford			_		_		do Napanoe			7,	do frescott							12 -	3	or Chippewa		op op op op op op op op op op op op op o	-	, ر		do Freston	-, -	,,,		do Monnt Romost	J.	Sand Anderdon	1 and 6 Arthur	4 Asphodel	3 Archur	11 do	to and 1 Artemesia and Gloneks	(a) Z Bediord	d Della hooh	b Digentlyh	2 December 2 December	D. D. D. J. S. S. S. S. S. S. S. S. S. S. S. S. S.		6 Carriels	15 Charlottenburgh	16 do	7	Carried formard
-											:	:			:				17:11				: : : : : : : : : : : : : : : : : : : :	:	:	:					3	5		:	:	:		:										
Do	Do	Do	Do	Do	Do	Do	00	90	001	00	96		96			200	96	300	96	000	96	07	00	Do	Do	000	071	Do	100	32	100	Do	Do	Do	Do	00	170	000	100	200			100	Do	1)0	Do		

& cts.		
s cts.	160,622 00	
\$ cts.	3,210 00	# 0 8 3 3 4 + 4 2 8 2 4 4 5 3 5 2 17 0 13 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	Brought forwardSBPARATE SCHOOLS—Continued.	School Sections:— 7 Dalhousie 7 Dalhousie 7 Dalhousie 7 Dalhousie 7 Dalhousie 7 Dalhousie 7 Dalhousie 8 Electron 6 Electron 6 Electron 6 David 6 Electron 7 Granthan 7 Granthan 7 Granthan 1 Granthan 4 Elzevir 9 Hawkesb 1 Humperfor 2 Haddman 4 Hawkesb 1 Hawkesb 1 Haddman 1 Hamperfor 2 Haldman 1 Handman 1 Hamperfor 2 Haldman 1 Handma
TO WHOM PAID.		Pristees. 10. 10. 10. 10. 10. 10. 10. 10. 10. 1
	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	CITHES, TOWNS, VILLAGES AND SCHOOL SECTIONS.

\$\frac{1175}{2}\$\$ \$\frac{127}{2}\$\$ \$\fra	4,487 00 1 160,622 00 1
10 Lochiel 12 do 1 Longueul 5 Mam 5 Marchorongh 7 Melanethon 3 4 and 5, Moore 4 Mornington 7 Neycan 13 do 10 Nichol 1 Nichol 1 Octobal 10 Octobal 11 do 12 Octobal 12 do 13 do 13 do 14 do 15 Histogran 15 do 16 Pilkington 17 Percy 18 Rabeigh 18 Rabeigh 19 Forton 10 Forton 11 Percy 10 Forton 11 Percy 12 Rabeigh 13 do 14 do 15 do 16 do 16 do 17 do 18 do 18 do 19 Percy 18 Rabeigh 18 According a 18 Rabeigh 19 Forton 10 Forton 10 Forton 11 Percy 12 Percy 13 do 14 do 15 do 16 do 16 do 17 do 18 do 18 do 18 do 19 Habeigh 10 Forton 10 Forton 11 Percy 12 Novalubes 13 Stuffivan 14 Wolfe Island 16 Towntho Gore 17 Veryra 17 Waynook 18 Waynook 18 Waynook 19 Waynook 10 Waynook 11	Clurried forward

Education Statement—Continued.

1	v 10001111.		Cessionai I	upo.	15 (10. 5).
	& cts.				
	\$ ots.	160,622 00	4,587 50	165,209 50	
	e cts.	4,487 00	11 00 11 00 17 00 17 00 18 00 18 00 18 00		\$50 00 1,175 00 1,175 00 2,85 00 2,85 00 2,85 00 2,85 00 2,85 00 1,05 00 1,05 00 2,07 0 00 2,07
	CITIES, TOWNS, VILLAGES AND SCHOOL SECTIONS.	Brought forwardSEPARATE SCHOOLS—Continued.	School Sections:— 9 and 10 Wellesley. 4 Yonge and E. E. 21 York 22 do 6 do 1 do	GRAMMAR SCHOOLS.	County of Brant do Bruce do Carleton do Dundas, Stormont and Glongary do Essex do Essex do Essex do Haldinnand do Haldinnand do Hashins do Harun do Harun do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshik do Lanshid
	TO WHOM PAID.		Enistees Do Do Do Do Do		Prestocs. Do Do Do Do Do Do Do Do Do Do Do Do Do D
			Trust Do Do Do Do Do	90	

Do		
December December		
December December	27,633 00	1,690 00
Do	200 00 00 00 00 00 00 00 00 00 00 00 00	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
01	Do do Peel. Do do Persort and Russell Do do Prince Edward Do do Prince Edward Do do Prince Edward Do do Nimcoe Do do Victoria Do do Wellington Do do Wellington Do do Viewtworth Do do Ortawa do Ottawa do Do do Hamilton (for Meteorological Station) Pressurer Country of Sincoce do	Treasurer County of Brace Do do Frontenace Do do Grey Do do do Gree 6, Metanethon) Do do Hastnigs Hastnigs Do do Lonex and Addington Do do Peterborough Do County of Renfrew Do County of Netforia

NOTE.—The expenditure for Grammar Schools (\$27,633.00), and for Separate Schools (\$4,587.50), was for the apportionment of the first half-year. The apportion-were included,

Education Statement—Continued.

& cts.		
es cts.	194,532 50	
e cts.		88888888888888888888888888888888888888
SUPERANNUATED TEACHERS.	Brought forward	SUPERANNUATED TEACHERS. To pay the following Superannuated Teachers as under :— To furrie. To furrie. To furrie. To forting. To forting. To forting. To forting. To Medouald. To Monomald.
TO WHOM PAID.		Hon, E. B. Wood

			03 (63 10)
28588888888888888888888888888888888888	29555555555555555555555555555555555555	28 28 2 11 2 2 8 8 8 8 8 8 8 8 8 8 8 8 8	1 88888888888
M. Deverenx M. O'Kane A. Jenkins A. Jenkins A. Jenkins A. Miller B. Beattie B. Beattie B. Beattie W. Cory W. Cory M. Edrusyon	J. Mackhuen J. Miskelly J. Miskelly A. Power J. Ramsay C. Snyder J. Trown J. Monaghan R. Younnans W. Ferguson T. Flanagan T. Flanagan T. Flanagan T. Planagan	- J	H. Brothanan M. M. Hutchins H. McLaren R. McCallum B. Potts D. D. Barrett Wm. Clarke J. Dohbs P. G. Weston T. Santlers G. Weston R. Hamilton J. Macdonell

	& cts.																			
	& cts.	194,532 50							===			and resident			-					3
	es cts.	1,616 75	18 00 12 00 21 00 91 00	1818 1818 1818 1818 1818 1818 1818 181	28 00	388 988	11 00	25 00 16 50	25 00 18 00	31 50	28 28 88	18 00	20 00	10 00	16 00	24 00		32 00	14 00	15 00 17 00 17
Education Statement—Continued.	SUPERANNUATED TEACHERS.	Brought forwardSUPERANNUATED_TEACHERS—Continued.	To pay the following Superannuated Teachers as under.— J. MeGarvey J. D. Thompson H. Boschur	J. Cameron. M. Clanke T. Cameron	D. Callaghan John McNamara	J. Robinson, J. Tyndall M. Ball	W. Brown J. Amastrone	C. Mexico. C. Maxier. E. Barber	J. McParlane. J. C. VanEvery			J. Walton.	J. Caude J. Douglass	D. Meddill. J. Lenaten	A. McKay S. Progoll	P. Sheriff	R. Jordan.	T. Dorothy	T. Wingheld W. Boaton	J. Robinson J. Kehoe
	TO WHOM PAID.		Hon. E. B. Wood																	,

4					
			,		194,532 50
					Ä
2882383 2882383 2882383 2883383 2883383 2883383 2883383 2883383 2883383 2883 2883	11.85 00 11.85 00 12.80 00 13.80 00 13.00 00 10.00 00 10.00 00 10.00 00 10.00 00 10.00 00 10.	2222222222 222222222 2222222222	882883488488888888888888888888888888888	242222222222 2422222222222222222222222	33 00 33 00 28 80 16 20 34 40 3742 63
J. Briggs J. Denman A. Gillespie J. Graydon C. Junge J. Ross.	J. Irvine J. Ross. J. Graydon. D. McDonald. J. McCornick. J. McCornick. J. McKay W. Irvine.	40448247-		N. McLeod M. Kineborough W. Foster W. Classford J. Vert W. Benson W. Cairus J. Jesys. J. Jesys. J. Healy H. Alacryue R. Conins	W. Dermote W. Hick J. Higginbotham W. Leonard D. Wing Carried forward

s ets.		
octa,	194,532 50	
es cts.	3,742 63	%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
SUPERANNUATED TEACHERS.	Brought forward	SUPERANNUATED TEACHERS—Continued. N. Deverenx M. O'Kane A. Jonkins J. Kennedy W. Miller R. Bentfie J. L. Biggar W. Corne M. Parington D. Vikapan J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. MacCheon J. Mongdan R. Yourn J. Mongdan R. Youngan J. Mongdan J. MacCheon J. Mongdan J. MacCheon J. Mongdan J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. Laken J. MacCheo
TO WHOM PAID.		Hon. E. B. Wood

20 20 80 80 80 80 80 80 80 80 80 80 80 80 80	24 60 14 80 97 40	38 63	29 20 20 E	17 60 17 60	17 60	30 20	19 70	36 50 40 00	16 20	25.50	13 40	33 00	35.80	 32 53 82 53	26 00 38 60	44 90	30 50	41 40 26 00	33 00	28 80 27 80 20 80	14 80	07 67	34 40	 45 60	43 50	20 40	24 60	49 80
	D. D. Barrett W. Clarke F. D. J.	J. Journs N. Mullhern	X. Westen	A MeDonell	J. McGrarvey J. D. Thomson	H. Bartley	J. Caneron M. Clark	J. Brown.	New Marana	. Kobinson	V. Bell	Armstrong	. Mozier), Barber McFarlane		D. Woods	Macgillies	k. Campbell	D. Calder	J. Douglass		A. McKay	P. Sheriff		T. Whitfield	W. Beaton	J. Kehoe	f. Briggs

Education Statement-Continued.

cts.			
\$ cts.	194,532 50	6,332 13	
\$ cts.	6,078 53	23 50 23 50 24 60 25 80 26 60 27 60 28 80 29 60 20 20 60 20 20 60 20 20 60 20 20 60 20 20 60 20 20 20	221 38557 2400 2400 2500 2500 2500 2500 2500 2500
SERVICE.	Brought forward	To pay the following Superannuated Teachers as under: J. Denham. A. Gillespie J. Graydon C. Judge J. Ross. W. Irvine E. Redmond LIBRARY AND MUSEUM.	Insurance Prockets, bronzed figures, &c Pedestals repairs, wood turning, medallious, &c Pedestals repairs, wood turning, medallious, &c Coloured Window Hardware Painting, Paints, &c Monthing maps, globes, clearts, fittings, labor, &c Repairs, gift mouldings, &c Nood carving for cases Models, glass, &c Pamphlets Plaster casts, hinges, repairs to railing, &c Pittings Plumbers work To purchase exchange to pay E. J. Potter & Co. for sundries £5 13s. 2d. sterling, 9 per cent premium To pay W. Norman for sundries Plass furnished Art Journal for 1869 Books Printing Blacksmithing Blacksmithing Blacksmithing Blacksmithing Chill Duty Colour Sterling, 92 Printing Blacksmithing Blacksmithing Blacksmithing Chill Duty Colour Sterling, 92 Printing Blacksmithing Colour Sterling, 93 Printing Colour Sterling, 94 Printing Colour Sterling, 95 Printing Printing Printing Printing Printing Printing Printing Printing Printing
TO WHOM PAID.		. В. Wood	Serev. Dr. Rycrson V. Casci. V. Casci. Graig & Leslie. J. McCarsakand Ridont. Aikenlead & Co. J. B. Carter. Gorrie & Parish F. H. Peterkin F. H. Peterkin W. C. Clewett & Co. Charles Potter. W. C. Clewett & Co. Charles Potter. Do. Do. Do. Charles Potter. Do. Do. Toewin & Yorton. Do. Toewin & Yorton. Samuel Rose. Hunter, Rose & Co. J. Teewin Golector of Customs

==			===														T			(-										_			18			
	3,481 81																			-		==				-										204,346 44
53 09 10 15			587 74	6 75	254 49	2,005 40	25 00	20 65	08 90	414 55	569 37	915 70	06 16	928 86	702 99	261 15	15 71	1.868 72	415 53	142 50	178 58	20 00	20 00	60 83	17 00	143 73	30 00	63 15	278 60	47 50	20 02	15 00	308 20	124 76	37 80	12,489 53
Subscriptions to sundry newspapers and magazines Stationery	DEPOSITORY.	LIBRARIES, APPARATUS AND PRIZES.	Printing To pay Insurance	Hardware	Mountains mous oborts walnut frame to	s, charles, z, boxes,		Lamps and Oil	Books, transparent views	Coloring maps and globes.	School books	Seals	Repairs, moulding, geometrical forms, &c.		Books.	Catalognes	Charges	Books, maps and merit cards, lithographing, &c.	Freight and Cartage.	Books		op	"Metrical waifs".	Astronomical instruments	Usures of Shalls	Shipping charges	Books	Coal	400	Coal scale (proportion)	Charts	Books	Stationery purchased for Normal and Model Schools	Books, &c	T What	Carried forward
A. Dredge & Co			Hunter, Rose & Co	Ridout, Aikenhead & Co	A. Dredge & CoStationery	John Rogers.	C. A. Bryce	Sparrow & Whatmough Brand Oil	W. Armstrong	S. P. May	A. Miller	Thomas Wheeler	Gorrie & Parish	Charles Potter	December 1	6 A. Lovell & Co.	6 Express Company.	W. C. Chewett & Co Books,	N. Mechan Freight and Cartage	Median & Co	Orange Judd & Co	Samuel Pose.	D. Wylie	Davis & Woods	Henderson Wallace & Co Cabinet of Shells	McPherson, Ross & Co.	John Sangster Books	T. C. Chisholm	Chaffey & Bros	A. K. Boomer (Coal scale (proportion)	E. A. Taylor & Co	Rev. E. H. Dewart Books	S. P. May.	Adam, Stevenson & Co	and for the control of the control o	

34	Victoria.	Sessional Papers (No. 3). A. 187	0-71
	cts.	204,346 44	
	& cts.	293 48 293 48 180 00 500 00 500 124 18 4 9 10 214 65 1124 00 119,312 66	,
Education Statement—Continued.	SERVICE.	Prought forward To pay arrears of salary for 1868, being amount of pay list for December, 1868 Postages Merit cards Merit cards Books Boo	F. Warne & Co., do Bell & Daldy W. &. R. Chambers do
	TO WHOM PAID.	Rev. Dr. Ryerson Joseph Lesslic. Copp., Clarke & Co. Sundry persons J. Young Do McMullen & Co. J. Campbell & Son. J. Campbell & Son. CHon. E. B. Wood	

							==
		-					
	9 07	2,919 50			47.		0 00
	33,149 07	2,91			17.876 54	,	2,000 00
					1		
				10,759 50	7,117 04	,	
				10,7	7,1		
	<u> </u>	:		:	:		
13	American Currency82,721 53 rorn Salaries,	:					
			Š			ON.	
	ıcy	:	H00]	age 5	:	ECTI	ward
Co., books	Curren		L SC	5. 12,	z <u>i</u>	NSP	Carried forward
pook	rican (ODE RIES.	ent No	e 61 .	0F 1	Carr
do do do do do do do do do do do do do d	American Curre Depository Salaries,		ND MODE	tateme	Contingencies.	зсно	:
	DEPOS	52	NORMAL AND MODEL SCHOOLS SALARIES.	per S	CONTINGENCIES. che year, as per Statement No. 13, page 61	GRAMMAR SCHOOL INSPECTION	:
J. Hogg & Son Morgan & Chase Arrold & Sons A. Hislop & Co. Jos. Tann (Tract Society) W. W. Gardner G. Philip & Son, maps, & W. P. Nimmo, F. J. Johnson, W. P. Nimmo, Cassel, Petter & Galpin, W. Blackwood & Son, G. Routledge & Co., Morgan & Chase, M. Patringge & Co., Morgan & Chase, J. W. Patringe & Co., Morgan & Chase, J. W. Patringe & Co., Morgan & Chase, J. W. Patringe & Co., Morgan & Shoughton, Smith & Son, maps. J. Wood to pay M. W. Dodds for books I. Wood to pay M. W. Dodds for books J. Sampson Low, Son & C. Carter & Bros., books A. S. Barnes & Co., boo American Tract Society Fields, Osgoode & Co., P. E. Simmons, P. Simmons, P. O'Shea, H. E. Simmons, Haryer Bros., H. Arper Bros., M. M. McDodd,		page	RMA	ar, as	ment	AMM	r, 186
Son hase on the state of the st		to. 12,	NO	the ye	State	GR.	specto
J. Hogg & Son Morgan & Chase A Hislop & Co. Jos. Tarrold & Sons A. W. Gardner G. Philip & Son, maps W. P. Nimmo, W. P. Nimmo, W. P. Nimmo, W. P. Artridge & Co. G. Rougled & Son, W. Backwood & Son, Cassel, Petter & Galpi S. W. Partridge & Co. G. Houtledge & Co. G. Houtledge & Co. Morgan & Chase, J. Morgan & Chase, Morgan & Chase, J. Wood to pay M. W. Dodds for bool I. W. Dodds for bool I. Sampson Low, Son & A. S. Barnes & Co., b American Tract Socii Fields, Osgoode & Co. H. E. Simmons, P. O'Shea, Rev. Dr. Lyer, Harper Bros., Harper Bros., M. McDodd,		nent N		s for i	as per	ŀ	of In
J. Hogs & Son Morgan & Chase A. Hislop & Co. Jos. Taurol & Sons A. W. Gardner G. Philip & Son, mapp W. P. Nimmo, W. P. Nimmo, W. P. Nimmo, W. Blackwood & Son, Cassel, 1 etter & Galp S. W. Partridge & Co. G. Noutledge & Co. Hodgan & Chase, J. Johnson, W. Barckwood to Johnson, W. Barckwood & Son, Cassel, 1 etter & Galp S. W. Partridge & Co. Hodgan & Chase, J. Wood to pay M. W. Dodds for boo Trison, Phinney, Blal Carter & Bros., books A. S. Barnes & Co., J. American Tract Soc Fields, Osgoode & Co.		staten		salarie	year,		salary
# D		As per Statement No. 12, page 52		To pay salaries for the year, as per Statement No. 12, page 51	For the		To pay salary of Inspector, 1869
#		V		T	<u> </u>		:
				Rev. Dr. Ryerson			LUGY. LIS EXPERSON
				Jr. Ry		9	3
				Rev. 1		e and	Leev.
101							

Education Statement-Concluded.

& cts.	260.291 55	1,886 02		13,540 27	275,717 84
& cts.			11,31300	2,227 27	
SERVICE.	Brought forwardJOURNAL OF EDUCATION.	Expenditure on account of this service for the year, as per Statement No. 12, page 52. EDUCATION OFFICE.	SALAKIES. To pay salaries for the year, as per Statement No. 12, page 50	For the year, as per Statement No. 13, page 61	Total Education, 1869.
TO WHOM PAID.		Sundry persons	Bev. Dr. Ryerson		

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

102

34 Victoria.

No. 21.

The Law Society in Account with the Province of Ontario.

1867. July 1 Dec. 31	To Debentures issued by the Province of Canada, at 6 per cent "Balance on open account, due do 5 do "half year's interest on Debentures do open account. "payments by Dominion, charged to joint account, O. and Q do do Ontario	\$ cts. 16,000 00 140,015 61 480 00 3,500 39 793 71 125 00	\$ cts.
	Cr.		100,011 (1
	By receipts for Law Stamps from Dominion	7,303 19 150 00 62 00	7,415 19
	Carried down		153,499 52
1868. Jan. 1 June 30 Dec. 31	To Debentures brought down 16,000 00 "balance of open account. 137,499 52 "half year's interest on Debentures. "do open account. "payments by Dominion, charged to joint account. "do Ontario. "half year's interest on Debentures. "do open account balance.	153,499 52 480 00 3,437 48 38 00 2,063 41 480 00 3,437 49	
	CR.		163,435 90
	By receipts from Law Stamps do W. Leggo do Johnson.	14,033 48 400 00 6 60	14,440 08
	Carried down		148,995 92
Jan. 1 June 30 Dec. 31	To Debentures brought down 16,000 00 '' balance of open account 132,995 82 '' half year's interest on Debentures '' do open account '' payments by Ontario. '' half year's interest on Debentures. '' do open account '' open account '' account open account '' balf year's interest on Debentures. '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' do open account '' half year's interest on Debentures '' half year's half year's half year's half year's half year's half year's half year's half year's half year's half year's half year's half year's half yea	148,995 82 480 00 3,324 89 1,757 09 480 00 3,324 90	158,362 70
	Cr.		250,002 11
•	By receipts for Law Stamps	13,594 51 400 00	13,994 51
4.0-0	Carried down		144,368 19
1870. Jan. 1	To Debentures brought down		144,368 19

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 22.

STATEMENT showing the amount of Stationery supplied to the various Departments by the Queen's Printer during the years 1868 and 1869.

Lieutenant-Governor's Office. Attorney-General's " Secretary & Registrar's " Treasurer's " Agriculture and Public Work's Office. Crown Land's " Inspector of Prison's " Auditor's " Legislative Assembly Master's Office, Court of Chancery. Court of Queen's Bench. " Common Pleas. Clerk of Process. Registrar, Osgoode Hall. Education Office. Provincial Lunatic Asylum	11	\$ cts. 13 99 73 04 381 29 278 53 300 84 2,029 45 15 43 17 12 1,055 83 16 57 6 77 20 21 5 84 160 39 428 86 73 77 4,877 93 1,975 96	6,85	cis.
---	----	--	------	------

E. B. WOOD,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,

Toronto, December 31st, 1869.

No. 23.

STATEMENT shewing the amount of Estimates for the year 1869, the amount expended by the Government of Ontario, and the amount of Estimates unexpended and overexpended to 31st December, 1869.

Unexpended. Overexpended.	es cts.		4,741 28	1,077 92 10,248 02 14,519 90	:	32,011 86
Unexpended	\$ cts.	8,965 66	3,215 39 315 00 11,951 83 28,576 09 14,410 06	814 47 143 75 1,850 87 398 10	687 31 341 36 266 50 20,776 57 3,966 58	• 99,951 23
Expended.	\$ cts. 1,200 00 1,015 00 6,150 00 7,165 00 8,031 00 7,765 00 34,372 31	21,883 34	1,784 61 85 00 23,048 17 14,744 28 21,423 91 35,589 94	11,010 53 1,856 25 1,857 92 15,848 02 1,649 13 601 90 1,142 21 44,519 90	15,249 69 7,068 64 4,433 50 108,223 43 27,471 29	429,139 50
Apprepriation.	\$ cts. 1,200 00 1,015 00 6,150 00 7,165 00 7,765 00 7,765 00 38,070 00	30,849 00	5,000 00 400 00 35,000 00 10,000 00 50,000 00	11,825 00 2,000 00 1,500 00 3,500 00 3,500 00 1,000 00 1,000 00 3,600 00	15,957 00 7,410 00 4,700 00 129,000 00 31,437 87	497,078 87
SUB-HEAD.	Executive Covernor's office, salaries Executive Council do do Actorney-General's do do Secréary Popartment, do Agriculture and Registrar's office, do Agriculture and Public Works Department, salaries Crown Lands Department, do		Salarios and expenses of travelling agents Board of Surveyors Agents' salaries, commissions and disbursements Refunds Surveys Surveys Colonization Roads	Salaries Salaries Messengers and Pages. Sessional Writers, Messengers and Pages. Postages and cost of House Post Office Sationery, including printing paper, printing and binding Printing, binding and distributing the Statutes. Expenses of elections. Increase of library. Indemnity to Members, including mileage.	Court of Chancery Do Queen's Banch Do Comnon Pleas Criminal Justice Miscellaneous Justice	Carried forward
SERVICE.	Civil Government	Contingencies	Crown Lands Expenditure	Legislation	Administration of Justice	

STATEMENT shewing the amount of Estimates, &c.—Continued.

Unexpended. Overexpended.	\$ cts. 32,011 86 3,115 85				
Unexpended.	\$ cts. 99,951 23 32,626 42 40 54 34,006 75	12,139 62 8,494 27 102 59 502 35 24,838 93	5,000 00	28,021 74 19,211 55 19,504 37 12,074 95	4,486 14 225 02 1,073 38 14,300 00
Expended.	\$ cts. 429,139 50 11,589 17 39,695 84 2,459 46 40,993 25	62,860 38 3,505 73 3,505 75 245 75 1,497 65 600 00 75,161 07	257 20	6,978 26 10,788 45 495 63 2,925 05	73,813 86 32,450 98 16,880 62
Appropriation.	\$ cts. 497,078 87 8,473 32 72,322 26 2,500 00 75,000 00	75,000 00 12,000 00 108 34 300 00 2,000 00 600 00 100,000 00	ē,000 00	35,000 00 30,000 00 20,600 00 15,000 00	78,300 00 32,676 00 17,954 00 14,300 00
SUB-IIEAD.	Brought forward Departmental and Parliamentary Buildings Government House—Completing LieutGovernor's residence, including outbuildings, feucing and laying out grounds. Fuel, gas, rent, &c., for LieutGovernor's present residence.	Completing new wings, P.L.A. Completing new wings, P.L.A. Furnishing two do Insurance on east wing, P.L.A., from 1st January, 1869, to 1st February, 1870, on \$20,000 Carpenter's risk on P.L.A. from 1st January, 1869, to 1st February, 1870 New pumping engine for P.L.A. House for caretaker Towards providing additional Asylum accommodation	Rejormatory. Workshops and works for supplying water Osgoode Hall.	Look on Rosseau River Lockat Young's Point Navigation between Balsan and Cameron Lakes Swamp Lands.	Provincial Lunatic Asylum, Toronto Malden Orillia do Roekwood
SERVICE.	Public Works and Buildings	106			Asylun Maintenanco

Reformatory	Maintenance	23,627 00	23,557 50	69 50	
Agriculturo	Electoral Division Societies 73 at \$700 each Do 1 at \$550 T at \$550 each T at \$550 each Fruit Growers Association Agricultural Association Mechanics' Institutes	51,100 00 550 00 2,450 00 350 00 10,000 00 4,000 00	$ \begin{cases} 53,894 & 00 \\ 350 & 00 \\ 10,000 & 00 \\ 3,307 & 41 \end{cases} $	206 00	
Immigration	Grant in aid of Immigration	10,000 00	17,595 00		7,595 00
	Salary of Inspector of Prisons. Expenses of do do Costle do Expenses of Arbitration Expenses of Arbitration Salary of Inspector of Registry Offices. With To cover gratuities to public officers whose services may be dispensed with To aid the destitute colonists of Red River Settlement, in the discretion of the Government, not to exceed	2,000 00 500 00 3,000 00 1,000 00 2,000 00 20,000 00	2,000 00 530 85 3,136 42 375 00 2,000 00 13,180 00	625 00 6,820 00 5,000 00	30 85
Hospitals and Charities		40,000 00	40,000 00		
Literary and Scientific Institutions		3,600 00	3,600 00		
Deducation	Common and Separate Schools Poor Schools. Normal and Model Schools—Salaries Grammar Schools	170,000 00 4,000 00 10,512 00 57,500 00	165,209 50 1,690 00 10,759 50 27,633 00	4,790 50 2,310 00 29,867 00	247 50
	Depository. Dibraries, apparatus and prizes Salaries do	33,058 00 2,942 00	:33,149 07 2,919 50	22 50	20 16
	Superanniated Teachers Museum and Library	6,500 00	6,332 13 3,481 81	167 87 18 19	
	Journal of Education.		,		
	Editing Printing, wrapping, addressing and mailing 5,000 copies per month	400 00	} 1,886 02		86 02
	Grammar School Inspection. County Common School Superintendents, part salaries—45 at \$300	2,000 00 13,500 00	2,000 00	13,500 00	
	Education Office.	11,313 00	11,313 00		
Unforeseen and Unprovided	To meet unforeseen and unprovided expenses	20,000 00	6,039 51	13,960 49	
	Carried forward	1,609,914 79	1,258,277 07	394,952 29	43,314 57

STATEMENT shewing the amount of Estimates, &c.—Concluded.

SERVICE.	SUB-HEAD.	Appropriation.	Expended.	Appropriation. Expended. Unexpended. Overexpended.	Overexpended.	
	Brought forward	\$ cts. 1,609,914 79	\$ cts.	\$ cts. 394,952 29	\$ cts.	
	Loan to Toronto General Hospital, to prevent the same being closed up, to form a charge on the Toronto General Hospital hereditaments and proposed to					
	To be President of the Court of Error and Appeal, and to each of the	4,000 00	4,000 00			
icipalities Fund	Municipalities Fund	10,000 00	10,000 00			
ionery Office	Stationery Office					
		1,623.914 79	1,623.914 79 1,444,608 83	394,952 29 43,314 57	43,314 57	

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1869.

No. 24.

STATEMENT shewing the amounts estimated in the Estimates of 1870, as required to be expended before 31st December, 1869.

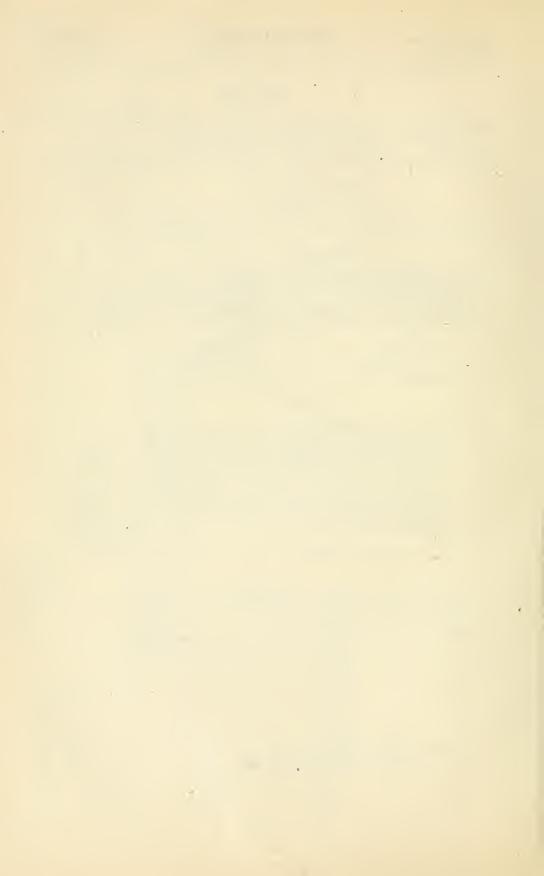
SERVICE OF 1869.	\$ cts.	\$ cts.
CROWN LANDS EXPENDITURE.		
Refunds—Excess of payments over estimate		3.065 70
LEGISLATION.		
Increase in indemnity to Members, including mileage For expenditure in excess of appropriation for Postages and cost of House	8,900 00	
Post Office to 30th Sept., 1869, \$203.48, and additional for remainder of 1869, \$1,250	1,453 48	
For expenditure in excess of appropriation for Stationery, Printing, &c., to 30th Sept., \$5,109.60, and additional for remainder of 1869, \$5,390.40	10,500 00	20,853 48
Voted for 1869 \$57,825 00 Additional required. 20,853 48 Total Legislation, 1869 78,678 48		
IMMIGRATION.		
Expenditures in excess of Appropriation, viz.: Postages, telegrams, cleaning sheds, &c. Posters, pamphlets, agricultural journals, circulars, schedules, &c., for distribution in Europe and Canada Railway, steamboat and express freight Remuneration and expenses of Emigration Commissioner to Europe Provisions for indigent Immigrants at the Toronto, Hamilton, Ottawa and Kingston Agencies Medical and undertaker's expenses. Transport, including railway, steamboat and land conveyance Extra clerk and messenger hire, and service of sub-agents Required to complete the service of the year.	388 22 13,937 56 294 01 3,000 00 2,493 74 134 67 3,653 80 398 00 1,000 00	
Amount of appropriation	25,300 00 10,000 00	15,300 00 39,219 18
Amount of overdrawn balances in 1869, as per Statement 23		43,314 57 39,219 18
Balance to be provided for, to complete services		4,095 39
	à l	

E. B. WOOD,

Treasurer.

TREASURY DEPARTMENT,

Toronto, December 31st, 1869.



A. 1870-71

STATEMENTS

OF

RECEIPTS AND EXPENDITURES

ON ACCOUNT OF THE

PROVINCE OF ONTARIO,

DURING THE TEN MONTHS ENDING 31st OCTOBER,

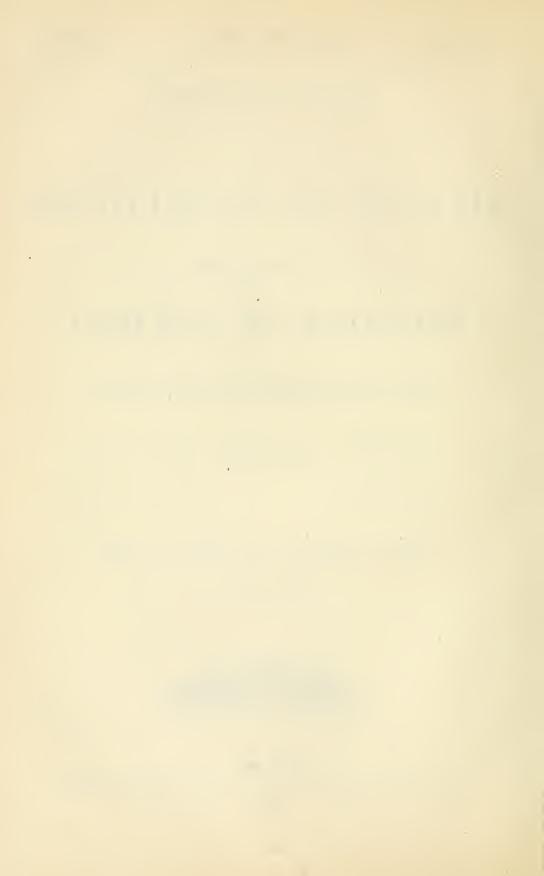
1870.

Laid before the Legislative Assembly, by Command, DECEMBER, 1870.



Taronta:

PRINTED BY HUNTER, ROSE, & CO, 86 AND 88 KING ST. WEST. 1870.



To His Excellency the Honorable William Pearce Howland, Companion of the Most Honorable Order of the Bath, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honor to present to Your Excellency STATEMENTS OF THE RECEIPTS AND EXPENDITURES on account of the Province of Ontario, during the ten months ending this day.

Respectfully submitted.

E. B. WOOD, *Treasurer*.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st October, 1870.



AUDITOR'S OFFICE,

31st October, 1870.

SIR.

The following statements shew the Receipts and Expenditure of the Province of Ontario, from the 1st of January to the 1st of November of the current year:—

The Receipts from several of the minor sources of the Public Revenue have already reached the amounts estimated for the twelve months. The principal exception will be found in the Crown Lands Revenues.

Early in the year, the Municipal Loan Fund Books, and the keeping of the accounts connected therewith, were transferred from the Receiver General's Department at Ottawa, to this Office. This transfer has however imposed no increased charge on the Province, as although, the services of an extra clerk were thus rendered necessary, a larger salary heretofore paid by the Province to an Officer in the Receiver General's Department has been saved. The amounts received from the borrowing Municipalities have barely reached one-fourth of the estimated amount for the year, by far the larger payments however under this head, are usually made during the month of December, still this account is in a very unsatisfactory state. Out of forty-seven Municipalities that are borrowers from this fund, nine have paid nothing for the last nine years and upwards, and four are in arrears for the last five years, while the payments from fourteen others fall far short of their annual liability. The warning however, which has recently been given by your instructions to the defaulting Municipalities, may have a salutary effect, and avoid the necessity of more stringent action.

The Expenditures under the various heads of the Public Service, have with four exceptions been kept within their respective appropriations, and the unexpended balances, unless some unforeseen contingency should arise, will be sufficient to carry them on to the end of the year.

With reference to the exceptions above noticed, the undersigned, in accordance with the instructions laid down for his guidance, reported to the Honorable the Executive Council that the appropriations made by Parliament for those services were exhausted.

The exceptions are.

Government House	Maintenance	\$ 83	47
Do	Construction Account	4,853	65
Dominion Arbitration	on	6,120	27
Immigration		2.555	95

In explanation of the excess more apparent than real under the head of Immigration' it may be stated that in the estimates for this year an appropriation of \$15.300 was made to cover liabilities incurred but not provided for in the estimates of 1869, and also an appropriation of \$24,700 for the service of 1870. The Immigration Department presuming that the whole amount so voted would stand to the credit of the year 1870, allowed a portion of the appropriation for the liabilities of 1869 to lapse, leaving only the sum of \$24,700 to the credit of this service for the year 1870.

I have the honor to be,

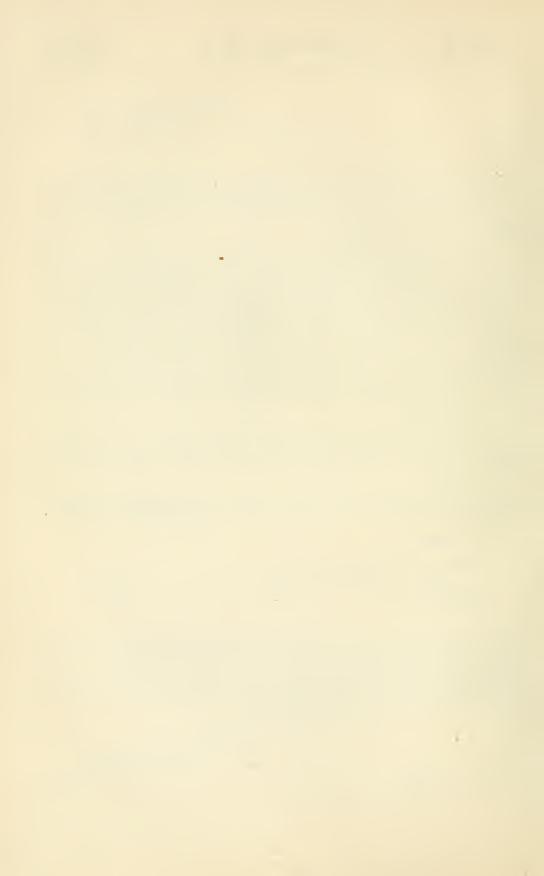
Your obedient Servant,

WILLIAM CAYLEY,

Auditor.

The Hon. E. B. Wood,

Treasurer.



CONTENTS.

STATEM	ENT OF CASH	e. 2	PUBLIC WORKS AND BUILDINGS Coutinued.	_
Do	OF INVESTMENTS	3	Lock between Balsamand Cameron Lakes	- 8
Do	of Receipts	4	Improvement of Navigation, Scugog River Cut between Lakes Joseph and Rosseau. Road between Washago aud Gravenhurst	- 8
Do	of Expenditure	5	Surveys and Drainage of Swamp Lands	8
CIVIL G	overnment :— Government House	5	Miscellaneous:— Repairs—Brock's Monument	8
	Lieutenant-Governor's Office-Salaries	5 5		
	Executive Council Office do Attorney-General's Office do Treasury Department do	5	ASYLUM MAINTANANCE	
	Secretary and Registrar's Office do	5	REFORMATORY MAINTENANCE	-
	Department of Agriculture and Public Works—Salaries	5	AGRICULTURE AND ARTS	8
	Crown Lands Department—Salaries	6	Immigration	9
CHARGE	s on Revenue : Miscellaneous	10	Miscellaneous :— Gratuities	6
<i>(</i> 1			Inspector of Prisons	6
CROWN	Lands Expenditure:— Board of Surveyors	10	Provincial Auditor Inspector of Registry Offices	6
	Salaries, &c., of Agents	10	Queen's Printer	
	Refunds Surveys	10	Hospitals and Charities	9
	Claims for Lands twice sold	10	LITERARY AND SCIENTIFIC INSTITUTIONS	9
	Arbitration	TO	Education	9
LEGISLA	TION:—	7	Unforeseen and Unprovided	0
	Salaries Sessional Messengers, Writers and Pages	7		
	Postages and Cost of House Post Office Stationery, including Printing-Paper, &c.	7	Municipalities' Fund	10
	Printing, Binding and Circulating the Statutes	7	STATIONERY ACCOUNT	10
	Expenses of Elections	77	MISCELLANEOUS AND DEPARTMENTAL CONTIN- GENCIES	
ADMINI	STRATION OF JUSTICE:-		STATEMENT OF CONTINGENCIES:-	
	Court of Chancery—Salaries Do of Queen's Bench do	7	Lieutenant-Governor's Office	
	Do of Common Pleas do	7	Executive Council Office	12
	Deputy Clerks of the Crown and Pleas	7	Treasury Department	13
	Criminal Justice, Criminal Prosecutions. Do Administration of	7	Secretary and Registrar's Office Department of Agriculture and Public	13
	Do Special Services	7	Works	14
	Miscellaneous Justice	7	Crown Lands Department	
Public	Works and Buildings:-		Auditor's Office	
	London Lunatic Asylum	8	Legislation	17
	Toronto Lunatic Asylum Deaf and Dumb Institute	8	Normal and Medel Schools Education	19
	Blind Asylum	8	Court of Chancery	19
	Reformatory, Penetanguishene	8	Court of Queen's Bench	20
	Court House and Gaol, Sault, Ste. Marie	8		
	Lock on Rosseau Rivor, Muskoka	8	STATEMENT OF BALANCES OF APPROPRIATIONS	21



STATEMENTS

OF

RECEIPTS AND EXPENDITURES. 1870.

STATEMENT	STATEMENT OF RECEIPTS AND EXPENDITURES of the Province of Ontario, for the ten months ending 31st October, 1870.	ae Province	of Ontario,	for the ten months ending 31st Octo	ber, 1870.
1870.	D.R.	s cts.	1870.	(fR,	& cts.
Jan. 1	Jan. 1 To Balance on hand	131,954 09		payments as per Statement No. 4	1,338,104 14
2				By Bank of Montreal Balance of Cash Account	47,968 64
		2,239,053 03			2,239,053 03

2,239,053 03

TREASURY DEPARTMENT, ONTARIO, TORONTO, October 31st, 1870.

No. 2.

STATEMENT of Investments made during the ten months ending 31st October, 1870.

Special deposit bearing interest at 4 per cent Special deposit bearing interest at			NATURE OF INVESTMENT.		Amount.	Total Amount.
\$850,000 00 705,471 68 687,194 06 852,980 25 3,005,615 99	nk of MontrealSpecia	deposit bearing interes	st at 4 per cent		\$ cts. 850,060 00 2,980 25	\$\$1.00 m
	Amour	nt of investments made	in 1868	\$850,000 00		62 006,200
		qo	1.869			
do 1870	Атоп	nt of special deposits ma	ade in 1869a	687,194 06		
3,005,615 99			1870	852,980 25		
				3,095,645 99		

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, October 31st 1870.

No. 3.

STATEMENT of Receipts of the Province of Ontario, for the ten months ending 31st October, 1870.

	\$	cts.	\$	cts.	\$	cts.
Dominion of Canada.						
On account of subsidy and general account do Marriage Licenses to 30th June do Law Stamps and Fees	34.5	26 46 55 00 99 05				
Reformatory.					1,201,0	SO 51
Reformatory Prison, Penetanguishene						
Lunatic Asylums.				•••••	7	56 27
Provincial Lunatic Asylum, Toronto Lunatic Asylum, Malden	12,9	46 56 41 13			10.0	07.00
Education.				******	13,2	87 69
On account of education					19,9	35 26
On account Consolidated Municipal Loan Fund		:				
Investments.				• • • • • • • •	54,5	38 99
Interest on account of Investments					# 00 0	
Casual Revenue.					128,8	J5 5 5
Fines, fees, and forfeitures					0 2	
Tavern and other Licenses.					3,90	63 62
Tavern, Shop, and Pawnbrokers' Licenses					50.40	00 36
Algoma Taxes.			********		00,40)O 30
On account of patented lands in Algoma					2.49	2 92
Law Stamps.					29 24	,, ,,
Law Stamps Ontario Gazette.					66,74	7 58
On account of Official Gazette					10.00	2.00
Ontario Statutes.					10,88	6 99
On account of Statutes.					1.74	7 20
Territorial Revenue.				*****	1,79	7 38
Special Funds - Clergy Lands	77,08 85,55 5,30					
			· · · · · · · · · · · · · · · · · · ·		167,93	7 45
Crown Lands Revenue. Woods and Forests.	98,18 277,56	5 98 2 39		}		
					375,74	
		}	777.0		2,107,09	8 94

E. B. WOOD.

Treasurer.

69 38,013 57

10,107

98

8,303

Carried forward.....

as per statement, page 14.

Sularies to 31st October, 1870 Contingencies, do do

STATEMENT of the Expenditure made by the Provincial Treasurer on account of the Province of Ontario, during the ten cts. 69 8,363 05 6,179 82 8,224 03 cts. 1,404 50 1,236 01 69 5,125 00 1,054 82 6,645 76 1,578 27 12 93 1,000 00 236 01 cts. 64 86 7,323 845 69 as per statement, page 12 as per statement, page 13. as per statement, page 11 DEPARTMENT OF AGRICULTURE AND PUBLIC WORKS. as per statement, page 11..... SECRETARY AND REGISTRAR'S OFFICE. CIVIL GOVERNMENT. LIEUTENANT-GOVERNOR'S OFFICE. ATTORNEY GENERAL'S OFFICE. Executive Council, Office. TREASURY DEPARTMENT. SERVICE Salaries to 31st October, 1870 Contingenoies, do do Salaries to 31st October, 1870 Contingencies, do do Salaries to 31st October, 1870 Contingencies, do do Salaries to 31st October, 1870 Contingencies, do do Government House months ending 31st October, 1870. Contingencies, TO WHOM PAID.

ं
. c
3¢
.=
7
Jo
ہے
0
:2
್ಟ್
3
- 3
·Ξ
E
2
7
ď
ion
1
700
- 50
- G
\rightarrow
-
16
2
Z,
2
20
9
45
Ě
=
G.
7
E
Civil
. \
0

\$ cts.													78,937 91
& cts.	38,013 57				29,690 23	1,756 92						9.477 19	
€.				5,999 98 4,874 98 5,758 31 3,087 48 3,583 32 1,106 66 791 66				316 67	1,666 66 363 46 279 75	1.666 64 28 50	1,500 00	200 00 56 31 3,399 20	
SERVICE.	Brought forward	CROWN LANDS DEPARTMENT.	Salaries to 31st October, 1870.	Commissioner, Assistant Commissioner and Clerk Pree Grants and Sales Branch Surveys, Partent and Roads Branch Woods and Porests Branch Accounts Branch Registrar Caretaker, and Messenger Contingencies and repairs to 31st October, 1870, as per statement, page 15	East It ing Parliament Buildings.	Miscellaneous Account, Carpenter work, tinsmithing, plumbing, &c., &c	Miscellaneous.	Grabuities	Inspector of Prisons, &c.: Salary to 31st October, 1870 Travelling expenses, &c Copying Clerk	Provincial Auditor: Salary to 31st October, 1870 Contingencies, do do as per statement, page 17	Inspector of Registry Offices: Salary to 30th September, 1870	Queen's Printer: Salary to 31st March, 1870 Contingencies, do do as per statement, page 17 Official Gazette	
TO WHOM PAID.							`						

	23,078 67							146,162 60
8,760 98	3,801,94 70,00 1,405,07 6,734,52 1,469,25 319,48 497,43		11,651 21	5,687 60	00 Ves 6	3,000 08 3,690 20 86,953 38 1,293 95	9,075 00	12,451 80 93 66 105 72 7,500 00 4,000 00
7,961 67			10,678 67	5,216 64 470 96	3,499 99			
Salaries to 31st October, 1870 Confingencies, do do as per statement, page 17	Repairs to Buildings. Sessional writers, messengers and pages. Stationery, and cost of House Post Office. Stationery, including printing paper, printing and binding. Printing, binding and distributing the Statutes Exponses of elections. Increase of Library.	ADMINISTRATION OF JUSTICE.	COURT OF CHANCERY. Salaries to 31st October, 1870	Courr or Queen's Brach. Salaries to 31st October, 1870 Contingencies, do do as per statement, page 19.	Court of College Common Pleass. Salaries to 31st October, 1870. Contingencies, do do as per statement, page 20.	Crown Counsel Prosecutions. Administration of Criminal Justice. Special services	Deputy Clerks of the Grown and Pleus : Salaries to 30th September, 1870	Adminish ation of Justice: In Algona, Nipissing, Muskoka and other services Repairs to Osgoode Hall Scals and other contingencies Salaries of Superior Court Judges to 30th September, 1870 Gratuities to Recorders

spitals and	& cts.	248,179 18			325,564 02	96,928 41	15,359 91	65,992 20
ration.—Hos	& cts.		133,343 53 24,016 25 33,984 04 1,5420 09 7,025 06 660 42 8,975 08 15,265 35 12,565 35 13,759 38	4,567 20 14,576 77 17,986 03	200 00	00,112 08 22,833 57 13,018 23 964 53		
arts.—Immig ded.	⊕ cts.							
c Works and Buildings.—Asylum Maintenance.—Reformatory.—Agriculture and Arts.—Immigration.—Hospitals and Charities.—Literary and Scientific Institutions.—Education.—Unforescen and Unprovided.	SERVICE.	Brought forward PUBLIC WORKS AND BUILDINGS.	London Lunatic Asylum Toronto Lunatic Asylum Deaf and Dumb Institute Blind Asylum Government House Court House and Caol, Salt Ste. Marie Lock on Rosseau River, Muskoka Lock to Young's Point Lock between Balsam and Cameron Lakes Luck between Balsam and Cameron Lakes Luck Asylum Saruch River Luck Asylum Saruch River	Cut between Lakes doseph and Gravenhurst Road between Washago and Gravenhurst Surveys and Drainage of Swamp Lands	Miscellancous: Repairs, Brock's Monument	Provincial Lunatic Asylum Orillia Lunatic Asylum Deaf and Dumb Asylum	REFORMATORY. Maintenance and Salaries of Officers	AGRICULTURE AND ARTS. Grants on account of this service.
Works and Bulharities.—Literar	FO WHOM PAID.							

					- L up	15 (11	o. <i>oj</i> .			A. 1070-	_
27,255 95	42,260 00	1,350 00						297,263 66			1,120,153 33
			168,103 90	14 489 55	56,250 00 6,500 00 1,666 66	10.997 59	3 111 09	30,959 40 2,757 21 1,623 33			
				9,054 96 5,434 59		9,843 99 1,153 60	2,554 99 556 03			612 00 100 43 547 50 884 86 3,700 00 86 74 13 64	5,945 17
On account of this service	Grants on account of this service	Grants on account of this service	Common and Separate Schools	Normal and Model Schools: Salaries to 31st October, 1870 Contingencies, do do as per statement, page 18.	Grammar Schools Superannuated Teachers Crammar School Inspection	Education Office: Salaries to 31st October, 1870	Depository: Salaries to 31st October, 1870 Contingencies, do do as per statement, page 19	Libraries, Maps and Apparatus Museum Journal of Education	UNFORESEEN AND UNPROVIDED.	W. R. Nursey. Services as Clerk in Auditor's Office, to 31st October. J. Lesslie Postagres, Registrar General's Office, to 31st October. H. S. Crowe. Services as Clerk in Registrar General's Office. Hunter, Rose & Co. Printing for Registrar General's Office. Hon. E. B. Wood. To pay Registrars of Births, Deaths and Marriages. H. S. Grewe. Cab hire and express charges re Births, Deaths and Marriages. William Firstbrook do	
					9					W. R. Nursey. J. Lesslie H. S. Crewe Hunter, Rose & Co Hon. B. B. Wood H. S. Grewe William Firstbrook	

4,542 40

CHARGES ON REVENUE,

124,134 11 2,719 68 2,000 00

Stationery Account
Accountable Warrant to meet Miscellancous Departmental Contingencies......

Colonization Roads Claims for Lands twice sold Salaries, &c., of Agents Refunds

Surveys

Board of Surveyors

Lands Expenditure :

Crown

Miscellaneous ...

Arbitration

119,591 71

21,194 63 10,046 81 25,000 00 2,060 00 45,000 00 16,120 27

liscellaneous	e cts.	1,120,153 33			15,991 22 73,105 80
ory Account.—Miscellaneous	& cts.		4 0 0	0,014 40	11 116'6
-Stationery	e cts.	5,945 17	3 00 108 63 25 22 40	15 00 4,829 00 1,000 00 3,500 00 567 77	
Inforeseen and Unprovided—Continued,—Municipalities Fund.—Charges on Revenue.—Stationery Account.—Miscellaneous Departmental Contingencies.	SERVICE.	UNFORESERN AND UNPROVIDED,—Continued.	Printing circulars for Aulitor To pay Registrans of Births, Deaths and Marriages Cartage stationery to Osgoode Hall Cleaning, &c., Superior Courts.	Villiam Edwards London Lunutic Asplum Maintenance and Furnishing Account, Unprovided: To pay for advertising re London Lunatic Asylum Maintenance Wood supplied London Lunatic Asylum Accountable Warrant re Maintenance London Lunatic Asylum Accountable Warrant re Maintenance London Lunatic Asylum Henry Landor On account of salary, &c., Stipendiary Magistrate, Parry Sound On account of salary, &c., Stipendiary Magistrate, Parry Sound On account of salary, &c., Stipendiary Magistrate, Parry Sound On account of salary, &c., Stipendiary Magistrate, Parry Sound On account of salary, &c., Stipendiary Magistrate, Parry Sound On account of salary On account of sa	MUNICIPALITIES' FUND
Unforeseen and Unprovided—Co	TO WHOM PAID.		Robertson & Cook Hon. M. C. Caneron John Notman John Alexander	William Edwards John Words William Edwards Henry Landor	0

1,338,104 14 E. B. WOOD,

Treusurer

TORONTO, October 31st, 1870 TREASURY DEPARTMENT, ONTARIO,

No. 5.

& cts.	- 1	26 96 10 10 10 10 10 10 10 10 10 10 10 10 10
ects.	- 1	888 x 2 3 x 4 8 x 2 4 10 x 87 x 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
of Ontario, for the ten months ending 31st October, 1870.		Postage to 30th September, 1870 Postage to 30th September, 1870 Perinting Cab bire Subscription and advertising do do do do do do do do do do Expenses to Ottawa. Books Books Protages to 30th September, 1870 Expenses to 30th September, 1870 Expenses to 30th September Protage Carbay Carbay Carbay Carbay Carbay Carbay Carbay Carbay Carbay Carbay Carbay Carbay Brooms, all, &e B
of Ontario, for the	fo whom PAID.	Joseph Lesslic Montreal Telegraph Co Hunter, Rose & Co Villiam Bailey Toronto Telegraph Toronto Telegraph Toronto Lewder Montreal Gazette Montreal Gazette Montreal Heredt Hamilton Specutor Camedian Freemen New York Alvion E. G. Curtis Do James Bain J. Lesslic Water Co Hunter, Rose & Co Hunter, Rose & Co Water Co T. C. Chisholm William Myles H. J. Boulton William Berry William Berry William Berry William Berry William Berry William Berry Gonsumers' Gas Co Metrick & Bros Hiram Piper.

Contingencies.—Continued.

	\$ cts.	236 01	98 82 83
	s cts.	434 70	20
CONTRIBOTION CONTRIBUTION	SERVICE.	Brought forward	Campeting Camp
	TO WHOM PAID		Henry Graham Cabman Cabman Cabman Cabman Cabman Cab Rice Subscription John Boxall Fapress Co John Boxall Thomas Labor H. Kindech Angus Macdonell McDunnough & James J. Lesslie Hunter, Rose & Co Mottreal Telegraph Co Metropolitan Water Co William Myles Caope Chaffey & Bro H. J. Boulton H. J. Boulton W. Berry William Myles Capse Chaffey & Bro Cartage Cansumers Gas Co H. J. Boulton Morrisburgh Co Morrisburgh Capting Morrisburgh Co Morrisburgh Morrisburgh Co Telegrams Capting Capting Morrisburgh Morrisburgh Dadil News Subscription Gorge Harrison Action Morrisburgh Capting J. Rordan J

1,054 82		1,578 27	3,427 96
305 00 50 60 3 00 1 25 1 20	2000	22 23 23 23 23 23 23 23 23 23 23 23 23 2	973 38
Law Reports, &c Repairing clock Street watering Envelopes Chimney cleaning Treasury Department.	r, 1870	Robertson & Cook Directory MeDumough & James One mathematics To pay protest, R. C. B. W. R. Hannell & James To pay protest, R. C. B. R. S. Thompson Ahmanaes To pay protest R. C. B. Ahmanaes To pay protest R. C. B. To pay protest R. C. B	Curried forward
T. Bryan F. Middleton F. Middleton F. Nickleton F. Broxup F. Broxup	Hunter, Rose & Co. Printing Antreal Telegraph Co Polegrams to 30th September Polling Simes Polling Simes Services as messenger. Clerk of Correspondence Cab hire Express Co Charges Contarto Correspondence Cab hire Charges Contarto Contarto Contarto Charges Contarto Charges Charges Contarto Charges	Robertson & Cook Directory	

Contingencies.—Continued.

& cts.	96 27 96	1,039 93		
ets.	973 387	### 12 12 12 12 12 12 12 12 12 12 12 12 12	######################################	5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
SERVICE.	Brought forward	Toronto Leader	Telegraph Co	Do do London Do do London Gos Supply Glover Marrison D. Forbes J. F. Noph Punishings J. Wohle Wearese Supply J. Worker J. Worker J. Worker J. Worker J. Workers
TO WHOM PAID.		Toronto Leader do do Alorisbangh Courier do Alorisbangh Courier do Subscription and advertising Toronto Tricproph (ab line Charles Robertson Three maps Th	J. Lesslie Postages to 3 Montreal Telegraph Co Telegrams Hunter, Rose & Co Printing Sundry Persons Cab hire Do Freight and c Extra Clerk Services Copp, Clark & Co Books R. C. Bothwell Post Office b R. C. Bothwell Post Office b I. T. Jones Expenses to I Do do Do do Do do Do do	Do

Contingencies.—Continued.

	4,427 84	56 31 56 31	10,784 25
0 1 1 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 32 23 18	20 84 24 32 2 15	88 88 88 88 88 88 88 88 88 88 88 88 88
S. Hill Juc. Tracy Chinney sweeping H. Piper & Co. Thi box Jacques & Itay Book rack, &c Copp. Clark & Co Commission fee Commission fee L. C. Dalon J. W. Lewis S. Hill S. Hill	Postages Printing	Quecu's Printer. Printing Stationery	Montreal Telegraph Co. Telegrams to 30th September, 1870 Trough Globe Batta copies W. Johnson Twond Globe W. Johnson Twond Globe W. Johnson Twond Globe W. Johnson Twond Globe W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson W. Johnson D. Johnson W
S. Hill J. Tracy J. Chinney sweeping H. Piper & Co. Jacques & Hay Jacques & Hay Copp. Clark & Co Copp. Clark & Co Commission fee J. W. Lewis S. Hill J. W. Lewis J. W. Lewis	J. Lesslie Postagos Hunter, Rose & Co. Printing	J. Lesslie Hunter, Rose & Co. J. Bain Stationery	Allomtreal Telegraph Co. Toronto Leader Toronto Leader Toronto Leader Toronto Globe W. Johnson C. T. Gillmor Subscriptions to smulty papers Advertising Adv

ALC CONTACT AND ADMINISTRATION OF PROPERTY.	& cts.	10,781 25	799 31		
SP-Value A WEST THE CO. STAN VALUE OF THE CO.	& cts.	681 43	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	85.00 85.00	2
	SERVICE.	Brought for ward Tourishation - Continued.	stores. y y y g clocks ing Private Bills No	Hember, Rose & Co Printing	Carpeting, &e Repairing clock Beyoning clock Mowing Practine Manuring grounds Manuring grounds Chockery Clearing snow Mason work
	TO WHOM PAID.		Chas, Thompson	Hunter, Rose & Co Printing George Challey & Bro Firel Pefer Lathan Pricklaying Pricklaying W. Dawson Cartage Cartage Danald Girant Cartage R. L. Fipar & Son Slove pipes Sharrow & Whatmough Plumbing R. L. Fipar & Son Stove pipes R. A. Wood & Bro Gartage R. A. Wood & Bro Gartage George George George George George George George George George George George	McDunnough & James (Carpetinis, &e B. M. Morphy Repairing clock Repairing clock B. M. Morphy & Caulbins & Sanderson Brooms, &e Mowing Machine. J. Fleening & Co. Mowing Machine. J. Forsyth Manuring grounds Henry Graham & Co. Manuring grounds Henry & Cambe. Cleverdon & Combe. (Crockery Robert Remie Combe. Charing snow Robert Remie Mason work Bank Recens Robert Remie Cambe. Cambe. Remie Rem

of victor	ia.	5101141 1 41		21, 10,0-11
6,484 59	1,153 (0	556 03	978 56 57	19,700 32
20 00 20 00 300 00 890 00 480 00 480 00	188. 17. 25. 25. 25. 25. 26. 20. 25. 20. 25. 20. 25. 20. 25. 20. 25. 20. 25. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20		98 55 56 66 66 66 66 66 66 66 66 66 66 66	85 88 88 88 88 88 88 88 88 88 88 88 88 8
Pano hire Hardware Examining pupils Water supply Painting	Hunter, Rose & Co. Printing Brown Bros. A. Diamond A. Diamond Taw books Rev. Dr. Onliston Carpenter work Tokkerson A. Lossilic Tokeountable Warrant to meet petty contingencies.	Depository. Printing Court of Chancery.	Huntey, Rose & Co. Frinting Henry Rowsell Stationery Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Henry Rowsell Helgeraph Co. Allowance to Judges Library, 1870 Allowance to Judges Library, 1870 Allowance to Judges Library, 1870 Allowance to Judges Library, 1870 Bostages Henry Rowsell Henry Row	Hunter, Rose & Co Printing J. T. Kohll J. Ramp ribbon J. Ramp ribbon Hardware James Alexander Hardware James Alexander Hardware Hardware James Gening R. Maleunder R. Maleunder Allowance to Judges Library, 1870 Carried forward
R. S. Williams & Co. Piano hire Faceson & Son. Rackware Rev. Dr. Orniskon. Examining pupils Metropolitan Water Co. Water supply Mexander Hamilton.	Hunter, Rose & Co. Stationery Brown Bros. Ifolgins, Buell & McWilliams. Law costs. A. Diamond. I. Raw books. Rev. Dr. Ormiston. Expenses atten. J. Jossile. Carpenter work. J. Lossile. Protries to 30th	Hunter, Rose & Co Printing	Huntor, Rose & Co. Funting Huntor, Rose & Co. J. P. Whitney J. B. Bliss Montreal Telegraph Co. J. Subherland A. Grant	Hunter, Rose & Co. J. T. Lohh J. T. Lohh J. T. Lohn J. T. Lohn J. Marabander J. Melander R. Malcohn R. Malcohn R. G. Datton F. G. Datton J. Michie J. Michie

Contingences.—Concluded.

10					1 (<i>)</i> .	
	\$ cts.	19,700 32	3 to 3 to 5	2	160 09	20,336 77	tswee.	
	* cts.	217 29	123 15 55 17 7 86 17 86 18 99 15 93 15 93 15 93		100 00 54 58		E. B. WOOD, Treasmren.	
	SERVICE.	Brought forward Court of Queen's Bench—Concluded.	Postages Cleaning windows Clearing snow Coles to chimnies Carpenter work Sundries Hanging curtains	Court of Connon Pleas.	Hunter, Rose Co		TREASURY DEPARTMENT, ONTARRO, TORONTO, October 31st, 1870.	
	TO WHOM PAID.		J. Lesslie Sandry Persons do John Boxall Withrow & Hillock J. Finch Jacques & Hay	20	Hunter, Rose Co		TREASURY DEPARTM	

No. 6.

STATEMENT shewing the Estimates for the year 1870, the amount expended by the Government of Ontario, and the amounts unexpended and overexpended to 31st October, 1870.

SERVICE.	Amount.	Expenditure.	Unexpended.	Over expended
Civil Government:	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government House	2,415 00 2,400 00 300 00 1,015 00 1,015 00 6,150 00 2,015 00	2,498 47 1,000 00 236 01 845 64 558 86 5,125 00 1,054 82	1,400 00 63 99 169 36 456 14 1,025 00 960 18	83 47
Treasury Department- Salaries Do Contingencies and	8,065 00 3,075 00	6,645 76 2,163 91	911 09	1
repairs Provincial Secretary—Salaries Do Contingencies and repairs Public Works—Salaries Do Contingencies and repairs Crown Lands—Salaries Do Contingencies and repairs	8,995 00 2,775 00 9,965 00 3,575 00 30,565 00 9,680 00	7,323 12 1,625 57 8,303 98 2,389 35 25,262 39 4,427 84	1,671 88 1,149 43 1,661 02 1,185 65 5,302 61 5,252 16	
Miscellaneous:				
Gratuities, Public Officers Inspector of Prisons. Do Contingencies Do Clerk Auditor Do Contingencies Inspector of Registry Offices. Queen's Printer—Salary Do Contingencies Official Gazette	7,000 00 2,000 00 650 00 400 00 2,000 00 50 00 2,000 00 800 00 75 00 3,990 00	316 67 1,666 66 363 46 279 75 1,666 64 28 50 1,500 00 200 00 56 31 3,399 20	6,683 33- 333 34 286 54 120 25 333 36 21 50 500 00 600 00 18 69 590 80	
LEGISLATION:				
Salaries Sessional Writers, Post Office, &c. Stationery Printing, &c., Statutes Expenses of Elections. Increase of Library Indemnity to Members Contingencies and Repairs.	10,825 00 4,500 00 10,000 00 2,800 00 1,000 00 1,000 00 38,900 00 6,590 00	7,961 67 1,475 07 6,754 52 1,469 25 319 48 497 43	2,863 33 3,024 93 3,245 48 1,330 75 680 52: 502 57 38,900 00 1,988 75	
Administration of Justice:				
Court of Chancery Do Queen's Bench Do Common Pleas C'riminal Justice Miscellaneous Justice	$\begin{array}{c} 15,759 & 00 \\ 6,950 & 00 \\ 4,650 & 00 \\ 122,000 & 00 \\ 44,700 & 00 \end{array}$	11,651 21 5,687 60 3,660 08 91,937 53 33,226 18	4,107 79 1,262 40 989 92 30,062 47 11,473 82	
PUBLIC WORKS AND BUILDINGS:				
London Lunatic Asylum Toronto do Deaf and Dumb Institution Asylum for the Blind Government House Reformatory Court House and Gaol, Sault Ste. Marie Lock, Rosseau River	190,205 92 26,132 94 40,719 98 75,000 00 33,001 83 8,000 00 2,500 00 28,046 14	133,343 53 24,016 25 33,984 04 9,420 94 37,855 48 7,025 00 660 42 8,975 08	56,862 39 2,116 69 6,735 94 65,579 06 975 00 1,839 58 19,071 06	4,853 65
Carried forward	784,250 81 21	503,459 92	285,728 01	4,937 12

STATEMENT showing the Estimates for the year 1870—Concluded.

SERVICE.	Amount.	Expenditure.	Unexpended.	Over expended
Brought forward	\$ ets. 784,250 81	\$ ets. 503,459 92	\$ ets. 285,728 01	\$ cts 4,937 12
Public Works and Buildings—Concluded.	,01,200 01	000,100 02	200,120 01	1,007 12
Lock Balsam Lake Do Younge's Point Navigation, Scugog River Cut, Lake Joseph. New Road, Washago Surveys, Swamp Lands Other Surveys Repairs, Brock's Monument	$\begin{array}{c} 19,670 \ 45 \\ 19,244 \ 55 \\ 21,000 \ 00 \\ 10,000 \ 00 \\ 25,000 \ 00 \\ 200,000 \ 00 \\ 4,000 \ 00 \\ 1,000 \ 00 \end{array}$	3,799 32 15,265 35 13,588 61 4,567 20 14,576 77 17,986 03	15,871 13 3,979 20 7,411 39 5,432 80 10,423 23 182,013 97 4,000 00 500 00	
ASTLUM MAINTENANCE:			ł I	
Provincial Lunatic Asylum Malden Do Orillia Do Rockwood Do Deaf and Dumb Asylum	83,177 00 29,495 00 17,026 00 28,600 00 5,000 00	60,112 08 22,833 57 13,018 23 964 53	23,064 92 6,661 43 4,007 77 28,600 00 4,035 47	
Reformatory	22,478 00	15,359 91	7,118 09	and the same of th
AGRICULTURE AND ARTS	69,450 00	65,992 20	3,457 80	
Immigration	24,700 00	27,255 95		2,555 95
Hospitals and Charities	42,510 00	42,260 00	250 00	
LITERARY AND SCIENTIFIC INSTITUTIONS	1,350 00	1,350 00		
Education: Common and Separate Schools Poor Schools Normal School—Salaries Do Contingencies Grammar Schools Depository, Libraries, &c Depository—Salaries Do Contingencies Superannuated Teachers Museum Journal of Education Grammar School Inspection Education Office—Salaries Do Contingencies UNFORESEEN AND UNPROVIDED MUNICIPALITIES' FUND CHARGES ON REVENUE:	170,000 00 6,000 00 10,842 00 5,850 00 57,500 00 32,500 00 3,000 00 6,500 00 3,778 43 1,800 00 2,000 00 11,813 00 1,983 00 20,000 00 78,972 84	168,103 90 805 00 9,054 96 5,434 59 56,250 00 30,959 40 2,554 99 556 03 6,500 00 2,757 21 1,623 33 1,666 66 9,843 99 1,153 60 15,991 22 73,105 80	1,896 10 5,195 00 1,787 04 415 41 1,250 00 1,540 60 535 01 262 97 1,021 22 176 67 333 34 1,969 01 829 40 4,008 78 5,867 04	
Miscellaneous Dominion Arbitration Board of Surveyors Salaries of Agents, &c. Refunds Surveys Claims - Lands twice sold Colonization Roads Boundary Survey Stationery Account Miscellaneous Contingencies—Accountable Warrant	8,750 00 10,000 00 400 00 35,000 00 15,000 00 50,000 00 50,000 00 4,000 00	4,542 40 16,120 27 170 00 21,194 63 10,046 81 25,000 00 2,066 00 45,000 00 2,719 68 2,000 00	4,207 6 230 00 13,895 37 4,953 10 25,000 00 2,940 00 5,000 00 4,000 00	6,120 27
Total	1,999,550 08	1,338,104 14	679,778 96	13,613 34

E. B. WOOD, Treasurer

STATEMENTS

OF

RECEIPTS AND EXPENDITURES

ON ACCOUNT OF THE

PROVINCE OF ONTARIO,

FOR THE YEAR ENDING 31st DECEMBER,

1870.

Laid before the Legislative Assembly, by Command.

JANUARY, 1871.



Toronto:

PRINTED BY HUNTER, ROSE & Co., 86 AND 88 KING ST. WEST. 1871.



To His Excellency the Honorable William Pearce Howland, Companion of the Most Honorable Order of the Bath, Lieutenant Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency STATEMENTS OF THE RECEIPTS AND EXPENDITURES on account of the Province of Ontario, for the year ending this day.

Respectfully submitted.

E. B. WOOD,

Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, 31st December, 1870.



CONTENTS.

		Pa	ge.	Fag	ge.
STATEMEN	T OF	Слян	1	Public Works and Buildings.—Continued,	
Do.	OF	Investments	2	Lock at Young's Point.	9
Do.	OF	Receipts	3	Lock between Balsam and Cameron Lakes Improvement of Navigation, Scugog River Cut between Lakes Joseph and Rosseau.	9 9
Do.	OF	Expenditure	4	Road between Washago and Gravenhurst Surveys and drainage of Swamp Lands	9
Civil Go	VERN	MENT:		our roys and drainage of Swamp Lands	J
		nent House	4	Miscellaneous :	
Lie	uten	ant-Governor's Office—Salaries.	4	Repairs—Brock's Monument	9
At	torne	y-General's Office "		ASYLUM MAINTENANCE	9
			4	D 35	
Sec	eretar	y and Registrar's Office "	5	REFORMATORY MAINTENANCE,	10
De	partn	nent of Agriculture and Public	5	AGRICULTURE AND ARTS.	10
Class	V ork	s—Salaries Lands Department—Salaries	5	AGRICULTURE AND ARTS	10
		Revenue:-	U	Immigration	10
		neous	12	Miscellaneous :	
2112	scena	деоио		Gratuities	5
CROWN L	ANDS	EXPENDITURE :		Inspector of Prisons	
Bos	ard of	f Surveyors	13	Provincial Auditor	
Sal	aries	, &c., of Agents	13	Inspector of Registry Offices	
		3		Queen's Printer	
Su	rveys		13	Official Gazette	6
		for Lands twice sold		Hospitals and Charities	10
		Roads		LITERARY AND SCIENTIFIC INSTITUTIONS	10
ARBITRA'	TION		13	Education.	10
LEGISLAT	ION :				
			6	Unforeseen and Unprovided	12
Ses	ssiona	al Messengers, Writers and Pages	7	M D	10
		s and Cost of House Post Office	7	MUNICIPALITIES FUND	12
		ery, including Printing Paper, &c. g, Binding, and Circulating the	7	STATIONERY ACCOUNT	13
		tes	7		10
		es of Elections	7	STATEMENT OF CONTINGENCIES :-	
		entary Library	7	Lieutenant-Governor's Office	
		, , , , , , , , , , , , , , , , , , ,		Executive Council Office	
		on of Justice :—	_	Attorney-General's Office	
Co	urt o	f Chancery—Salaries	7	Treasury Department	
ת	0. 0	f Qucen's Bench "	7 8	Secretary and Registrar's Office Department of Agriculture and Public	10
De	0.0	Clerks of the Crown and Pleas	8	Works	15
		I Justice, Criminal Prosecutions		Crown Lands Department	
04.		Oo. Administration of	8	Auditor's Office.	
	Ī	Do. Special Services	8	Queen's Printer	16
Mi	scella	aneous Justice	8	Legislation.	17
D	¥7 -			Normal and Model Schools	
		I unatio Asylum	8	Education	
		Lunatic Asylum Lunatic Asylum		Court of Queen's Bench.	
		d Dumb Institute		Court of Common Pleas	19
		sylum			
Go	vern	ment House	9	STATEMENT OF BALANCES OF APPROPRIATIONS	20
Re Co	urt I	atory, Penetanguishene Iouse and Gaol, Sault Ste. Marie	9	Comparative Statement of Expenditure	23



STATEMENTS

OF

RECEIPTS AND EXPENDITURES.

1870.



No. 1.

STATEMENT of Receipts and Expenditure of the Province of Ontario, for the year ending December 31st, 1870.

1870	Дв.	e cts.	1870	CR,	-8 -cts.
Jan. 1	Jan. 1 To balance on hand	131,954 09 2,495,820 27		By payments as per Statement No. 4	1,575,787 78
				" Do do Royal Canadian Bank" "Balance Bank of Montreal, current account	2,980 25
1		2,627,774 36			2,627,774 36

E. B. WOOD, $T_{Vensurer}$.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1870.

No. 2.

STATEMENT of Investments made during the year ending 31st December, 1870.

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 3.

STATEMENT of Receipts of the Province of Ontario for the year ending December 31st, 1870.

	\$ c	ts. \$ cts.	\$ cts
Dominion of Canada.			
On account of Subsidy and General Account Do Marriage Licenses to 30th June, 1870 Do Law Stamps and Fees	1,213,426 4 34,555 0 3,099 0	0	
Reformatory.		—	1,251,080 51
Reformatory Prison, Penetanguishene			1,786 40
Lunatic, and other Asylums.			
Provincial Lunatic Asylum, Toronto Lunatic Asylum, Malden. Do Orillia Do Rockwood Deaf and Dumb Institution, Belleville	$1,761 \ 4$ $85 \ 8$	0 3 5	
Education.		-	17,671 50
On account of Education			26,649 17
Municipal Loan Fund.			
On account of Consolidated Municipal Loan Fund			153,308 50
Investments.			200,000 00
Interest on account of Investments			144,303 55
Casual Revenue.			111,000 00
Fines, fees and forfeitures	3,893 8	7	
Provincial Lunatic Asylum -Sale of old iron, &c	. 2,121 2		
Tavern and other Licenses.			6,015 14
Tavern, Shop and Pawnbrokers' Licenses			60,652 26
Algoma Taxes.			
On account of patented lands in Algoma			2,547 56
Law Stamps.			
Law Stamps.			78,477 94
Ontario Gazette.			
On account of Official Gazette			14,766 69
Ontario Statutes.			
On account of Statutes			2,134 95
Territorial Revenuc.			
Special Funds—Clergy Lands	88,634 2 94,903 8 5,950 4	2	
Crown Lands Revenue	121,036 4		189,488 54
Woods and Forests	425,901 0	7	546,937 56
			2,495,820 27

E. B. WOOD, Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1870.

STATEMENT of the Expenditure made by the Provincial Treasurer, on account of the Province of Ontario, during the year ending 31st December, 1870.

0		and the second second	1000	
TO WHOM PAID.	SERVICE.	**************************************	cts.	s cts.
	GIVIL GOVERNMENT. GOVERNMENT HOUSE.			
	Expenditure for ten months ending 31st October.	2,498 47	66 F66 65	
	Salaries for ten months ending 31st October. Do two months ending 31st December.	1,000 00		
	Contingencies for ten months ending 31st October	1,200 00 236 01 129 80	5	
•	ATTORNEY-GENERAL'S OFFICE.		T-141/162 (1)	
	Salaries for ten months Do two months	5,125 00 1,025 00		-
	Confingencies for ten months. Do two months, as per statement No. 5	6,150 00 1,054 82 222 49	7 407 91	
	Executive Council Office.		10 174.1	
	Salaries for ten months. Do two months.	845 64 169 36		
	Contingencies for ten months	1,015 00 558 86 117 55	1 601 41	
	TREABURY DEPARTMENT.	G 645 76		
	Designies for ten months	0,0%0,0		=

	9,894 96			10.054.87				11,930 23			31 one 47		9 13% 93		2,481 67	86,708 29
1,417 67	8,063 43 1,578 27 253 26		7,323 12 1,461 03	8,784 15 1,039 93 230 79		8,303 98 1,661 02	9,965 00 1,803 71 661 52	12,430 23 500 00		25,262 39 5,010 93	30,273 32 4,427 84 1,591 31		1,756 92 378 31		316 67 2,165 00	
Do ivo months	Contingencies for ten months. Do two months, as per statementNo. 5.	Secretary's Department.	Salaries for ten months. Do two months.	Contingencies for ten months. Two months, as per statement No. 5	Public Works Department.	Salaries for ten months. Do two months	Contingencies for ten months syper statement No. 5 two months, as per statement No. 5	Less accountable warrant, charged in ten months' accounts	CROWN LANDS DEPARTMENT.	Salaries for ten months. Do two months.	Contingencies for ten months. Do two months, as per statement No. 5	East Wing, Parliament Buildings.	Milgellaneous Account—Carpenter work, tinsmithing, plumbing, &c., for ten months. Do for two months	Miscellaneous.	Christofies, ten months	Cat ried forward

Miscellancous-Continued.-Legislation.-Administration of Justice.

	s cts.											98,459 88
	& cts.	86,708 29				6 020 c	110000	9 063 18	00 000 6	269 42	4,345 85	=
	s cts.			1,666 66	2,000 00 363 46 372 93	2,736 39 279 75 51 00	1,666 64	2,000 00 28 50 37 68	1,500 00	200 00 56 31 13 11	3,399 20 946 65	7,961 67
Language and the second of the	SERVICE.	Brought forward	Miscellancous—Continued.	Salary, ten months Do two months	Travelling expenses, &c., ten months Do two months	Copying Clerk, ten months. Do two months	Provincial Auditor: Salary, ten months Do two months	Contingencies, ten months. Do two months, as per statement No. 5	Inspector of Registry Offices: Salary, ten months Do two months	Queen's Printer: Salary, ten months Contingencies, ten months. Do two months, Statement No. 5	Official Gazette, ten months Do two months	Legirlation. Saluries, ten months
	TO WHOM PAID.		,									

two months	1,388 33			
Contingencies, ten months	9,350 00 799 31 1,119 76	000		
Repairs to Buildings, ten months Do two months	3,801 94 507 17	11,269 07		
Sessional Writers, &c., ten months	70 00 890 05	4,309 11		
Postages, &c., ten months Do two months	1,405 07	60 006		
Stationery, including Printing Paper, Printing, and Binding, ten months	6,754 52 4,293 47	1,503 82		
Expenses of Elections, ten months Do two months	319.48	11,047 99		
Increase of Library, ten months Do two months	497 43	341 05		
Indemnity to Members, two months		1,107 21 5,480 32 1,469 25	in the second se	- 0.1
Administration of Justice,			31,481 81	
Sourt of Chameery: Salaries, ten months Do two months	10,678 67 2,456 33			
Contingencies, ten months Statement No. 5	13,135 00 972 54 413 34			
Court of Queen's Bench.: Salaries, ten months. Do two months.	5,216 64 1,043 36	14,520 88		
Contingencies, ten months	6,260 00 470 96 135 75		,	
Court of Common Pleas: Salaries, ten months Do two months	3,499 99 700 01	0,866 71		
Garried formand	4,200 00	21,387 59	135,947 75	

Administration of Justice-Concluded.-Public Works and Buildings.

ets.	135,947 75										179 163 60	00 0016311		
& cts.	21,387 59		4 263 66	3,000 00 F	1,000 00	1 609 69	2,026.02	00 000,51 07 681 81	110 99	00 000 01	1,000 00		F87 F87 C83	28,354 03
\$ cts.	4,200 00		160 09	3,690 20 3,398 86	86,953 38 16,361 71	1,293 95	9,075 00 2,975 00	12,451 80 2,700 90	105 72 13 50	7,500 00 2,500 00			133,343 53 24,218 10	24,016 25 4,337 78
SERVICE.	Brought forward	Administration of Justice—Continued.	Court of Common Pleas: Contingencies, ten months. Do two months, as per Statement No. 5	Crown Counsel Prosecutions, ten months bo	Criminal Justice, ten months Do two months	Special Services, ten months	Deputy Clerks of the Crown and Pleas, ten months Do do two months.	Administration of Instice in Algema, Nipissing, and other Services, ten months	Scals and other contingencies, ten months by two months	Sataries, Superior Court Judges, ten months two months	Repairs, Osygoute Hall Recorders—Gratuities	Public Works and Bulldings.	London Lanatic Asylum, ten months. Do two months.	Toronto Lumatic Asylum, ten months
TO WHOM PAID.														

	56,497 53	L0,555 94	51,507 29	(,500 US)	1,024 42	11,132.21	18,804 95	20 100 (0	12,040 01	6,734.50	64 605,11 07 175 Ab	981 10			(0,510 (7)	95,671 43
33,984 01 2,513 49	9.420 94 6,113 00	37,855 48 11 81	7,025 00 565 95	660 42 964 00	8,975 08 2,817 19	15,265 35 3.539 60	3,799 32	13,588 61 5,452 00	4,567 20 2,227 10	14,576 77 2,626 66	17,986 03 28,385 76	500 00 481 10		60,112 08 10,706 67	22,833 57 2,019 11	
Deaf and Drank Institute, ten months	Asylum for the Blind, ten months. Do	Government House, ten months	Reformatory, ten months.	Court House and Gaol, Sautt Ste. Marie, ten months	Rousseau Lock, Muskoku, ten months.	Young's Point Lock, ten months.	Lock, Balsam and Cameron Lakes, ten months	Narigation, Sengog River, ten months.	Cut, Lakes Joseph and Rousseau, ten months two months	Washayo and Gravenhurst Road, ten months	Surceys and Drainage of Swamp Lands, ten months	Miscellaneous: Brock's Monument, ten months	ASYLUM MAINTENANCE,	Provincial Lunatic Asplum, ten months. Uno Do two months.	Malden Lunatic Asylum, ten months	Carried forward

s.—Literary	s cts.	724,966 91			135,452 44		22,473 36	000 000	00,722 20	70 000	52,087 05	5	42,510 00 1,350 00		
nd Charitie	& cts,	95,671 43	2: 2: 2: 2: 3:	5 219 03	19,145 43.						0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				169,952 90
-Hospitals	% \$20		13,018 23 2,398 32	964 53 4,254 50		15,359 91 7,113 45		65,992 20 730 00		27,255 95 4,831 70		42,260 00 250 00			168,103 90 1,849 00
ylum Maintonance—Continued.—Reformatory.—Agriculture and Arts.—Immigration.—Hospitals and Charities.—Literary and Scientific Institutions.—Education.	SERVICE.	Brought formard	Orillia Landie Asylum, ten months	Deaf and Dumb Institute, ten months Do two months	London Lunatic Asylum	Ten months' expenditure. Two months' expenditure.	AGRICULTURE AND ARTS.	Ten months' expenditure	IMHGRATION.	Ten months' expenditure	Hospitals and Charites.	Ten months' expenditure. Two	LITERARY AND SCIENTIFIC INSTITUTIONS	EDUCATION.	Common and Separate Schools; ten months
ylum Maintonance—Continued.—Reform and Scientific Institutions.—Education	TO WHOM PAID,														

805 00 7 108 00	6,000 00 1,507 04	10,862 00 5,434 59 1,473 15	17,769 74 600 00 17 169 74	56,250 00 1,250 00 57 500 00	6,500 00	1,666 66 333 34 2,000 00		11,813 00 1,153 60 1,679 38	14,645 98 250 00 14,395 98	2,554 99 511 01	3,066 00 556 03 861 24 4 483 97	30,959 40 1,474 92	32,434 32 20 21 32,414 11	25 627 760 L
88	9,05	10,86 5,43 1,47	17,76	56,25 1,25		1,66	9,843 1,969	1,81 1,15 1,15 1,67	14,64	9. 50. 50.	3,06 555 86	30,95 1,47	32,43	
Poor Schools; ten months	Do two months Normal and Model Schools: Salaries, ten months. Do two months	Contingencies, ten months. Do two months, as per statement, No. 5.	Less amount of fuel account, charge a ble to "Education Office" and "Museum"	Grammar Schools: ten months. Do two months.	Superannuated Teachers	Grammar School Inspection: ten months	Education Office: Salaries, ten months. Do two months.	Contingencies, ten months	Less accountable warrant, charged in ten months accounts	Depository: Salaries, ten months. Do two months	Contingencies, ten months. Do two months, as per statement, No. 5	Libraries, Maps and Apparatus: ten months	Less refund	

Fund—Charges on	ets.	1,025,562 56			515,887 92	•	8,104 89	73,332 00	
i	ets.	310,416 00	60 123 %	1,800 00					4,627 81
Unprovided—Municipalities Stationery Account.	e£ cts.		2,757 21 914 71	1,623 33		15,991 22 121 67 122 00 128 80 13 88 10 08 21 62 26 65 26 65 250 00 250 00 815 00	17,448 89 9,341 00	73,105 80	4,542 40 86 41
of Education—Unforeseen and -Arbitration—Colonization Roads—	SERVICE.	Brought forward Education—Continued.	Museum, ten months	Journal of Education, ten months	UNFORFSEN AND UNPROYIDED.	Ten months. Salany as Clerk in Registrar-General's Office, two months Do in Auditor's Office Express charges re Birthis, Marriages and Deaths. Stove for Registrar-General's wauft. Postages—Registrar-General's vault. Printing Do Salany as Stipendiary Magistrate, Parry Sound, December Quarter. Law Stann Salan.	Less amount chargeable to London Lanatic Asylum maintenance	Municipalities Fund. Ten months' expenditure	Miscellancous, ten months
Education continued.—Museum—Journal Revenue—Crown Lands Expenditure—	TO WHOM PAID.					P. H. S. Crewe Walter R. Nursey H. S. Crewe J. R. Armstrong & Co. J. Lesslie Hunter, Rose & Co. John Notman J. W. & J. Taylor.			

em Lands Boypenditure.	Board of Surveyors 170 00 Lands twice sold 2,060 00 Salaries, &c., to Agents, ten months 4,738 44	Refunds, ten months. 29,255 89 Do two months. 10,046 81	ten months	Arbitration: 16,120 27	Oblonization Roads, ten months 50,000 00 50,000 00 50,000 00 50,000 00	ten nonths 2,719 68 two months 3,450 59	Loss charged to Departments. 1,686 56	Total Total
Voorn Lands Evpenditure	Board of Surveyors Lands twice sold Salaries, &c., to Agents, ten mouths two months.	Refunds, ten months	Surveys, ten months	ARBITRATION	OOLONIZATION ROADS, ten months	Stationery Account ten months. Les two months.	Less charged to Departments	Total

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO, TORONTO, December 31st, 1870.

No. 5.

STATEMENT showing the details of Contingencies referred to in the annexed Statement of the Expenditure of the Province of Ontario, for the two months ending 31st December, 1870.

ects.	120 80	117 55	222 49	
e cts.	6 6 6 6 9 6 9 6 9 6 9 9 9 9 9 9 9 9 9 9	5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	39 37 2 2 30 37 2 50 38 39 39 39 46 75 75 6 75 7	12 37
SERVICE.	Postages Postages Filing and Fiftings Sabsenjotion Do Stationery Executive Council Office.	Postages Water Supply Printing Office Rent Subscription Hardware Blacklead, &c. Fire Crate	Postages Water Supply Office Rent Hardware To pay for Book Case Brooms Law List Law List Whishs	Treasury Department.
TO WHOM PAID.	J. Lesslie J. Adams Ottawa Chizen. Hamilton Times	T. Lesslie Metropolitan Water Co. Hunter, Rose & Co. G. D. Boulton. Montreal Vitnes Rice Lewrs & Son Hiram Piper. Thomas Lalor	J. Lesslic Postages All Further Postages G. D. Boulton Office Rent P. Paterson & Son Hardware J. G. Scott To pay for John Boxall Brooms J. Rordans Law List C. Burns Ice Fulton, Michle & Co. Whisks John Notunan Stationery John Notunan Stationery	Hunter, Rose & Co

			· •/·		
253 26	62 083				953 89
6 38 40 00 1 00 1 15 00 1 2 20 1 32 1 32 1 00 1 10 00 1 26 2 4	43 25 40 70 113 50 6 38 50 126 46	124 x x x x x x x x x x x x x x x x x x x	 14 yro 4 yr ro 4 ro ro 18 0 8 8 9 8 8 8 8 8 8 8	2 48 38 38 39 40 40 40 40 40 40 40 40 40 40 40 40 40	414 50
Almanacs Almanacs Almanacs Almanacs Explenses to Ottawa Brushes Postage Stamps Express Charges Chockery Chockery Chockery Sharen Sharen Stationery Skorretary and Registrar's Department.	Postages Printing Office claims Almanacs Stationery Problic Works Department.	Postages Printing Subscription Subscription Subscription Subscription Express charges Freight Express attending Agricultural meetings in Brant, Norfolk and Haldimand do do do do St. Catherines and London Cab hire	Investigating cattle disease Mannancs. Towelling. Extra Clerk Subscription do do do do do	Dutly Journal Magazines Milbon press Expenses to London do Woudbridge Lee supply. Ingressing 4.	Carried forward
Merrick Brothers Ahmanacs J. D. Linton. Hon. E. B. Woodly Expenses to Ottawa William Brydon Postage Stamps. Jordan & Co. Grockery Princeton Review Subscription Hamilton Times John Notman Stationery	J. Lesslie	J. Lesslie Postages Hunter, Bose & Co. Printing —London Protolype Subscription Washing	A. Smith, V. S. Ahmanas. J. D. Linton Ahmanas. Merrick Brothers Forest Extra Clerk Charles Potter Sarometer Morrisburgh Courier Subscription Ottawa Free Press do London Advertiser. Horonto Telegraph do do do Montes & do do America & do do America & do do America & do do Montes & do do Montes & do do do Montes & do do Montes & do do Montes & do do Montes & do do do Montes & do do do Montes & do do do Montes & do do do Montes & do do do Montes & do do do do Montes & do do do do do do do do do do do do do		

Contingencies—Continued.

	\$ cts.	414 50 953 89	4 13 2 00 240 89 661 52	64.83 28.657 28.657 28.657 3.3.85 60	5 21 7 90
CONCOLUDING AND AND AND AND AND AND AND AND AND AND	SERVICE,	Brought forward Public Works-Continued.	Express charges Ten racks. Stationery Crown Lands Department.	70. Auditor's Office.	J. Lesslie Postages John Netman Stationery
CHARGE CHORNEL IN COMMENT OF THE PROPERTY OF T	то wном ратр.		J. Edwards Express John Norman Statione	Hunter, Rose & Co. R. Burroughes G. B. Cowper Water Co. Water Co. Paterson & Son Worter Co. Robert Bell Robert Be	J. Lesslie Postages. John Notnan Stationery

	1,119	1,473 15	5.850 42
2013 2013 2014 2014 2018 2018 2018 2018 2018 2018 2018 2018	248584778878978898 3485887888888888888888888888888888888888	29.00 10	
Hunter, Rose & Co. Binding Dougher Dougher Binding Grand Trunk Railway Co. Breight Kingston Whig Brantford Courier Toronto Telegraph do do do do do do do do do do do do do	Kingston News. do do Gown. Lown. & Gown. By Press charges C. Thompson. C. Thompson. By Adam Stevenson & Co. Classware E. Taylor E. Taylor C. Thermoneter, & C. C. Thermoneter, & C. C. Thermoneter, & C. C. Thermoneter, & C. C. Thermoneter, & C. C. Joseph & Co. Classware E. Taylor C. Joseph & Co. Classware E. Taylor C. Joseph & Co. Classware C. Thermoneter, & C. Classware C. Thermoneter, & C. C. Joseph & Co. C. Joseph	T. C. Chisholm J. R. Armstrong & Co. Goal hod George Harling P. Paterson P. Plumbing P. Paterson P. Paterson P. Paterson P. Paterson P. Son, Plumbing P. Paterson P. Paterson P. Son, Plumbing P. Paterson P. Son, Plumbing P. Paterson P. Son, Plumbing P. Paterson P. Son, Plumbing P. J. B. Shith P. J. B. Shith P. J. B. Shith P. J. Garwer P. J. Forsyth P. D. Garwer P. J.	\$ 7

Contingencies—Concluded.

& cts.	5,850 9	1,679 38	F6 198	
e cts.		350 100 100 100 100 100 100 100 100 100 1	196 46 9 00 85 78 600 00	87 75 35 86
SERVICE.	Brought forward. Edwartion Office.	George Chaffey & Brothers Water supply J. Lesslic J. Lesslic Brown Brothers Stationery Printing Postage stamps Brown Brothers Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Printing Postage stamps Postage s	Hunter, Rose & Co. Printing John Rogers Lamber H. M Wilkinson Stationery John Notman Stationery (Your or ('Hanceny).	Hunter, Rose & Co
TO WHOM PAID.		George Chaffey & Brothers Water Co. Jussific Brown Brothers Endinery Hunter, Rose & Co. Brown Brothers Brown Brothers Adam Miller Law Reports, Rone Brothers Co. H. M. Wilkinson Leader Rosecute Rosecute Rosecute Rosecute Rosecute Do Toronto Telegraph. Do John Notman Stationery	Hunter, Rose & Co. John Rogers H. M. Wilkinson John Nodman.	Hunter, Rose & CoPrinting

J. T. Rolph. John Notman	J. T. Rolph	9 00 280 73	25 21
	COURT OF QUEEN'S BENCH.		17.1
Hunter, Rose & Co John Notman	Hunter, Rose & Co	29 83 105 92	185 757 757
	Court of Comon Pleas.		
Hunter, Rose & Co	Printing		35 75
			8,943 70

E. B. WOOD,
Treasurer.

TREASURY DEPARTMENT, ONTARIO,
TORONTO, December 31st, 1870.

No. 5.

Statement showing the Estimates, the amount expended by the Government of Ontario, and the amounts unexpended and over-expended, for the year ending 31st December, 1870.

Overexpended.	8 cts. 819 33 65 81	36 39	ή,
Unexpended.	\$ cbs. 1,200 00 1,200 00 1,200 00 1,37 69 1,37 69 1,37 69 1,37 69 1,38 02 2,98 02 2,91 68	3,660 85 4,518 33 66 25 690 00 5 58	1,475 00 1,039 95 1,039 95 1,390 75 638 95 33,419 68
Expenditure.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6.019 6.	9,380 00 9,380 00 11,017 99 1,469 85 1,469 85 1,107 11 95 1,107 11
Appropriation. Expenditure. Unexpended. Overexpended	# 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
SUB-HEAD OF SERVICE.	Government House Gorder, salaries Lieutomant-Governor's office, salaries Executive Council Office, salaries Executive Council Office, salaries On do contingencies Treasury Department, salaries Secretary's Department, salaries Public Works Department, salaries Public Works Department, salaries contingencies, &c. Public Works Department, salaries contingencies, &c. Contingencies, &c. Contingencies, &c. Contingencies, &c. Contingencies, &c. Contingencies, &c.	Cratuities, public officers Cratuities, public officers Unspector of Prisons, salary Do Clerk Auditor, salary Do contingencies Threetor of Registry Offices Queen's Printer, salary Contingencies	Salaries Sessional writers, &c. Sessional writers, &c. Sessional writers, &c. Stationery Printing, &c., Statutes Dripense of Breedings Increase of Blocky Increase of Blocky Increase of Members Confingencies and repairs
SERVICE.	Civil Government	Miscellaneous	Jestalation

•	2,221 0.9 4,865 46	219 03 19,145 48	7,387 65	20 00 457 74 508 27
1,238 12 83 29 83 29 286 34 10,003 23 3,284 42	32,644 29 4,222 45 59,466 06 10,533 87 16,253 87 15,833 13 4,860 1,553 89 3,265 70 7,779 89 3,265 70 1,553 89 4,000 00 1,83 13 4,000 00 1,83 13 1,83 1	12,858 25 4,642 32 1,699 45 28,660 00	2,727 80	85 89 24 00 24 00 418,883 66
14,520 88 6.866 71 4,363 66 111,996 77 41,415 58	157,581 63 28,384 63 15,584 75 11,080 95 11,080 94 12 11,080 94 12 11,080 94 12 11,080 94 12 11,080 94 12 11,080 94 13 11,080 94 13 11,080 95 13 11,	70,818 75 24,852 68 15,416 55 5,219 03 19,145 43	(6,722.20 32,087.65 42,510.00 1,350.00	163,952 90 6,000 00 16,807 2 00 6,307 2 00 32,44 0 1,417 27 6,300 00
15,759 00 6,950 00 4,650 00 122,000 00 44,700 00	190,205 92 26,132 94 40,719 98 75,000 00 33,001 83 8,000 00 2,500 00 21,000 00 10,000 00 4,000 00 4,000 00 1,000 00 1,000 00	83,177 00 29,495 00 17,026 00 25,600 00 5,000 00	69,450 00 24,700 00 42,510 00 1,350 00	176,000 00 6,000 00 15,822 00 15,830 00 17,500 00 3,000 00 6,500 00 6,500 00 1,000 00 1,000 00 1,000 00
Court of Chancery. Court of Queen's Bench. Court of Common Pleas. Criminal Justice Miscellancous Justice	London launatic Asylum Proport Launatic Asylum Dest and Dumb Institute Saylum for the Blind Government House Reformatory Court House and Caoi, Sault Ste. Marie Lock, Rosseau Blyer Lock, Rosseau Blyer Lock, Anng's Point Avrigation Scugor Blyer Cut, Lakio Joseph Washago and Gravenhurst Road Shrveys and Dramage Other Surveys Repairs, Brock's Monunent.	Provincial Lanatic Asylum Malden do Orillia Roskwood Beaf and Dumb Asylum London Familie Asylum		Common and Schools Poor Schools Normal Schools Normal Schools Of Grammar Schools Libraries, Maps and Apparatus Dio Contingencies Superannuated Teachers. Corried forward
Administration of Justice	Public Works and Buildings	Asylum Maintenance	Agriculture and Arts	Education

Statement, etc.—Continued.

SERVICE.	SUB-HEAD OF SERVICE.	Appropriation.	Expended.	Unexpended,	Unexpended, Overexpended.
		cts.	Se Cts.	-	
	Brought forward	1,701,052 81	1,319,582 58	418,	37,413 43
	Museum Advand of Education. Grammar School Inspection Education Office, Salaries Do	3,778 43 1,800 00 2,000 00 11,813 00 1,983 00	3,671 92 1,800 00 2,000 00 11,813 00 2,582 98	106 51	509 98
Unforeseen and Unprovided		00 000,02	8,104 89	11,895 11	
Municipalities Fund		78,972 84	73,33~ 00	5,640 84	
Charges on Revenue	Miscellaneons Arbitration	8,750 00	4,627 81	4,122 19	6 190 97
	Board of Surveyors Salaries, &c., of Agents	35,000 00	170 00 170 00 25,933 07	00 000 00 000 00 000 00 000	
	Refmuds Surveys Claims, Lands twice sold.	15,000 00 50,000 00 5,000 00	12,302 70 40,060 00 2,060 00	2,697 30 10,600 00 2,940 00	
following to December		4,000 00		4,000 00	
COLUMNICATION DORGES		00 000,00	00,000,000		
Stationery Account	Stationery Account.		1,686 56		
	Total	1,999,550 68	1,575,787 78	469,582,54	44,133 68

22

No. 6.

COMPARATIVE STATEMENT, shewing the amounts Expended by the Government of Ontario during the three years ending 31st December, 1870.

	ture, Expenditure, 1870.	6 cts. 8 cts. 8 cts. 9	g 34 15,541 39	2,530 85 3,070 14 3,136 42 4,345 85 4,000 00 2,481 67 13,180 00 2,481 67	2,600 60 2,000 18 2,600 00 2,00 42 375 00 16,120 27	9,350,00 9,350,00 9,350,00 9,350,00 9,350,00 1,503,82 1,503,82 1,503,82 1,604,90 1,104,107 1,107,21 1,107,21	5 00 13,135 00 13 33 6,260 00	5 10 171 463 09
A. T. S. S. S. S. S. S. S. S. S. S. S. S. S.	ure, Expenditure, 1869.	cts. 39 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2	34 21,885			01 11,010 05 3,279 00 44,3279 25 1,586 55 1,587 31 15,248 39 1,649 601 989 601	46 14,755 92 6,493	01 2F0 816 06
ACCOUNT AND VALUE AND VALU	Expenditure, 1868.	% 1,100 1,110 1,10 1,	23,778	7,600 00 1,180 62 1,435 43 11,000 00	200 00	9,906 3,265 61,800 4,451 3,881 9,843 1,513 4,99	14,441 6,905	097 041 90
	SUB-HEAD OF SERVICE.	Lieutenaut-Governor's Office, Salaries Government House, Maintenance Government House, Maintenance Lixecutive Council Office, Salaries Attorney-General's Office, do Secretary-Registrar's Office, do Secretary-Registrar's Office, do Department of Agriculture and Public Works, Salaries Crown Lands Department, Salaries	Departmental	Distressed Fishermen, Nova Scotia. Inspector of Asylums and Prisons, Salary and Contingencies. Official Gazette. Towards facilitating Transport on Lake Superior Loan to Toronto General Hospital Grathities	Provincial Auditor, Salary and Contingencies Inspector of Registry Offices, Salary Queen's Printer, Salary Arbitration	Salaries Contingencies Contingencies Indemnity to Members Ressional Writers, Messengers, and Pages Postages, &c. Stationery, Printing, and Binding Printing and Binding Statutes Expenses of Elections Library	Court of Chancery, Salaries	
Sign Ecompor, 1010:	SERVICE.	Civil Government	Contingencies	&Miscellaneous		Legislation	Administration of Justice	

Statement, &c.—Continued.

		Printed to a color to the color of the color	CONTRACTOR OF STREET,	TO CHARLES SHOW SECTION SECTIO
SERVICE.	SUB-HEAD OF SERVICE.	Expenditure, 1868-	Expenditure, 1869.	Expenditure, 1870.
	Brought forward	\$ cts.	\$ cts.	\$ cts. 171,463 02
	Court of Common Pleas, Salaries. Contingencies. Criminal Justice Miscellangous Justice	4,240 25 1,200 81 118,104 61 27,102 76	4,200 00 1,303 50 108,223 43 37,471 29	4,200 00 2,156 25 111,996 77 41,415 58
Public Works and Buildings		123,010 29	257,593 43	409,855 56
Immigration			17,595 00	32,087 65
Agriculture and Arts		66,034 00	67,551 41	66,722 20
Hospitals and Charities		39,000 00	· -40,000 00	42,510 00
Literary & Scientific Institutions.		3,600 00	3,600 00	1,350 00
Education		327,487 51	206,373 53	315,887 92
Asylun Maintenance	Toronto Lunatic Asylum Malden do Crillia do London do Belleville Deaf and Dumb Institute	76,543 96 35,313 12 17,336 87	73,813 86 32,450 98 16,880 62	70,818 75 24,852 68 15,416 55 19,145 43 5,219 03
Reformatory		22,992 24	23,557 50	22,473 36
Charges on Revenue	Crown Lands Expenditure Miscellaneous.	40,653 49	61,085 97	80,465 77 4,627 81
Colonization Roads		31,959 42	35,589 94	50,000 00
Municipalities Fund			168,596 73	73,332 00
Stationery Office			3,735 03	1,686 56
Unforseen and Unprovided		12,229 15	6,039 51	8,104 89
	Total	1,183,852 77	1,444,608 83	1,575,787 78

EXPENDITURE on account of Vote of Credit, 1871.

	\$ cts.	890 33	20,619 53	13,636 09	44,931 32
					44
	\$ cts. 85 16 85 16 512 50 597 89 791 89 830 99 2,457 82 4,509 52	210 16 228 66 451 40	496 67 122 86 20,000 00	612 48 521 64 349 99 345 00 186 67 11,620 31	
SERVICE.	Executive Council Office. Executive Council Office. Attorney General's do Treasury Department Secretary and Registrar's Office Public Works Department Crown Lands do	MISCELLANBOUS. Inspector of Prisons Audit Office. (Queen's Printer LEGISLATION.	Salaries Socional Writers, &c. Postages Indemnity to Members Administration of Justice.	Court of Chancery Court of Queen's Bench Court of Queen's Bench Court of Common Pleas Master's Office Accountant. Criminal Justice	Carried forward
	Salaries Do Do Do Do Do Do Comtingencies	Salary, &c. Inspector of Prisons	,	Salaries Do Do Do Do	

EXPENDITURE on account of Vote of Credit, 1871-Continued.

	\$ cts.		21,651 74		13,463 20		400 00		1,000 25		81,446 51
	& 0	183 75 5,886 62 2,645 03 2,700 00	651 00 81 00 1,547 84 7,956 50		8,759 83 2,538 54 2,164 83		400 00	900	1,000 20	23,080 00	27,310 00
SERVICE.	Brought forward	London Lunatic Asylum Provincial Lunatic Asylum Provincial Lunatic Asylum, Toronto Deff and Dunib Institute Asylum for the Blind	Rossean Lock Balsan Lock Washago and Gravenhurst Road Drainage	ASYLUM MAINTENANCE.	Provincial Lynatic Asylum, Toronto London Lynatic Asylum Deaf and Dumb Institute	Reformatory.	Maintenance	IMMIGRATION.		Grammar Schools	Separate Schools

EXPENDITURE on account of Vote of Credit, 1871-Continued.

	SERVICE.		
	Brought forward	\$ cts. 27,310 00	\$ cts. 81,446 51
	Education—Continued. Superannuated Teachers Normal Schools Depository Journal of Education Salaries Contingencies	275 36 4,962 10 260 00 300 70 2,345 90 509 29	
	CHARGES ON REVENUE. License and Stamp Office	100 00	36,727 15
	Salaries, &c., to Agents Refinds Surveys	842 34 112 13 2,000 00	3,054 47
	Colonization Roads.	2,000 00	2,000 00
	Total.		123,228 13
TREASURY DEPARTMENT,		E. B. WOOD.	D.



ANNUAL REPORT

OF THE

Commissioner of Agriculture and Public Works

FOR THE PROVINCE OF ONTARIO,

ON

AGRICULTURE AND ARTS,

FOR THE YEAR 1870.

Printed by Order of the Legislative Assembly.



Coronto:

PRINTED BY HUNTER, ROSE & CO., 86 & 88 KING STREET WEST. 1871.

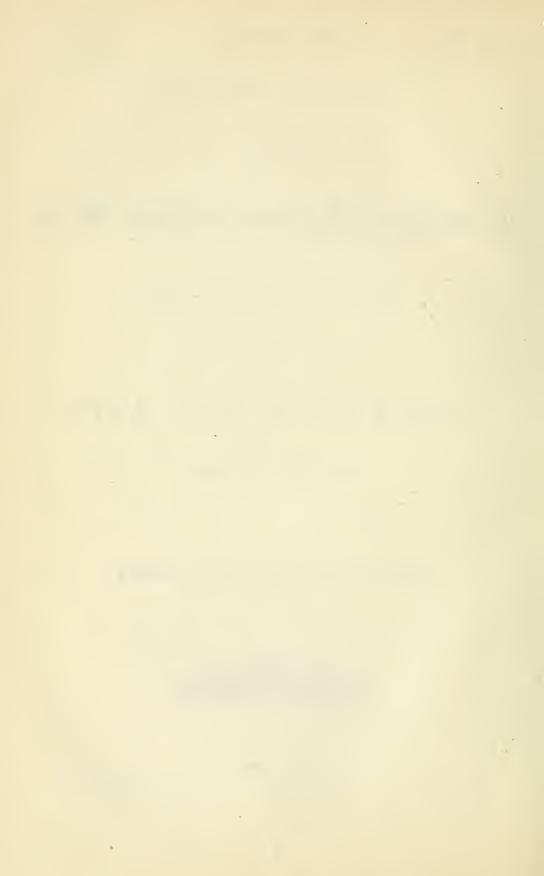


TABLE OF CONTENTS.

COMMISSIONER'S REPORT.	
The state of the s	AGE.
Agricultural Societies	vi
Mechanics' Institutes	vii
Fruit Growers' Association.	viii
Agricultural and Arts Association	ix
Agricultural Education.	X
Asylum and Reformatory Farms.	xii
School of Practical Science.	xii
Cattle Disease	xiii
Dairy Products	xi₹
Cultivation, as influenced by Drainage and the character of the seasons	XV
Conclusion	xvi

APPENDICES.	
APPENDIX A.—Analysis of Reports of Agricultural and Horticultural Societies for 1869* 1	2-205
Report of Council of Agriculture and Arts Association for 1869	207
APPENDIX B.—Report of Association of Mechanics' Institutes for 1870	214
Analysis of Reports of Mechanics' Institutes (alphabetically arranged)	222
Analysis of Reports of Mechanics Institutes (alphabetically all anged)	454
APPENDIX C.—Report of Fruit Growers' Association for 1870—Annual Meeting	234
President's Address	288
Autumn Meeting, 1869	245
Circular to Members	252
Winter Meeting, 1870	255
Summer Meeting, 1870	261
Extracts from letters on Fruit Culture	26 š
Autumn Meeting, 1870	270
Reports on Fruits, 1870	274
Report on Plum Curculio, by W. Saunders	279
Prize Essay on the Raspberry, Strawberry, &c. by W. Saunders	285
First Annual Report on Noxious Insects—Introduction	296
Insects affecting the Apple, by Rev. C. J. S. Bethune	298
Insects injurious to the Grape, by W. Saunders	324
Insects affecting the Plum, by E. B. Reed	348
Prizes for 1871	358

^{*} Electoral Division Societies are arranged Alphabetically and printed in Capitals, with their respective Township and Horticultural Societies, printed in italics.

Appendix D.—Correspondence between the Commissioner and the Council of Agricultural and Arts Association	
APPENDIX E.—Report of Rev. W. F. Clarke on Agricultural Education	365
Appendix F.—Reports of Andrew Smith, V.S., on Diseases affecting Cattle	378
Appendix G.—Analysis of Crop returns for 1870	380
Appendix H.—Amounts expended for the encouragement of Agriculture and Arts in 1870	

ANNUAL REPORT

OF THE

Commissioner of Agriculture and Public Morks

FOR THE PROVINCE OF ONTARIO,

ON

AGRICULTURE AND ARTS,

FOR THE YEAR 1870.

To His Excellency the Honourable William Pearce Howland, C.B., Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honor to lay before Your Excellency, as required by Statute, a condensed statement of the proceedings of my Department, and of the state of the different societies connected therewith, since the last Session of the Legislature.

It affords me sincere pleasure in being able to congratulate Your Excellency on the general prosperity of the Province of Ontario, and of the Dominion, of which it constitutes an important integral part. Perhaps in no period of our history have the agriculture, manufactures, and commerce of this Province been in so healthy and progressive a condition as they are at present, when works of great magnitude are undertaken, and the various industries of life prosecuted with an ardour and sound judgment, which cannot ultimately fail, if perseveringly followed, to elevate this country to a high rank for the enjoyment of great material, social, and intellectual advantages. Nor is this prosperity confined to particular localities, but the whole country, from the oldest settlements to the remotest stations in the backwoods, more or less participates in the blessings of progress. Real estate is everywhere rising in value, the building trade is unprecedentedly active, and population is rapidly increasing; all unmistakably indicating advancement of a sound and healthy character.

Whilst gratefully recognising this pleasing fact, it must be admitted that the past

season has not been one of abundance and prosperity to every portion of the country. It has, in its character and results, been a very singular and checkered one, even as regards only our own Province. The excessive heat and drought that prevailed in certain sections of the east, and the unusually heavy rainfall that occurred in some districts of the west, materially abridged the incomes of many farmers, while the unprecedented and destructive fires which happened in the Ottawa region, have been attended by a painful amount of suffering to a large number of honest and industrious people. Notwithstanding such local disasters, however, our industrial and financial condition must be regarded, on the whole, as sound and satisfactory; and there never has been a period in our colonial history, when capital and industry had so wide and profitable a field for legitimate and successful operations.

AGRICULTURAL SOCIETIES.

I have much satisfaction in stating that the numerous societies in connection with the Bureau of Agriculture, appear to be, on the whole, in a progressively improving condition, though, in too many instances, the advancement is slow. There yet remains too much ground for the complaint which I made in my last Report; that comparatively little really useful and generally interesting information, fitted for publication, is given in their annual returns. In the subsequent analysis (Appendix A) which has been made of the reports for 1869, sent to my department, everything has been inserted possessing the least general interest, many of the reports consisting of nothing but the figures required by statute as a mere financial statement. I have again called the attention of the officers of societies, for the current year, to this serious desideratum, and hope to be supplied with more original and useful information in their reports for the future.

It is satisfactory to note that in several of the Reports, particularly of Township Societies, favorable mention is made of two or more Societies uniting, for holding an annual Exhibition; and there is ground for believing that the importance of uniting for such a purpose, which the law leaves optional, is being gradually recognized. I have always been favorable to the allowing of the members of Societies to decide matters of local interest for themselves, as they ought to be the best judges of what they require; but I am convinced that the holding of so many small exhibitions is a serious drawback to agricultural progress, and it is much to be desired that the good sense of the people will, by degrees, correct this evil. The Union Shows that have been held at Toronto, Ottawa, Hamilton, London, and other places, have unmistakably illustrated the truth of the maxim, that "union is strength;" and the show held in the latter city last September, whether the quantity or quality of its material, or the number of visitors, be regarded, was of a most interesting and encouraging character, reflecting great credit on the intelligence and public spirit of the farmers, mechanics, horticulturists, and others, engaged in prosecuting the leading industries of the West. It has been said that such exhibitions have a tendency to injure our great Provincial Show, and some have even intimated that in one instance, at least, such intention was meditated. I am confident that such statements are wholly groundless, and believe that good District Shows of a comprehensive character, liberally supported and numerously attended, will help rather than injure the Provincial one, by supplying it with more material of a superior quality.

It should be borne in mind, that however desirable and valuable a competitive exhibition unquestionably is, when conducted on a sufficiently extensive scale, it is a feature which is not absolutely essential to the beneficial working of an Agricultural Society, much less to its existence. From the Reports of several Township Societies, it will be seen that their exhibitions are sometimes suspended for two, three, or even more years, and their whole strength is devoted to the improvement of stock and the procuring of seed grain, objects of paramount importance. In the North Brant Report, I notice with pleasure, a reference to the exertions of Mr. Charles Arnold, of Paris, in hybridizing different kinds of wheat, and trust that his experiments will ultimately prove successful. There is much need of greater efforts being made in testing and introducing new kinds of seeds, as many of the Reports speak of the old kinds as becoming more and more deteriorated.

It cannot be too strongly impressed on the members of Agricultural Societies that there remains in these organizations a latent power of good, which an age of inquiry and progress cannot fail to develop. Hitherto the holding of an annual show, and a meeting, as required by Statute, for passing the accounts and for the election of officers, have comprised the whole proceedings of most of these bodies. How natural and easy-in townships, at least—for the members of Agricultural Societies, which generally comprise a good sprinkling of leading mechanics and merchants, to hold several meetings during the winter months for the discussion of subjects relating to the theory and practice of agriculture, horticulture, and the mechanic arts connected therewith. In this way the results of experience might be compared, mental power awakened and devoted to the most useful objects, invaluable habits of observation and induction fostered and carefully directed, and our young men incited to feel a rational and patriotic interest in the promotion of a pursuit the most important to every civilized community, and demanding for its successful prosecution a range of information and an exercise of the mental faculties of no ordinary character. It is gratifying to learn from a few of the Reports that meetings of this character have been inaugurated, and that the results generally are satisfactory; examples which, it is much to be desired, will be speedily and extensively followed. The bringing of farmers, mechanics, and others, more frequently together for purposes of mutual instruction and encouragement, cannot fail to promote a kindly, social spirit, and the advancement of their respective avocations.

MECHANICS' INSTITUTES.

It will be seen from Appendix B that a number of these Institutes in various parts of the country have availed themselves of the provisions of the Statute, in obtaining a portion of the Legislative Grant for conducting evening classes and procuring works of a useful character for their libraries. The latter appears to have been generally attended to, and the value of a judicious selection of standard books easy of reference, in our towns and villages, can hardly be overrated. It is to be regretted, however, that in so many of these institutions, class instruction in such subjects as are necessary to be understood by artisans of all classes has not, as yet, been introduced; and even where it has, the results in several instances have not been encouraging. In others, class instruction has been successfully and even extensively carried out, and a large amount of valuable and much needed

information imparted to the artisan classes. A larger participation in the Legislative Grant for this important object would, it is believed, meet with a commensurate response. If, in the wisdom of the Legislature, means should be provided for the efficient teaching of science in its practical applications to the various industries of life, the encouragement of class instruction in Mechanics' Institutes would assume a yet more serious form, constituting a means for supplying, in great measure, a scientific school with pupils.

FRUIT GROWERS' ASSOCIATION.

The report of this Society for the year just terminated, will be found in Appendix C. It affords satisfactory evidence of the increasing usefulness of the Association, showing the wisdom of the Legislature in granting it public aid, as provided in the Agricultural and Arts Statute. It has already been, I believe, the means of giving a fresh impulse to the important and interesting pursuit of fruit culture, in Ontario, and its influence for good has not, there is reason to believe, been wholly confined to our own Province. New, and in some instances extensive, orchards are springing up in various directions, comprising the better kinds of fruit, adapted to our soils, climate and markets; a result attributable in no small degree to the exertions of this Society in the diffusion of sound, practical knowledge on the subject of raising fruits specially adapted to the requirements of the country. The extension of grape culture in the open air has been really marvellous during the past few years, and from the diffusion of sound, special information on this subject, this delicious fruit is now being brought, in suitable seasons, to a degree of perfection in parts of the country formerly regarded as wholly unsuitable to its cultivation. Indeed in several parts of the peninsular of this Province, so extensively and successfully has the culture of the vine been carried on, that wine of a good quality is already being made on a scale to give this branch of industry an increasing degree of public importance. Strawberries and other small fruits are now raised in the vicinity of our towns and larger villages, almost equal to meet the vastly increased demand, relieving us in great measure from the necessity of importation, and affording the great body of our people a liberal supply of what may be truly designated wholesome necessaries and luxuries, the produce of our own soil.

The essays, contained in the report, on the more common insects injurious to fruit, from the pens of three of the most distinguished members of the Entomological Society of Canada, cannot fail to be read with much interest and profit by all who possess an orchard or a garden, however small. Insect depredations, on both fruits and grains, have unfortunately of late years been much increased in number and intensified in effects. Millions of dollars are sometimes lost in a single year from this cause, the proper understanding of which, with the means of preventing or modifying such losses, can only be acquired by the study of the natural history of these pests. Our farmers and gardeners have certainly some hope for the future, while we have residing among us, men disposed and qualified to investigate and grapple with these destructive agencies by an earnest study of the science of Entomology, accompanied by a habit of careful personal observation specially adapted to our local wants. Although Entomology is, as it were, but a science of yesterday in Canada, I am told that one, at least, of the three contributors of essays in this report, is already frequently quoted as an authority by men most distinguished

in the science in the United States. It becomes, therefore, a matter of no small public importance that men who are practically acquainted with our soil and climate and prevalent modes of cultivation, and are both able and willing to investigate these intricate subjects with an aim to a practical application, should receive from public sources such encouragement as the value of their labors justifies. I trust, therefore, that both the Agricultural and Arts and the Fruit Growers' Associations will continue, in the interest of the public, to encourage and foster investigations of this important character, and publish the results in a form that can be understood and practically applied by the people.

AGRICULTURAL AND ARTS ASSOCIATION.

I am informed that the Council has determined on the publication of another volume of its transactions, a work that has long been wanted, and which will do for agriculture and the mechanic arts, what the Fruit Growers' Association, by its annual reports, has been doing for the valuable department of fruit culture. There can be no doubt that such a representative body as the Council of our Agricultural and Arts Association can, and is expected to do more than to take charge of an annual exhibition, comprising, as it does, the leading men in their several departments of industry, from all sections of the Province, who must have the opportunity of collecting much valuable and practical information relating to agriculture, manufactures and arts generally, such as would make a highly interesting and instructive annual volume.

It is satisfactory to know that the Provincial Exhibition, held at Toronto, in October last, was quite as successful as any of its numerous predecessors. Considering the unfavourable weather previous to and at the commencement of the show, the display of live stock, implements and machines, agricultural, horticultural, and dairy products, manufactures, and works of art, was wonderfully good, demonstrating, if any such additional proof were wanting, the great and increasing interest felt by the public in this most useful and popular institution. From a very insignificant beginning, a quarter of a century ago, after surmounting what appeared to be insuperable difficulties during the earliest period of its career, the Provincial Exhibition has, by steady and healthful growth, attained to a position which is certainly not surpassed by any similar organization, either in the old world or the new; and this consideration is the more important, inasmuch as this annual display of the results of our various industries, may justly be regarded as an unerring index of the progress and actual condition of the country. In fact, to such a magnitude has this annual gathering now attained, that more time is imperatively required in all the departments, except, perhaps, live stock, to allow the public an opportunity of maturer and closer inspection, and thus more fully to avail themselves of the great educational advantages afforded by these Exhibitions.

I cannot dismiss this part of the subject, however, without briefly referring to a matter of a less pleasing and satisfactory character. Soon after the Council was elected under the provisions of the new Agricultural Statute, and when the treasury, from unfortunate circumstances, was completely depleted, I suggested a method by which a considerable annual saving might be effected and the management improved. I regret that my proposal was not accepted, and especially that its object and spirit were misunderstood. It was stated that I was desirous of controlling the Council by gov-

ernmental influence; a notion which I repudiate, not only on my own behalf, but also on behalf of the Administration. It was only under a pressing sense of public duty of a very painful character, that I felt myself called upon to cause an official investigation to be made into the accounts of the previous Board, and from the same motive, I volunteered to suggest what I still believe would be a benefit to the Association. I thought then, as I do now, that an annual saving of several hundred dollars might be made, while increasing at the same time both public convenience and the efficient working of the Institution, and that the sum thus saved, added to the prize list, or expended in encouraging experiments in agriculture, by the testing of new varieties of seeds, manures, &c., or in procuring original essays and reports, would make the Association still more useful and popular. The correspondence in relation to it is given in Appendix D.

AGRICULTURAL EDUCATION.

In my last Report to your Excellency, I expressed a conviction that something furher was needed to develop more fully the great agricultural interests of this Province, by a wider extension of the means of education, in all such subjects as have an immediate bearing on agriculture and the cognate arts. Much as has undoubtedly been accomplished already by Agricultural Societies of different grades, all more or less aided by Legislative grants, it must be acknowledged that comparatively little has yet been done towards imparting to the youth of our rural districts, systematic instruction in the theory and practice of a pursuit which constitutes the foundation of our material wealth and progress.

I am happy to inform your Excellency that measures are now being taken to supply this pressing need. A new Educational Bill is now before Parliament, one of the most important features of which is the provision for giving a systematic course of instruction on science, in its relations to agriculture, to the pupils in training for teachers in the Provincial Normal School. In this way, the object which I proposed, will, in a short time, and at comparatively little expense, be largely served, by facilitating the introduction of instruction in the principles of agriculture, both as a science and as an art, in the common schools of the country.

It gives me no small satisfaction, and a degree of confidence that I could not otherwise have felt, that our venerable and most efficient Chief Superintendent of Education cordially supports my views, and I cannot doubt that in the carrying out of so important and beneficent a measure, he will regard it as among the most valuable that have characterised his long and able administration. I must not omit to note that Dr. Ryerson has recently given a substantial proof of the deep interest which he takes in this matter, by having put himself to the trouble of preparing and publishing a very suitable introductory work on agriculture, specially adapted to such Canadian youths as are already engaged in, or intended for farming pursuits.

In addition to the introduction of Agriculture as a subject of study in our Normal School, and through the teachers therein trained, ultimately into the Common Schools, something further seems needed to meet fully the demands of the age, and the special wants of the Province. We have a large number of intelligent youths growing up amongst us destined for agricultural pursuits, to many of whom an extensive and systematic course of instruction in the science of farming, in connection with daily prac-

tice on a sufficiently extended scale, would prove an inestimable boon; such a scheme, if judiciously and zealously carried out, would, there can be no doubt, greatly augment the resources of the country.

With a view to ascertain what has already been done for a higher Agricultural education in some of the States of the American Union, I appointed the Rev. W. F. Clarke, Editor of the Ontario Furmer, well known and appreciated as an able agricultural writer, to visit the Agricultural Department at Washington, and a few of the Agricultural Colleges, and to collect such practical information as would aid us in commencing something of an analogous character in this Province. Mr. Clarke's report (Appendix E), will well repay a careful perusal, abounding, as it does, in facts and reasonings of great practical value in relation to this very important subject.

Looking at the situation and wants of the Province at large, it might appear more expedient to commence this great work on a humble scale in two or three widely separated sections, than to confine it to one locality. The soils and climate of the Province vary considerably, and experiments conducted on an extensive scale so as to meet fully these different conditions would, it might be urged, more likely be attended by beneficial and satisfactory results. The establishment of one institution as a commencement would, in a few years, afford sufficient data for determining whether it would be expedient or not to increase the number.

At the outset I would propose, in connection with the working of an extensive farm according to the laws of good husbandry, adapted to the special wants and condition of the country, sound elementary teaching in Chemistry, Natural Philosophy, Natural History, and Farm Architecture and Engineering; also such branches of an ordinary English education as would be necessary for the special benefit of those pupils whose early mental training might have been neglected.

In order that the pupils might become thoroughly conversant with the various details and the routine of farm operations they should be required, without exception, to work with their own hands on the farm, or in the workshops, a certain number of hours daily; thus acquiring at the outset what is of vital importance, an aptitude and respect for manual labor. Portions of the farm should be devoted to purely experimental purposes, such as the testing of implements, seeds, manures, and different systems of cultivation; proper care being used for obtaining reliable results. This, it is well known, is a very difficult, and in a young country, almost impracticable thing for private individuals to perform satisfactorily; but on an illustrative farm, under the management of competent scientific and practical teachers, it is confidently believed that results of great practical value would be obtained.

The breeding and management of live stock should form a prominent feature of such an institution, not with a view to coming into a competition, injurious to private breeders, to whom the country already owes so much, but rather to illustrate fully and practically what may be termed the great scientific principles involved in the breeding and feeding of animals, and to introduce and test such new varieties as are not likely to be procured and experimented with in the ordinary way of business, so as to ascertain their suitability to the pastures, climate and markets of this country.

ASYLUM AND REFORMATORY FARMS.

Believing that the farms attached to our Asylums and Prisons, some of which are already of considerable extent, might be made to subserve the interests of agricultural improvement, I have consulted Mr. Langmuir, the Provincial Inspector of these institutions, and I am glad to find that that able officer, and also the Medical Superintendents, are favorable to the idea, and are perfectly willing to co-operate in carrying it into practice. The institutions at Toronto, London and Penetanguishene, already possess sufficient land for carrying out the object, and there would be but little difficulty, I presume, in procuring the same for Kingston. In this way new varieties of grains, roots, &c., might be effectually tested at these different points, embracing as they do the principal variations in the soil and climate of the whole Province. I would have these farms conducted on such principles, as would develop to the fullest extent the capability of their respective soils; not by an extravagant outlay, but in such a manner as to show practically what can be done by a judicious and liberal system of farming, which is always the most profitable in the long run, and which admits being more or less followed by farmers generally. I am aware that such farms could not be regarded as fixed models, which every farmer should try literally to copy, since the means and conditions of farmers greatly vary. But a practical exposition of good husbandry, adapted to the situation and wants of different portions of the Province, could not fail to be productive of much public benefit. These farms would afford opportunity for personal inspection by all who feel an interest in agricultural improvement, for observing the best stock suited to the locality, the most approved implements and machines, and the results of different manures and modes of tillage, and could not fail to attract much attention, and to teach by example, important and much needed lessons to many who are engaged in farming operations.

SCHOOL OF PRACTICAL SCIENCE.

Agriculture is unquestionably the principal interest which contributes to our wealth and prosperity, and hence the wisdom of the Legislature shown for many years in promoting its improvement, by the stimulation of liberal grants. But agriculture, however important, is not the only interest we have that is deserving of public encouragement. The mechanical and manufacturing arts, though only as yet in an incipient condition, constitute no very insignificent portion of our wealth, and they indicate a capacity of expansion as our population and markets multiply. Indeed, agriculture, manufactures, and commerce, are so intimately connected in all prosperous communities, as to be in reality, mutually dependent; and whatever country combines these elements in the greatest strength and harmony, will be found the most advanced in wealth and civilization, independence and national happiness. Our own Province, though evidently adapted by nature specially to agriculture, for the raising of grain and the rearing of stock, yet possesses, even in a high degree, capabilities of a manufacturing and commercial character. Our water power and communication, are probably unequalled in the world; our vast forests abound in the most useful kinds of timber; while our mines are rich in ores of the most necessary and valuable metals. Our mining operations, it is true, are as yet but very slightly developed, and in some cases are unremunerative, arising from different causes,—one of the greatest, perhaps, being the want of special preparation and systematic efforts in those who conduct such enterprises.

In order, therefore, to promote more effectually the interests of manufactures, mining, and the useful and ornamental arts generally, the establishment of a Technical School of Arts, is much to be desired. This should embrace systematic instruction, with a constant application to practical purposes, in mining, civil engineering, architecture, chemistry, in its various applications to manufactures and arts, designing, modelling, mechanical drawing, &c. In such a school, our youth designed for any of these pursuits, would have an opportunity of going through a thorough course of instruction suited to their wants, and of acquiring the knowledge and habits requisite for performing those practical operations of analysis and construction, which are essential to success. The utility of such an institution will become apparent upon a careful consideration of the present state of our mineral and manufacturing industries, and the inadequency of the means we at present possess of an educational character, of meeting this want.

Schools of this character have sprung up of late years in the United States, and have long been fostered in the more advanced countries of Continental Europe, where both the useful and ornamental arts have been brought to an extraordinary degree of perfection. In the mother country, the absorbing question of the day is how the widest diffusion of education having a definite and practical character, can be most effectually accomplished, and all classes of her artisans be specially instructed in the applications of science to the every day purposes of life; so as to maintain against a constantly increasing foreign competition, the long acknowledged superiority of Britain in many of the leading branches of arts and manufactures. The time seems to have arrived when a commencement, at least, should be made to meet our own wants, as a Province, in matters of such paramount importance.

CATTLE DISEASE.

It is a cause of thankfulness that our live stock has not been visited by any of those destructive epidemics which have proved so disastrous, both in Europe and in some parts of this continent, during the past few years. There were serious grounds for apprehension of the introduction of Texan fever, about a year since, and it was deemed expedient, by the Dominion Government, to adopt such strict precautionary measures as the gravity of the case seemed to require. The rinderpest is said to be devastating whole herds of cattle at the present time, in many parts of France, Germany, Russia, and other European countries.

Considerable sensation was caused in certain localities in this Province, during last summer and autumn, in consequence of an irritating disease manifesting itself chiefly among horses and horn cattle (more particularly the latter), which at first affected their legs, and then brought on such a deranged and feverish state of the system as greatly to impair the constitution. In a few extreme and neglected cases it is said to have produced death.

Under these circumstances I deemed it expedient to communicate with some of the officers of Agricultural Societies in the affected districts, and also to instruct Principal Smith, of the Ontario Veterinary College, to visit some of the localities, and rigidly

investigate the cause and nature of the malady, and suggest such measures as, in his judgment, the case required. Mr. Smith's report will be found in Appendix F, from which it appears that the attack was occasioned by a fly, well known to naturalists, which existed in great numbers, and whose poisonous bite was greatly intensified by the extraordinary heat and atmospheric moisture that so strikingly characterised some of the summer and autumnal months of the past year. Whenever a concurrence of physical conditions may again arise to produce this evil, farmers will be better able to prevent or mitigate it, from the information that has now been widely disseminated respecting its character and most efficient mode of treatment. The malady wholly disappeared on the approach of cooler weather, and was never of a contagious character.

I have, quite recently, been informed that a report is in circulation in the United States, that what is termed "Foot and Mouth Disease," has, for some time, been prevalent among cattle in Canada, from whence it has been introduced into some of the adjacent States. I deemed it my duty to give this report an unqualified contradiction, in reply to a communication received from the United States Consul, at Hamilton. There is no evidence whatever that this much dreaded malady has, even in a single instance, made its appearance in this Province, or, that I am aware of, in any other parts of the Dominion. Professor Smith's report relative thereto (Appendix F), and other information obtained from various sources, clearly show that the rumour is altogether destitute of foundation.

Dairy Products.

Until within a period quite recent the Dairy products of Canada were comparatively insignificant, scarcely adequate to meet domestic demand, and a considerable amount of theese was annually imported from abroad, particularly from the United States. The butter which we exported to Britain was of small amount, and generally, from want of proper attention in the making and packing, was of inferior quality, reflecting no credit on our skill in dairying, or on the great capabilities of our country in this fruitful source of wealth. Within the last few years, however, the picture has been greatly changed and improved. In consequence of the frequent failures of grain, wheat more particularly, for the production of which portions of this Province were formerly so celebrated, and of the increased price of butcher's meat, cheese and butter, the attention of our farmers has been more earnestly directed to the improvement of live stock, and thus an impetus has been given to Dairy farming, which is most satisfactory to contemplate.

I regret that we possess no reliable statistics that would represent the extent and value of the present production of butter and cheese, but am confident that the approaching census of the Dominion will demonstrate, for Ontario at least, that dairy products occupy a large space in the aggregate of our national wealth. I find from a very interesting Report of the Canadian Dairymen's Association, that in 1868, full reports were received from no less than 58 Cheese Factories in the Province, the united productions of which, during the season of that year, would make a very large sum, as the make of cheese in several of the Factories ranged from fifty to one hundred and ninety-four thousand pounds. This, however, would be only a part of the aggregate production of the Province, as many private dairies have from a dozen to twenty or thirty cows each.

It is satisfactory to know that dairy products, particularly cheese, have recently been rapidly increasing, year by year, and that the quality of the article has kept pace with its increased production. Not many years since it was a difficult thing to obtain a really good quality of Canadian cheese, the best marks being imported, chiefly from England. Now the manufacture here is sufficiently advanced, that we can supply as good an article as our neighbors to European markets, the constantly increasing demands of which are not likely to be soon over-reached. Besides, our domestic consumption of cheese is constantly increasing, not only from the additions made to the population by natural increase as well as immigration, but there seems a growing taste for this article, which is admitted to contain more nourishment, weight for weight, than most other kinds of food in general use. The pursuit, therefore, of dairy husbandry, and the breeding of improved cattle, is to be strongly recommended as a source of profit, and also for its tendency to counteract the baneful practice of over-cropping with the cereals, particularly wheat, that has unhappily so long characterised our Provincial agriculture. By getting comparatively exhausted land down into profitable pasture for a few years, it will again yield remunerative returns of grain, if properly cultivated, and the crop is not too frequently repeated. This appears the natural, if not the only practicable, way of restoring the former fertility of our worn-out soils, and of maintaining that true balance of nature between waste and supply, which is essential to the maintenance of a progressive and, in the long run, profitable agriculture.

CULTIVATION, AS INFLUENCED BY DRAINAGE AND THE CHARACTER OF THE SEASONS.

The past two or three years especially, owing to the striking contrasts they presented during the growing season, as regards temperature and moisture, have afforded agriculturalists excellent opportunities for observing the influence of meteorological phenomena on the art of culture. The extremely hot and dry character of the summer of 1868, equally illustrated the immense advantages of under-draining and thorough cultivation, as did the opposite conditions of the cold and wet season of the succeeding year. And the year which has just closed, presented similar contrasts, as regards the unequal distribution of moisture; for while the eastern sections of the Province severely suffered, in many places, from the effects of drought, the western portion was visited by a long succession of heavy rains, in some parts most injurious to the ripening and harvesting of the crops, affording farmers in different sections, placed under opposite conditions as regards the distribution of moisture, lessons of great practical value, relative to the proper management of the soil. Wherever land, naturally wet, had been drained and deeply cultivated, the crops were much superior, and the same results are obtained whatever may be the character of the season. People are beginning to learn, from observation and experience, that the draining and thorough working of the land are alike beneficial in dry and in wet seasons, and consequently are essential to a progressive and profitable agriculture.

It scarcely admits of doubt, that much of the injury which our crops so frequently sustain from insect depredations, and from other causes popularly designated as blights, would be prevented if the soil were brought into a more suitable condition, mechanical and chemical, for the healthy growth of plants. Such considerations open a wide field for the observant and enterprising agriculturist to explore, and his labors in this direction.

tion cannot fail to produce the most valuable results. It is encouraging to know that draining has been commenced in earnest in some of the older settled districts, and that tiles or pipes are manufactured in considerable quantities in several localities, of good quality and at moderate prices, considering that the demand is as yet so limited. The laying out of drains, as to depth and distance, as well as their construction, are beginning to be better understood, and workmen, when they have had experience, perform the operation better and more cheaply than it could have been done only a few years since. However, only a mere commencement in this indispensable art of ameliorating the soil has as yet been made, even in the oldest and richest districts of the Province, and it must require, not only increased capital, but the lapse of a considerable time before the benefits of thorough draining can be generally diffused. The recent Drainage Act relating to extensive swamps, has already been taken advantage of in several counties, and its benefits will, in due course, appear in a more salubrious climate, and in a greatly increased productiveness of the soil.

CONCLUSION.

It is satisfactory to note the increasing numbers of immigrants coming to this Province, thereby meeting, though as yet imperfectly, the demand for labor of various kinds which has so long been generally felt. One of the principal obstacles to the advancement of agriculture has been the inadequacy of the supply of labor, and the consequent high price which farmers have had to pay for the necessary help they required. This evil is now in course of mitigation, and by judicious efforts in bringing the resources of the Dominion of Canada, and of our own Province in particular, as a field for emigration before the notice of the British public, there is every reason to believe that our wants in this respect will, year by year, be more fully supplied.

The accounts which I have received from various quarters as to the state of the immigrants are more encouraging, as a whole, than could have been anticipated, especially when it is considered that among so large a number there are necessarily many not the best adapted either for farm labor, or for the sturdy work of a new settlement. I am glad to learn that most of those who have settled on the free grant lands seem to be satisfied with their choice. The excellent samples of wheat, oats, peas, &c., that were sent to my Department from the neighborhood of Bracebridge, which did not arrive in time for the Provincial Exhibition, clearly indicate the agricultural capabilities of the Muskoka district, which, with other extensive areas of fertile land in the course of being opened up to settlement in this Province, would afford homes of peace and plenty to thousands of industrious families in the mother country, that are now struggling with disappointment and want.

Respectfully submitted,

JOHN CARLING,

Commissioner.

TORONTO, January, 1871.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture aus Arts.

APPENDIX (A).

ANALYSIS OF REPORTS OF AGRICULTURAL AND HORTICULTURAL SOCIETIES FOR 1869.

ANALYSIS OF REPORTS

OF

Agricultural and Porticultural Societies,

FOR THE YEAR 1869.

ADDINGTON.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To 105 Members' Subscriptions		110 00	
" Legislative Grant		700 00	810 00
Cr.			010 00
By Balance due Treasurer		1 07	
"Prizes for Live Stock	166 25		
" " Field Products	45 25		
" " Dairy "	$\begin{array}{ccc} 14 & 50 \\ 12 & 50 \end{array}$		
" " Agricultural Implements	45 75		
" " Arts and Manufactures	77 50		
		361 75	
" L. G. to Township Societies		$\frac{350}{77} \frac{00}{07}$	
"Working Expenses		17 07	789 89
Balance in hand			20 11
Candon			
Dr. Camden.	\$ cts.	\$ ets.	\$ cts.
Dr.	\$ cts.	\$ ets. 3 97	\$ cts.
Dr. To Balance in hand	\$ cts.	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	\$ cts.
Dr. To Balance in hand	\$ ets.	3 97	•
Dr. To Balance in hand	\$ cts.	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	\$ cts.
DR. To Balance in hand	\$ cts.	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
Dr. To Balance in hand		$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
DR. To Balance in hand " 74 Members' Subscriptions " Legislative Grant CR. By Prizes for Live Stock " " Field Products " " Dairy "	129 00 28 00 7 50	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
DR. To Balance in hand " 74 Members' Subscriptions " Legislative Grant CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products	129 00 28 00 7 50 3 00	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
DR. To Balance in hand	129 00 28 00 7 50 3 00 49 50	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
DR. To Balance in hand	129 00 28 00 7 50 3 00	$\begin{array}{c} 3 & 97 \\ 117 & 00 \end{array}$	•
DR. To Balance in hand	129 00 28 00 7 50 3 00 49 50 23 75	3 97 117 00 149 32	270 29
DR. To Balance in hand	129 00 28 00 7 50 3 00 49 50 23 75	3 97 117 00 149 32	•
DR. To Balance in hand	129 00 28 00 7 50 3 00 49 50 23 75	3 97 117 00 149 32	270 29

Lough borough.			
Dr. To Balance in hand	\$ cts.	\$ cts. 5 15 50 00 59 72	\$ cts.
CR. "Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures Total awarded. Unpaid.	43 50 24 75 4 50 3 20 5 25 16 60 	02.00	
By Working Expenses		92 09 29 78	121 87
Balance due Treasurer			7. 00
DR. To 64 Members' Subscriptions. " Legislative Grant. " Miscellaneous Receipts.	\$ cts.	\$ cts. 65 00 71 67 1 06	\$ cts.
CR. By Balance due Treasurer. "Prizes for Live Stock. "Field Products "Dairy " Horticultural Products. "Agricultural Implements, Carriages, &c. "Arts and Manufactures.	62 05 10 25 1 25 00 55 21 40 11 20	12 92	
	106 70		
Unpaid Prize for last year By Working Expenses Balance due Treasurer.	1 25	105 45 00 50 19 60	138 47
DR. To 58 Members' Subscriptions. " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 58 00 69 29 2 07	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products 3	63 75 11 25 3 75 2 00		

" " Agricultural Implements " Arts and Manufactures	\$14 75 17 00		
" Unpaid	112 50 4 00	108 50 16 36	
" Working Expenses		10 30	124 86
Balance in hand			4 50
' ALGOMA.			
Dr. To Balance in hand. " 94 Members' Subscriptions. " Admissions to Show. " Legislative Grant. " Proceeds Sale of Seeds.	\$ cts.	\$ cts. 640 07 247 50 4 78 700 00 164 79	\$ cts.
CR. By Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Arts and Manufactures. "Ploughing Match. "Exhibition Buildings and Grounds. "Purclase of Seeds. "Agricultural Publications. "Working Expenses. Amount due Treasurer for Seeds.	125 75 40 50 28 50 15 00 34 00 18 00	261 75 408 29 178 57 3 50 105 79	957 90 128 27
Balance in hand			670 97

REPORT.

1st. That the past season has been most unfavourable from the continued summer rains, yet notwithstanding, all crops, with the exception of peas on heavy lands, ripened well; and that, but for early frosts, much of the abundant crops of roots could have been saved.

2nd. That it has been universally remarked that all plants produced this past season had an unusual amount of foliage, as if nature, to compensate for the limited quantity of

solar heat, had provided an increased surface exposed to its action.

3rd. That in consequence of the recent improvements in the roads through the settlements considerable impetus has been given to the efforts of settlers, and the effects of the improved state of communication with the Townships were perceptible at the last Fall Show, in the increased number of entries.

4th. That we consider it essential that an exhibition building be erected during the coming summer on the present enclosed grounds of the Society, as the extension of the Society and the state of its finances will, in the opinion of your Directors, justify the outlay necessary therefor.

5th. That we are happy to perceive an increasing interest in the efforts of this

Society by all, as evinced by the liberal subscriptions thereto.

6th. Your Directors trust that the friends of the Society, as heretofore, will continue their liberality—at least, until an exhibition building is completed.

BRANT, NORTH. Dr. To Balance in hand " 247 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " South Dumfries Society " Miscellaneous Receipts	\$ cts.	\$ cts. 203 01 284 50 369 61 700 00 150 00 108 00 43 00	\$ cts.
CR. By Prizes for Live Stock "Field Products "Dairy "Horticultural Products "Agricultural Implements "Arts and Mauufactures "Harness and Leather.	511 00 29 00 27 5 98 0 76 0 45 0 24 7	0 0 0 0 0	
Unpaid	811 2 99 0		1279 21
Balance			578 91

Note.—For repairs and premiums unpaid, \$207 16.

REPORT.

In presenting to you the Twelfth Annual Report of the North Brant Agricultural Society, your Directors have once more the pleasure of stating that the Association continues to prosper financially, and that the purposes for which it was established are more fully carried out from year to year.

During the last twelve months, owing to freedom from the obligations by which they were previously encumbered, and a generous supply of funds, your Directors were enabled to publish a considerably enlarged prize list, offering premiums of higher value and greater quantity than had been given for several years past, and, in consequence, the Exhibition was well attended by the farming community, and the increased multitude of

visitors added greatly to the receipts at the entrance gates.

The Annual Exhibition was held on the 12th and 13th of October, and was very successful. Visitors from a distance, who had never seen any of your exhibitions were enthusiastic in its praise, and declared that they had no conception that North Brant could produce such a display of stock, produce and articles of industry, such as were exhibited on the grounds and in the hall. All this was very gratifying, and is calculated to encourage the members of your Society to renewed and increased exertions in the future.

The show of horses was very large, there being 264 entries in this department alone, and the collection contained some very fine animals, which fully sustained the well-earned reputation of this section of the country. A large number of cattle, chiefly Durhams, Devons and Grades, were on the grounds, the character of which was very creditable to those who raised them. Sheep were in abundance, viz., Leicesters, Southdowns, Cotswolds and Merinoes. There was also a very good show of pigs, chiefly Berkshires. Some Yorkshire and Suffolk pigs were on the grounds, which last appear to be more generally bred in this section than they used to be. A large number of poultry were exhibited, amongst which where some fine specimens of domestic and fancy fowls. The display of carriages and implements was very good, and considerably in advance of former years. The entry of "discretionary" articles numbered 160, a much higher number than has ever been attained in this Riding.

The roots and vegetables were large in quantity, and excellent in quality, probably superior to any similar display hitherto seen at any show in this or any other county in Ontario. The fruits and flowers filled up an ample space in the building, and were very generally admired. The ladies' department was also well filled, and gave undoubted proof of the industry and taste of the female portion of our farming community. The

total number of entries was 1,918, being 538 in excess of the previous year.

An amalgamation was effected with the South Dumfries Agricultural Society, as in former years, and their funds were placed at the disposal of your Directors, the members being admitted to all the rights and privileges of those of the County Society. Hitherto this Association has been very advantageous to us; and your Directors, having heard it stated that some are of opinion that it should be dissolved, would strenuously urge that it be encouraged and carefully fostered, on account of the benefits derived from its assistance to the County Society.

Mr. John Conworth has been experimenting during the past two years with salt as a top-dressing for Swedish turnips, and states that the results have been satisfactory; but as he has not been particular with regard to measuring the quantity grown, he is unable to supply any statistics at present, but hopes that he will have it in his power to do so before the expiration of another year.

Report of Committee appointed by the Directors of the North Brant Agricultural Society to examine and report upon Mr. Charles Arnold's new Hybridized Wheat.

Gentlemen,—We, the undersigned members of Committee appointed to examine Mr. Arnold's new varieties of wheat, beg leave to make the following report.

The first examination was made by this Committee in the Spring of 1868, and it was found that all varieties had stood the winter well, in fact, quite as well as the Soules and Blue stem, and much better than the Amber, Michigan, and Treadwell Wheats.

The next examination was made just before harvesting, in the same year, and your Committee were satisfied that they were really new varieties. Another minute examination was made with a magnifying glass after threshing, and your Committee were satisfied that they were midge proof, while the Soules's parentage had greatly improved the quality of the grain.

Your Committee saw the ground prepared for the reception of the seed in the fall of 1868, and are of opinion that the husbandry bestowed upon the ground was of the most ordinary description, and scarcely sufficient to do justice to the grain, not being equal to an ordinary summer fallow; and have to state that it did not receive any manure, either barn-yard or artificial.

The next examination was made in the spring of 1869, and the wheat was again found to have stood the severity of the winter, quite as well as in the previous year. One member of your Committee, having occasion to pass it almost daily, had opportunities of seeing it in its various stages of growth, continually, until harvest; and another

member had the opportunity of observing that it came fully into ear as early as the 16th of June, in the unusually late season of 1869, which was much earlier than the Michigan, Amber, or Treadwell, grown on the same quality of soil, in the immediate neighbourhood, and within a few rods of Mr. Arnold's land.

The quality of the straw was stiffer, and it stood up well. The ears were much larger than those of the parent kinds, while they had even more than the compactness of the Soules wheat, and your Committee are of opinion that Mr. Arnold has not over-

estimated the yield per acre—viz., 52 bushels.

Your Committee examined the samples after harvest, and found them to be much superior to any Amber, Michigan or other Red wheats that ever came under their notice.

As it is possible that American agriculturists may be desirous of purchasing Mr. Arnold's grain, your Committee would recommend that the Provincial Board should make an offer to him for the purpose of securing it for the benefit of the inhabitants of this province, as such an opportunity lost may not be easily regained.

All of which is respectfully submitted.

NNOR. CONWORTH.

Paris, January 19th, 1870.

Brant for d.			
Dr. To Balance in hand " 108 Members' Subscriptions " Admissions to Show " Legislative Grant " Donation Hon. G. Brown " J. Y. Bown, M.P Cr.	\$ cts.	\$ cts. 20 00 108 00 18 55 118 37 10 00 5 00	\$ cts. 279 92
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	172 00 21 25 11 00 9 75 15 50 8 75		
" Unpaid "Working Expenses.	238 25 31 75	206 50 41 91	
Balance in hand			248 41 31 51

REPORT.

The Directors of the Township of Brantford Agricultural Society in making their Report for 1869, regret that their cash account shows a deficiency over past years; but they would call attention to the fact in accounting for this, that the number of subscribers is less than formerly, and also that the Legislative grant was less than in former years, though the prizes awarded at their Annual Show have not been lessened. But notwith-standing this seeming unsatisfactory state of affairs, they must congratulate the subscribers on the excellence of their show, held during the past year, as also the quantity and quality of all articles exhibited. They would earnestly impress on all interested, the necessity of using more strenuous exertions this coming year to collect additional subscribers, as it must be borne in mind that the amount of Legislative grant is in proportion to the amount subscribed, and returned to the Treasurer of the Electoral Division.

Dumfries, South.			
DR.	\$ cts.	\$ cts.	\$ cts.
To 108 Members' Subscriptions		108 00	
" Legislative Grant		112 64	990 64
Cr.			220 64
Paid County Society for Union Show		190 64	
Working Expenses		30 00	
			220 - 64
REPORT.			

The President and Directors of the South Dumfries Agricultural Society in presenting this their Seventh Annual Report, beg to state that in pursuance of a Resolution of the Board of Directors, passed at a meeting held on the fifteenth day of May last, the funds of your Society for the year 1869 were in accordance with the Act for the encouragement of Agriculture, merged with the funds of the North Brant Agricultural Society, and the funds of your Society were by your Treasurer paid over to the Treasurer of the North

That your directors have much pleasure in stating that one hundred and eight member's tickets were sold during 1869, as shownby the list hereto annexed, being more than double the number sold in 1868, and which entitled your Society to \$112.64 as its share

of the Government Grant.

Brant Society.

That a report of the proceedings and statement of accounts has been drawn up by your Secretary for deposit with the Commissioner of Agriculture, in accordance with the regulations of the Department.

That your directors and members were in accordance with said resolution, and the Statute in that behalf merged in and became members and directors of the North Brant

Agricultural Society.

That your directors cannot close up this their Report without congratulating your Society on the complete success of the Fall Exhibition, both in the number and quality of the articles exhibited, and also in a pecuniary point of view, and would suggest that the North Brant Society deserves great credit, in not only having paid off the debt incurred by the exhibition building and other improvements to the Fair Grounds, but having, as your directors are informed, a surplus on hand, thus showing what a few energetic men, having at heart the agricultural interests of North Brant, can do.

Onondaqa.			
Dr. To Balance in hand " 54 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " Miscellaneous Receipts.	\$ cts.	\$ cts. 10 41 58 00 13 00 81 10 20 00 00 48	\$ cts.
CR. By Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. "Previous year. "Working Expenses.	105 53 20 94 11 25 2 02 2 25 20 25	162 24 5 00 15 23	182 47
Balance in hand			00 52

Paris Horticultural Society. DR. To Balance in hand " 45 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ 0	ts.	\$ cts. 94 19 58 00 76 54 70 70	\$ ets.
CR. By Prizes Fruits " " Flowers and Plants " " Vegetables " " Arts and Manufactures	30 9	75 75 85 75		
Unpaid " Working Expenses		10 35	55 75 46 90	102 65
Balance in hand				196 78

REPORT

The President and Directors of the Paris Horticultural Society in presenting this their second annual report, beg to state that in pursuance of a resolution passed at a meeting held on the 31st day of May, 1869, your society held a spring exhibition in that year.

That owing to the extremely wet and backward season the display of vegetables was neither so large nor so good in quality as could have been wished, but that the display of fruits, especially strawberries, exceeded the most sanguine expectations. The display of flowers, notwithstanding the heavy rain the day and night before the exhibition, was also good.

That your directors have much pleasure in stating that 124 entries of flowers, and about 90 entries of fruits and vegetables were made, which your directors consider good

for the backward season.

Your directors would most earnestly and respectfully urge that no effort be spared to keep up the society not only in its present efficient state, but to increased energy, as your directors feel that the Horticultural exhibitions are a source both of profit and pleasure to the public of Paris and its vicinity.

" 333 " Admi " Legis " Muni	BRANT, SOUTH. ce in hand	\$ ets.	\$ ets. 176 71 333 00 580 00 700 00 100 00 133 40	\$ cts.
Cr. By Prize	s for Live Stock Field Products Dairy " Horticultural Products Agricultural Implements Arts and Manufactures for previous year 9	446 -50 53 -75 26 -75 80 -75 112 00 35 00	754 75 47 22	

By L. G. to Township Societies " Preparing Show Grounds " Interest on borrowed money " Agricultural Publications " Working Expenses.	\$326 27 182 91 42 00 23 35 352 57
	
Balance in hand	294 04

REPORT.

The Annual show held last fall was in some of the departments fully up to the average of former years, but in others there was a falling off from the previous year.

The show of Horses was in number about the same as the previous year, that being considered larger than in former years,—but in point of quality they were considered superior to any former exhibition, thereby showing that Farmers are taking pains to further

improve that noble and useful animal.

The number of Cattle exhibited was not large, but of very good quality. There appears not to be a very great and general interest taken in the improvement of Cattle, which can be accounted for as owing to the very low price heretofore paid for such stock; prices being now in advance of what they formerly were; and should present prices be likely to prove permanent, no doubt there will be a corresponding interest taken in the improvement of Cattle. The variety known as the short Horn (or Durhams,) seems to be the most in favour, and we think justly so, for the reason that we consider them the most profitable.

The show of Sheep was very good, and if it is fair to judge from those exhibited, it is very evident that there is a great and general interest taken to improve that profitable

and useful animal.

This remark does not include or refer to Merinoes.

The swine and poultry were about the same as in former years.

The display of Agricultural Implements, of which there was a large and varied assortment was particularly good in all Branches, both in quality, finish, and utility; and appeared well adapted for the work intended for them to do.

The exhibition within the building.—In the Ladies department thereof, there was a great falling off from the previous year in the number of Articles exhibited-which had

the effect of detracting considerably from the appearance of the Hall.

The same may be said of the Dairy Department.

There was a large and apparently a superior lot of Parlour and Cooking Stoves, some of which the furniture was highly finished and polished, especially some to which was awarded the first prize at the Provincial Exhibition held in London last year.

The display of Grain, Roots and Vegetables was very good.

The past year was distinguished as being a very fruitful one, especially in this County. The crops of Grain and Roots having considerably exceeded the average yield of former years, but in consequence of the very wet season, and part of the crops being housed and stacked without being properly cured, in consequence such grain is inferior in sample, and therefore depreciated in value. This together with an over stocked Market in Europe and in the United States, has brought the price of grain down to a lower point

than has been reached for several years.

A few observations on the merits and demerits of some varieties of wheat may here be noticed, first, the kind known as the Deihl wheat, is, in the opinion of experienced millers much superior in quality to any other known variety of fall wheat now grown; and if, as is generally supposed, the midge has left or about to leave us with its infection, then this is considered the best variety to sow for profit, especially where the soil is adapted for its cultivation; it requires good strong soil to produce a good crop. The variety known as the Treadwell, has proved inferior to what was at first anticipated of it, as it now brings in the market of the town of Brantford, the same price as red fall wheat and California spring wheat.

With reference to spring wheat, the Fife variety brings the highest price of any other

kind, owing to the peculiar properties this grain has for making good strong flour, it has become so well and favourably known to bakers, that they are always anxious to obtain it at prices in advance of flour made from red winter wheat, and sometimes at prices equal to white winter wheat (flour). The variety known as the Johnston or Rio Grande, we would advise the discontinuance of growing it, as buyers in Brantford are all agreed that should it be raised in large quantities it will come down in value to nearly feed prices, as the flour produced from it is unfit for exportation.

The barley crop was the largest ever grown in the County in any year, but its value is slightly depreciated in consequence of the universal darkness of its colour; nevertheless the sample is considered superior to that grown in the Western United States. There seems to be much disappointment regarding the two rowed sample imported a few years ago, and much cultivated the past year. There was a general impression that it was superior for malting purposes to our old six rowed variety, but now that it is coming into market in large quantities, it is found not to do so well, and buyers will not pay by, from 4 to 6 cents per bushel for it, as they will for the six rowed. It is said to be unsaleable in the American market, if they can get sufficient of the six rowed kind to supply the demand. Under these circumstances would it not be advisable to discontinue growing the two rowed Barley?

Peas are not grown to a large extent in this County, but the yield of that grain for the past year would have been much in excess of some previous years, but owing to the wet weather there was a large quantity of them lost on the ground by swelling and burst-

ing the pod, and the sample generally is considered inferior.

The oat crop was unusually good, and apparently secured in good order, as the

samples offered for sale are universally good, and heavier than usual.

Your Board of Directors are of the opinion that the continuance of Township Societies is detrimental to the usefulness of Riding Societies, and that, therefore, an effort ought to be made to discontinue them as such, and merge them into the Riding Societies. And while considering the propriety of adopting the above view, they would further suggest that the Society take into consideration the advisability of advocating the merging of Riding Societies into County Societies, with the view of placing them in a still better position for usefulness. We would further suggest for the consideration of members that, so soon as the funds of the Society will admit of it, prizes be awarded for growing crops of grain and roots; and also for the best cultivated farms generally, including buildings and fences. This plan, if adopted, would create a spirit of emulation, which would not only benefit members themselves but also the county at large. And in order to carry this arrangement fairly into effect, three commissioners be appointed annually for each electoral division within the riding, whose duty should be to examine the crops and farms owned or occupied and worked by the members of the Society; each of such farms to contain fifty acres and upwards, and to examine such farms twice in the year; first, before wheat harvest, and second, about the middle of September, and report to the Board of Directors one week previous to the holding of the annual exhibition. And, also, in connection with the above, that prizes be awarded to those that will plant out the largest number of shade trees, and are successful in getting them to live, especially hard maples, as growing timber is getting scarce in this section of the country; and if people continue to cut down growing timber at the rate they have done for a few years past, in a few years more there will not be a tree left standing for ornament or use. It is expected that such commissioners be paid their expenses out of the funds of the Society.

Your Board of Directors are also of the opinion that it would be a step in the right direction, to purchase improved male stock for the benefit of members of the Society, as by this means they can get into possession of good improved stock at comparatively very little expense. Without adopting some such means, it will be almost out of the reach of ordinary farmers to purchase from first class stock breeders, owing to the high prices of

such animals.

Burford.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		136 98	
" 126 Members' Subscriptions		126 00	

To Admissions to Show		\$71 20 129 00 8 21	471 39
Cr.			411 33
By Prizes for Live Stock	147 75		
" " Field Products	30 00		
" " Dairy, &c. ' "	11 00		
" " Horticultural Products	4 50 3 00		
" " Agricultural Implements	21 00		
This and manufactures		217 25	
" Preparing Show Grounds		8 25	
" Working Expenses		51 37	080 08
			276 87
Balance in hand			194 52
Brantford Horticultural Society.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		73 89	
" 133 Members' Subscriptions		155 00	
" Admissions to Show		161 70 140 00	
" Legislative Grant. " Proceeds Sale of Plants. &c		25 47	
1 Tocceds pate of Frances, techniques			556 0€
Cr.			
By Prizes for Fruit	78 50		
" " Flowers and Plants	92 75 $96 25$		
" Vegetables	50 25	267 50	
" Prize previous year		25	
" Preparing Show Grounds		54 12	
" Purchase of Plants, and Expenses		28 57	
" Working Expenses		174 31	524 75
			954 (9
Balance in hand			31 31

REPORT.

The Directors of the Brantford Horticultural Society, in presenting the Second Annual Report since the incorporation of the Society, have again to congratulate the members upon the marked progress it has made during the past year, and upon the increased interest that is being manifested in the Society itself. Although there appears a slight falling off in the membership, yet the numbers who have patronized the Society by their attendance at the Exhibitions have been far greater than in any former year.

As heretofore there have been two Exhibitions held during the year—one on the 1st of July, in the Music Hall, and the other on the 29th September, in the Drill Shed.

The numbers of entries made at each of these exhibitions was as follows:

	Flowers.	Fruit.	Vegetables.	Total.
Spring	148	79	210	437
Fall	169	383	277	749

Thus closing with a total of 749 entries at the Fall Show, a number vastly in excess

120 08

of any former exhibitions. The following comparative statement shows the steady increase in the number of articles entered for competition during the last three years :-

	1867.	1868.	1869.
Spring	198	240	437
Fall	366	401	749

Thus showing the numbers to have doubled within the three years.

Financially the progress of the Society has been equally satisfactory. Although as mentioned before the membership has slightly fallen off; yet the Treasurer's Report will show that the receipts at the door have been far greater than ever before, and more than counterbalances the falling off in membership, and although the working expenses have been somewhat greater than was estimated there still remains a fair balance to be carried forward to the next year.

The amount offered by the Society for competition in prizes this year was as follows.

1137 tilliount onorott by the couldy for t	ompound	in prizes emis	year was a	o lollows.
	Fruits.	Flowers.	Vegetables.	Total.
SpringFall		\$70 50 52 75	\$46 00 67 25	
making a total of \$346 as against \$262.25 t The amount of prize money awarded the			#	\$346.00
The time and of pride menty an area of	Fruits.	Flowers.	Vegetubles.	Total.
Spring. Fall.		\$55 50 37 25	\$38 75 57 25	\$116 00
while the total awarded last year was \$160.	75.			\$267 25

"	BOTHWELL. Dr. Balance in hand 255 Members' Subscriptions. Admissions to Show Legislative Grant. Municipal Grant. Special Subscriptions.	\$ cts.	\$ cts. \$ cts. 35 57 255 00 32 65 700 00 60 00 110 09 1,193 22
66 66 66 66	Cr. Prizes for Live Stock. "Field Products. "Dairy " Horticultural Products. Agricultural Implements. "Arts and Manufactures. "Ploughing Match. L. G. to Township Societies. Working Expenses.	275 25 57 20 12 75 17 15 18 50 69 90 98 00	548 75 417 65 106 74 ————————————————————————————————————

EXTRACTS FROM REPORT.

Balance in hand.....

Your directors beg leave to say that the past year has been one of great plenty as re-

gards almost all kinds of grain and root crops, although the latter were injured to a great

extent in the northern part of the County by excessive rains.

Your Directors would submit that they have reason to look back with feelings of pleasure on the success of their second annual Exhibition, it being acknowledged to have been one of the best County Exhibitions ever held in the Western Counties. We have also held a Spring Show and ploughing match, and a fall ploughing match. The latter, we are sorry to say, was poorly attended—only eight ploughmen taking the field.

	Euphemia and Dawn.			
"	DR. Balance in hand	\$ cts.	\$ cts. 92 10 78 00 8 45 68 65	\$ cts.
P.,,	Cr. Prizes for Live Stock	93 25		
Dy.	" Field Products	29 20		
	Field Floraces	9 00		
"	" Dairy " " Horticultural Products	5 55		
46				
"	Agricultulai implements	11 25		
	Arts and Diandiactures	13 80		
44	" Ploughing Match	20 00		
	Preparing Show Grounds		182 05 5 50 38 02	225 57
	Balance in hand			21 63

Note.—The Directors report abundant crops, and that the Society is in an improving condition. The Exhibition of 1869 was superior to its more immediate predecessors, and all that is required to sustain a constant advancement in agriculture is a more general awakening of the farmers of the Townships to a proper conception of the importance of their pursuit.

	Howard.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
To	Balance in hand		84 23	
66	139 Members' Subscriptions		143 00	
66	Legislative Grant		$136 \ 30$	
66	Proceeds Sale of Seeds	9	98 25	
"	Amount of Notes Collected		86 65	
	Cr.			548 43
By	Prizes for Live Stock	97 - 50		
"	" Field Products	$23 \ 00$		
66	" Dairy "	3 75		
66	" Horticultural Products	9 75		
6.0	" Agricultural Implements	16 50		
46	" Arts and Manufactures	$23 \ 75$		
44	" Ploughing Match	21 - 50		
66	Growing Crops	17 00		
			212 75	
	Purchase of Seed		127 34	
"	Working Expenses		58 64	
				398 73
	Balance in hand			149 70

wards of 600 entries in the agricultural department of the Show, which was well attended. A Ploughing Match was held by the Society, the work performed in all the classes clearly indicated improvement on preceding years.

	Orford.			
66	Dr. Balance in hand 73 Members' Subscriptions. Legislative Grant.	\$ cts.	\$ cts. 37 75 73 00 72 70	\$ cts.
By	Cr. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures	61 25 17 75 8 00 8 50 10 00 16 25		
66	Unpaid Prizes previous year	121 75 57 75	64 00 20 00	
"	Working Expenses.		19 00	103 00
	Balance in hand			80 45
	Zone.			
44	Dr. Balance in hand 128 Members' Subscriptions Legislative Grant	\$ cts.	\$ cts. 4 00 153 00 140 00	\$ ets.
By	CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures.	141 00 26 00 9 95 11 75 13 58 22 12	224 40	
66	Preparing Show Grounds		16 09 48 32	288 81
	Balance in hand			8 19
	BROCKVILLE.			
"	Dr. 97 Members' Subscription Admissions to Show Legislative Grant. Donation.	\$ cts.	\$ cts. 139 24 3 05 350 00 45 77	\$ cts.
	15			538 0 6

CR. By Balance due Treasurer " Prizes for Live Stock	\$174 30	\$28 60	
" " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	51 95 22 07 46 00 4 00 47 85		
Unpaid	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	343 14	
By Preparing Show Grounds		38 43 88 74	498 91
Balance in hand			39 15
BRUCE, NORTH. Dr. To Balance in hand	\$ cts.	\$ cts. 175 13 114 00 700 00 149 39 18 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products, &c. " " Agricultural Implements " " Arts and Manufactures	177 75 88 00 22 50 24 00 43 75 40 00		
" Unpaid " L. G. to Township Societies. " Preparing Show Grounds " Refunded Paisley Society " Prizes of previous year. " Working Expenses.	396 00 33 50	362 50 419 97 30 00 43 00 21 50 111 61	988 58
Balance in hand			167 94

Your Directors in laying before you this their second Annual Report, feel bound to congratulate the members on the success which has attended the Society during the second year of its existence—notwithstanding the fact that several of those who gave an apparently willing support to the Society during its first year, hesitated to lend a helping hand by way of continuing their membership for the year just past; while several new

names were added to our lists during the past year, we have to report the absence of many older ones, and we cannot too strongly urge upon the public in general, and the farming community in particular, the importance of giving a constant support to your

Society, and endeavouring to increase the benefits to be derived therefrom.

Your Directors regret to state that the past year was not in many respects favorable to the agriculturists of this Electoral Division, in common with those of many other parts of the Province. The summer season was an unusually wet one, causing the rapid, and and we might say, luxuriant growth of every kind of grain and root crops, so much so, that our farmers looked forward to an abundant yield. Wheat, however, which has hitherto been the great staple of the county, failed to come up to the expectations entertained by many before harvesting. Fall wheat in many instances proved a complete failure—being hardly worth the expense of harvesting. Rust and the midge were its principal, in fact, its only enemies. In some cases, however, a good yield has been realized, and amongst the various kinds of wheat grown, the Treadwell and Deihl, seemed to have suffered least from both those injurious visitors.

Spring wheat during its growth, presented an unusually fine appearance—much of it, however, appears to have been injured by early frosts—and in other cases where the sample is good, we find that the yield has fallen far short of what might have been expected from its appearance while growing,—other grain crops have in general yielded well.

The frequent heavy rains during harvest, combined with the difficulty in procuring farm laborers, during that busy season, caused some portion of the grain crops to suffer

damage before being housed.

Root crops of almost every description yielded abundantly, but the unusually early fall of snow, which has covered the ground since the beginning of November, prevented a great number of our farmers from securing these crops in season; in fact great quantities of potatoes, turnips and carrots, are yet in the ground—and in several instances farmers are unable to feed stock intended for the market from want of the latter.

The comparatively short yield of the wheat crop and the low price of every kind of grain this season, has caused general depression financially, among the farming community—and furnishes undoubted evidence of the great and long felt want of better means of communication with other parts of the Dominion. In this connection we may remark—that we have now a reasonable prospect of having at an early day, railway communication between our lake frontier, and the different seats of commerce in the Dominion—affording an outlet at all seasons of the year, to our surplus products, and enabling our farmers to realize more fully, the benefits to be derived from their calling. We can only express the hope that in this expectation they will not be doomed to disappointment. Moreover, we can see no reason why a fertile and highly productive portion of the Province—such as this is, should be kept without those facilities for communication which aid the material progress of the husbandman, and tend to encourage him in the exercise of his laborious calling—while other parts of the Province, less fertile, less productive, less populous, and which consequently add less to the general revenue of the Dominion, enjoy all the advantages to be derived from easy access to our seats of commerce.

Your Directors will now give a brief report of the workings of your Society during the past year. The Spring Exhibition of the Society, was held at Paisley, on the 23rd of April. The state of the roads, combined with the impression, that many intending exhibitors felt, that the bridges in some places were unsafe—prevented many entries that otherwise would have been made. The show of horses was, however, very good—and it is satisfactory to be able to add, that the bulls exhibited, were good looking animals and

pure bred.

Your Directors held an exhibition of Fall wheat for seed purposes, at Southampton, on the 7th of September. This exhibition, your Directors intended as much for the purpose of giving farmers an opportunity of selecting choice seed, as giving a premium to the man who produced the best sample. The weather, however, proved unfavorable to this exhibition, rain falling during the greater part of the day—consequently but few samples were placed on exhibition. Enough, however, to prove that this county is capable of growing wheat equal, if not superior, to that produced in any other part of this Dominion; and we may safely assert that had our Fall wheat escaped the rust and the

ravages of the midge—it would have proved in this county, not only abundant in yield,

but also excellent, in short, first class in quality.

The Fall Exhibition of the Society was held at Port Elgin on the 8th of October, and proved in many respects a decided success. The weather was favourable, the people of Port Elgin had provided ample accommodation, and the entries exceeded in number those of 1868 by nearly 150. There was keen competition in most classes. The entries of horses, grade cattle and sheep were numerous. Pigs and poultry were well represented. But at this, as well as at the Fall Show of last year, your Directors had to regret the absence of several pure bred cattle which are kept in the Riding-only two pure bred animals being on exhibition. There was a fine display of grain and roots, especially of the latter. Dairy produce was well represented, and the show of fruit would have done credit to much older and more favoured Counties. The show of agricultural implements was good, and it is satisfactory to be able to add, that nearly every implement necessary to carry on the work of the husbandman and to facilitate his labours is now being manufactured within the limits of your Society. Some of the best implement manufacturers have settled down amongst us, and are pursuing their vocations profitably to themselves and the people who support them. Men whose handiwork has secured the approbation of leading farmers not only in this County, but also in every part of the Province. Since our last report the mower and reaper have been introduced among us. Several of our farmers are now in a position to use these machines successfully, and we are glad to be able to report that this important addition to the implements of the farmer is likely also in a short time to be manufactured within this Electoral Division.

Your Directors intended holding a ploughing match on the 30th of October, and the liberal donations placed at our disposal by many mechanics and others in the Riding, enabled us to offer unusually attractive premiums; but we regret that owing to the unfa-

vorable state of the weather we were obliged to abandon the match altogether.

On the whole we think considerable progress has been made during the past year, in agricultural matters in this county; all the modern inventions in implements of Husbandry are being introduced, as rapidly as the state of agriculture in this recently settled county will admit of—and we may safely infer that, in a very few years this county will rank amongst the first in point of productiveness, as well as in the system of agriculture adopted, and the means of carrying it on.

We may remark from the experience of the past that our farmers would do well, by giving less attention to the cultivation of wheat and more to the growth of root crops; in this, however, we find a gradual change is taking place—and the large fields of turnips and carrots which we witnessed in several places during the past year, prove that some at

least, are not disposed to depend entirely upon the success of the wheat crop.

The want of a constant market has long been felt in this county, but we trust that ere long our surplus products of every description will find easy access to the best markets in the Dominion, and that our industrious, though ill paid farmers, will be able to hold

their own among the votaries of the different callings in the country.

It is to be regretted that a greater number especially of our farmers do not recognize the society, and give it an earnest support. The liberality of the Legislature in making an annual grant for the encouragement of agriculture is not fully appreciated, nor are the benefits intended to be conferred by these grants fully realized; when the burden of carrying out the great object is thrown upon the shoulders of a few—while many who ought to be equally interested, content themselves in being mere spectators at the exhibitions of the society, without contributing a cent towards its maintenance.

In conclusion, your Directors would urge upon the members of the society, and the farming community in general—the importance, in short the necessity of taking a deeper interest in the workings of the society, and we indulge the hope that your Directors whoever they may be, will during the present year, have the hearty co-operation of the people of this Electoral Division, in furthering the objects of the society, thereby increasing its

usefulness, and tending more fully to secure the great end in view.

Arran.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		43 75	
" 68 Members' Subscriptions		68 00	

To Admissions to Show	\$ cts.	\$ cts. 9 00 116 09	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products	54 75 30 25 9 75 1 50		
" " Agricultural Implements" " " Arts and Manufactures" " " Ploughing Match	17 00 7 00 10 65	130 90	
" Agricultural Publications " Working Expenses		9 25 38 05	178 20
Balance in hand			58 64
Bruce.			
Dr. To Balance in hand Go Members' Subscriptions Legislative Grant	\$ cts.	\$ cts. 76 15 64 46 90 48	\$ cts.
 -0			231 09
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Agricultural Implements " " Arts and Manufactures	66 25 19 25 7 75 7 50 11 70		
Unpaid	112 45 12 75		
" Preparing Show Grounds " Prizes of previous year " Working Expenses.		99 70 11 00 25 79 17 05	153 54
Balance in hand			77 55
			77 00
DR. To Balance in hand	\$ cts.	\$ cts. 2 32 95 00 109 26 43 00	\$ cts.
" Amount received from County Society		43 00	249 58
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures.	66 00 20 00 13 25 15 00 14 25 22 00		210 00
	150 50		
10			

By Unpaid	\$ cts.	\$ cts.	\$ cts.
" Working Expenses		134 75 31 27	
			166 02
Balance in hand			83 56

In presenting a Report of the business transactions of the Society for the past year, it affords your Secretary much pleasure to refer to the satisfactory condition of its finances. At the beginning of the year some difficulty was experienced in getting a sufficient number of persons to pay in their subscriptions in time to entitle the Society to a share in the Government Grant; but by the active assistance of some of the Directors, this difficulty was overcome, and a sufficiency of names obtained to entitle the Society to the handsome assistance of \$109.26 from the Government. In connexion with this matter, it is well to notice a defect in the law, which grants assistance to Societies only in proportion to the number of names on the roll on the 1st of June of each year, whereas those who defer payment until the day of the show are entitled to the same rewards. Parties are thus induced to defer paying in their subscriptions until the last moment, when the prospect of an immediate return of their money in prizes, rather than the welfare of the Society, prompts them to become members thereof. Were all its supporters to act in this manner, it would be impossible to organize the Society in time to secure a share in the Government Grant, without which the Directors could not offer the prizes that now act as a stimulus to the exertions of our agriculturists and manufacturers. The Act organizing our Societies requires amendment in this respect.

Another matter to which your Secretary desires to draw attention, is the fact that whilst the Society is ostensibly an Agricultural one, and is in reality designed by the Legislature as an aid to the industry of farmers, a majority of those who paid in their subscriptions before the first of June, and thereby gave the Society a legal existence, was composed of mechanics and merchants of the village. It is to be hoped that in future our agriculturists will be stimulated to greater exertions in support of the Society, at least to the extent indicated, of paying their subscriptions in time to benefit by the provisions of

the Act.

Saugeen.			
Dr. To Balance in hand " 62 Members' Subscriptions " Admissions to Show	\$ cts.	$\begin{array}{ccc} 12 & 04 \\ 62 & 00 \\ 35 & 09 \end{array}$	\$ cts.
" Legislative Grant		104 14	213 27
By Merged in County Show " Preparing Show Grounds " Purchase of Seed. " Working Expenses.		104 14 50 59 31 00 13 80	
			199 53
Balance in hand			13 74
BRUCE, SOUTH.			
Dr. To Balance in hand	\$ cts.	\$ cts. 29 71 149 75	\$ cts.

20

To Legislative Grant	\$ cts.	\$ cts. 699 12 174 34 40 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Reaping Match " L. G. to Township Societies	243 00 54 00 14 50 10 00 59 50 15 00 26 00	422 00 421 53	đ
"Working Expenses		175 82	1019 35
Balance in hand			73 58
Dr. To 55 Members' Subscription. " Legislative Grant.	\$ cts.	\$ ets. 55 00 44 75	\$ cts.
Cr. By Preparing Show Grounds. " Working Expenses.		81 75 18 00	99 7 5 99 7 5
Note.—The Society held no Show, but devoted its funds grounds to be used hereafter for exhibition purposes.	to the fer	icing of p	
Carrick.			2
DR. To 107 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 125 00 111 87 15 00	\$ cts.
" Municipal Grant			251 87
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	91 50 50 00 8 50 28 50 10 00 27 00	015 50	
" Working Expenses		215 50 16 25 16 00	247 75
Balance in hand			4 12
Culross.		\$ cts.	\$ cts.
Dr. To Balance in hand		50 62 92 00 82 34	224 96

Established Trapels (10. 9).		11. 1	010-11
Cr. By Erections on Show Grounds, &c. "Amount to Show of County Society.		\$ cts. 50 62 174 34	\$ cts.
Note.—The Society united with the County Society in h	olding a l	Fall Show	
		•	
Grenock.			
Dr. To 50 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 50 00 44 75	\$ cts.
Cr.			94 75
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	37 00 18 87 3 75 1 25 5 25 4 63	70 75	
" Working Expenses		16 50	87 25
Balance in hand			7 50
Huron.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand "Members' Subscriptions "Legislative Grant "Proceeds Sale of Seed "Proceeds Sale of Stock "Subscriptions for Ploughing Match "Miscellaneous Receipts	ę cus.	39 31 137 00 93 97 280 45 58 50 57 50 17 00	
Cr.			683 73
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	71 25 19 75 7 75 11 75 9 00 16 25 53 00	188 75	
" Purchase of Live Stock. " Purchase of Seed. " Agricultural Publications. " Working Expenses		240 24 287 89 11 00 60 45	
			788 33

Note—The Directors report that the show of cattle was better than for years past, and that of horses quite unequalled. In consequence of the extreme wetness of the season, grain generally was of inferior quality; but dairy products exceedingly good.

77. 11			
Dr. To Balance in hand " 59 Members' Subscriptions " Legislative Grant.	\$ cts.	\$ cts. 30 98 59 50 43 85	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	41 75 13 75 3 00 1 25 6 50 7 00		-
Unpaid	73 25 16 00	57 25 4 25 47 51	109 01
Balance in hand			25 32
Kinloss.			
Dr. To 106 Members' Subscriptions "Admissions to Show Cr.	\$ cts.	\$ cts. 106 00 30 50	\$ cts.
By Balance due Treasurer. " Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	57 00 29 75 7 25 4 50 21 75 27 25	3 94	
" Preparing Show Grounds		147 50 10 50 28 00	189 94
Balance due Treasurer			53 44

Note.—It appears that the returns of this Society not having been sent to the County Society in proper time, its proportion of the Legislative Grant was withheld.

CARDWELL.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		117 05	
" 178 Members' Subscriptions		178 00	
" Admissions to Show		145 10	
" Legislative Grant		700 00	
· ·		1	,140 15

_				
By	Cr. Prizes for Live Stock	\$ cts. 145 00	\$ cts.	\$ cts.
"	" Field Products	44 75		
46	" Dairy "	8 00 8 50		
66	" Agricultural Implements	32 90		
"	" Arts and Manufactures	30 45	269 60	
66	" of previous year		1 25	
"66	L. G. to Township Societies		420 00	
"	Preparing Show Grounds		$ \begin{array}{ccccccccccccccccccccccccccccccccccc$	
44	Working Expenses.		48 32	
				1,140 26
	Balance due Treasurer		_	11
T_{α}	Dr. Balance in hand	\$ cts.	\$ cts.	\$ cts.
"	82 Members' Subscriptions		31 33 83 00	
66	Admissions to Show		3 00	
66	Legislative Grant		99 28 7 50	
				224 11
D.,	CR. Paiges for Live Steels	00 00		
Dy "	Prizes for Live Stock "Field Products	80 00 41 00		
66	" Dairy "	29 50		
"	" Horticultural Products	$\begin{array}{ccc} 3 & 00 \\ 10 & 25 \end{array}$		
66	" Arts and Manufactures	10 50		
		154.05		
	Unpaid	174 25 79 00		
,,			95 25	
66	" of previous year		$\begin{array}{ccc} 2 & 00 \\ 14 & 96 \end{array}$	
	The state of the s			112 21
	Balance in hand			111 00
	Datance in hand			111 90
	Albion.			
m.	DR.	\$ cts.	\$ cts.	\$ cts.
10	Balance in hand		99 86	
**	Admissions to Show		33 60	
66	Legislative Grant		76 89 40 00	
66	" County of Peel		$\frac{40}{22} \frac{00}{75}$	
66	Miscellaneous Receipts		15 70	070 00
	Cr.		***************************************	378 80
	Prizes for Live Stock	102 00		
"	" Field Products	$ \begin{array}{cccc} 19 & 50 \\ 5 & 25 \end{array} $		
46	" Dairy "	16 00		
	24			

By Prizes for Agricultural Implements	\$ cts. 38 00 30 75 18 00	\$ cts.	\$ cts.
Unpaid " " for previous year " Working Expenses	229 50 39 50	190 00 38 00 45 70	
			273 70
Balance in hand			105 10
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand	Î	156 13	
" 167 Members' Subscriptions		167 00 148 71 156 61	
" Legislative Grant" County Grant		28 25	
" Miscellaneous Receipts		9 05	002 82
CR.	160 75		665 75
By Prizes for Live Stock	50 75		
" " Dairy "	16 50	-	
" " Horticultural Products	12 50 30 50		
" Agricultural Implements	64 63		
		335 63	
" Last year		$\frac{1}{10} \frac{00}{30}$	
" Preparing Show Grounds " Working Expenses		125 39	
Holking Dapenses			572 32
Balance in hand			93 43
Mono.	0 .4.	© ota	c ata
Dr. To Balance in hand	\$ cts.	\$ cts.	\$ cts.
" 89 Members' Subscriptions		93 00	
" Admissions to Show		66 35	
" Legislative Grant		87 25	307 27
CR. By Prizes for Live Stock	115 00		
" " Field Products	45 00		
" " Dairy "			
" " Agricultural Implements	27 00		
" " Arts and Manufactures	23 75	021 50	
" Preparing Show Grounds		231 50 $10 50$	
" Working Expenses		42 15	
0 1			284 15
Balance in hand			23 12

Note.—The Fall Show indicated improvement in some departments, particularly in 25

horses, cattle and sheep; but in poultry and pigs, as also grain, it was not equal to some previous years.

CARLETON.

	Dr.	\$ cts.	\$ cts.	\$	ets_
To	125 Members' Subscriptions	*	340 00		
66	Admissions to Show		138 40		
66	Legislative Grant		700 00		
66	Municipal Grant		125 00		
66	Special Subscriptions		582 50		
44	Miscellaneous Receipts		140 00		
	•			2025	90
	Cr.				
$\mathbf{B}\mathbf{v}$	Balance due Treasurer		168 58		
č.	Prizes for Live Stock	508 00			
66	" Field Products	135 00			
44	" Dairy "	67 00			
44	" Horticultural Products	52 00			
66	" Agricultural Implements	67 88			
66	" Arts and Manufactures	188 00			
66	" Ploughing Match	130 00			
"	" Growing Crops	161 00			
	8 1		1308 88		
46	Preparing Show Grounds		92 28		
64	L. G. to Township Societies		377 88		
66	Agricultural Publications		35 00		
66	Working Expenses		225 18		
				2207	80
	70.1				
	Balance due Treasurer			181	90

REPORT.

The President and Directors beg to lay before the members of this Society, a report

of the Exhibition held under their auspices last autumn.

In so doing, we cannot but congratulate the members on the marked improvement which has taken place in the Exhibition of 1869, as compared with former ones—chiefly conspicuous in the number of entries made, excellence of the stock and produce shown, and in the number who visited the fair grounds. The crop-viewers' report already published, showed that they had made two visits of inspection during the past season, instead of one, as formerly. In this way some additional expense was incurred, but greater justice was done to competitors. Messrs Patterson and Gourley performed their work carefully and well. Their report showed that a much greater breadth of grain had been sown than usual, and that with very few exceptions, it looked exceedingly promising. The hay crop was reported as a very heavy one. Oats, barley, and other grains, corn excepted, promised well. * * * * * As regards the entries made for the past few years, the following will give some idea of how we have progressed.

In 1865, the books show but 343; in 1866, 406; in 1867, 450; in 1868, 540; and

in 1869, 831.

It will thus be seen that competition has been steadily increasing, the past season

being far in advance of any previous one.

The municipal Council of Nepean handsomely voted the Society from its funds \$100, and the Council of Goulburn, \$25. The Honorable J. Skead still continues to act with exceeding liberality towards this Society. This year his contributions amount to nearly \$100. A. Gilmour, Esq., a regular and liberal patron of this Society, gave the gold medal,

and J. Holmes, Esq., M. P., a silver one, both medals, with Mr. Archibald's plough, being awarded at the ploughing match.

With reference to the display made in the different departments, it may not be out

of place to mention a few of the leading features :-

Horses of all classes were well represented. The stock horses were very superior; and amongst those shown, Mr. John Clark, Jr., (who has done so much in this and adjoining counties for the improvement of stock,) exhibited five superior animals. The carriage teams, including those of A. Gilmour, Esq., and J. D. Slater, Esq., were much admired.

The first prize was taken by Mr. Kemp. Brood mares, both for draught and saddle, were considered good. The draught teams could not well be excelled. The first prize

pair belonged to J. B. Lewis, Esq.

Horned cattle were also of excellent quality, both grades and thorough-breds. Mr. Lewis was the chief exhibitor in Durhams. Hon. Mr. Skead sent a full herd of Galloways, and Messrs. J. and W. Thomson, a fine Durham bull—first prize taken in two classes. Some fine grade cattle were also shown by the Messrs. Thomson, Mr. Lewis, Mr. Robertson, and others already mentioned in the prize list.

Sheep.—Chiefly Leicester and South Downs, were well represented. The new pens were found just the thing for this class of stock; as also swine, which for the first time for several years, appeared upon the ground. The show of the latter was not numerous,

but the specimens were good.

Farming Implements.—The show in this department was the finest yet made on the ground. The best display was by Mr. Robertson, whose implements are of the most improved description, and his assortment the largest probably in the county. Some good

waggons and carts were also exhibited.

The Hall.—The first feature in importance was, perhaps, the display of woollen goods, and articles of home manufacture, exhibited by the ladies. It was agreed on all hands to be the finest collection yet shown in the hall. The dairy department was a marked feature. In butter alone there were 57 samples, separated into three classes, the better to award the prizes, which were numerous and liberal. Fruit was also largely shown, one individual alone having on view 27 varieties of apples from his orchard in Nepean. The chief exhibitors were the Messrs. Thompson, and Mr. R. Traveller, of Nepean, and Mr. H. Gourley, of March. Of produce, a very fine display was made. Fall wheat was plump and well filled—Spring wheat not being so uniform in quality, however. Oats grown on high soil, were of a very fair description, but from low lands, they were in some cases badly filled. In the other grains there was nothing remarkable. The roots were very good—perhaps scarcely equal, however, to the display of 1868—the best of many years. Every available spot was taken up with the samples, which were far more numerous than had ever before been placed in the Agricultural Hall. Some very excellent samples of harness, leather, boots and shoes, &c., &c., were also displayed in the Hall, exhibitors coming from the distance of Ashton and Ottawa.

March.

Dr. To 25 Members' Subscriptions " Legislative Grant.	\$ cts.	\$ cts. 80 00 109 69	\$ cts.
C _R			
By Prizes for Live Stock	90 25		
" " Field Products	21 15		
" " Dairy "	9 30		
" " Growing Crops	$23 \ 25$		
" " Ploughing Match	23 70		
<u> </u>		167 65	
" Working Expenses		22 04	
0 1			189 69

Fitzroy.			
DR. To Balance in hand	\$ cts.	\$ cts. 18 69 95 50 135 00 5 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " " Ploughing Match " " Growing Crops.	95 75 27 00 14 50 17 75 4 50 33 75 24 00 43 50 260 75		201 IJ
Unpaid	41 25	219 50 26 00	245 50 8 69
Huntley.			
Dr. To Balance in hand "Members' Subscriptions "Legislative Grant Cr.	\$ cts	\$ cts. 3 00 100 00 130 70	\$ cts. 233 70
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures. " " Growing Crops	82 46 44 10 11 76 2 94 10 50 11 76 52 93	216 45	
" Working Expenses.		17 25	233 70
CGRNWALL.			
Dr. To Balance in hand " 105 Members' Subscriptions " Legislative Grant Cr.	\$ ets.	\$ cts. 161 63 134 00 350 00	\$ cts.
By Prizes for Live Stock. " " Field Products " " Dairy " 28	97 50 49 75 9 50		

Ву	Prizes for Horticultural Products	12 00	\$ cts.	\$ cts.
66	" Agricultural Implements	10 50		
66	" Arts and Manufactures	38 35		
66	" Growing Crops	$72 \ 00$		
"	Preparing Show Grounds Purchase of Live Stock Prize previous year Working Expenses.		289 60 44 00 104 36 1 00 96 14	F9F 10
	Balance in hand			$\frac{535\ 10}{110\ 53}$

Note.—The Report speaks encouragingly of the state and prospects of the Society, and also of the various manufacturing industries of the Division. Crops generally had been good, both as regards quality as well as quantity. A ploughing match was held during the year, the expenses of which were met by special subscriptions, which are not entered in the Society's accounts.

DUNDAS.

Dr. To Balance in hand " 330 Members' Subscriptions " Admissions to Show " Legislative Grant " Proceeds Sale of Booths		50 00 331 25 247 85 700 00 96 50	\$ et	
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " L. G. to Township Societies " Preparing Show Grounds " Working Expenses.	246 50 54 86 13 46 28 25 43 73 51 44	438 24 382 58 308 06 163 12	1292	

REPORT.

Your Directors beg leave to lay before the meeting the financial statement and Treasurer's account for the past year, and are pleased to find the finances are now in so favorable a condition. From the heavy outlay in building, fencing grounds and other expenses the Society has been for some years encumbered, and it affords your Directors much gratification to find that, after payment of all liabilities, expenses, or claims against the Society, a balance in the Treasurer's hands, which has not been the case for some years.

The exhibition this year was favorable, and though, from the unfavorable weather on the first day of the exhibition, the receipts at the gates were not as large as they would have otherwise been, still on the whole they exceeded the expectations of your Directors.

The show of grain and root crops exceeded any former year. The display of stock was an improvement, as were also dairy products and domestic manufactures. But your Directors above all were impressed with the marked improvement in agricultural implements.

Your Directors cannot but be thankful for the bountiful harvest, and trust that the farmers generally appreciate the kindness thus bestowed on them by Providence.

	Matilda.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
To	66 Members' Subscriptions		66 00	
	Legislative Grant Proceeds Sale of Live Stock.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	Proceeds Safe of Live Stock		42 00	155 50
	Cr.			105 00
By	Balance due Treasurer		00 71	
ii.	Prizes for Live Stock.	40 75		
"	" Field Products	13 25		
"	" Dairy "	$\begin{array}{cc} 2 & 00 \\ 10 & 25 \end{array}$		
66	" Arts and Manufactures	11 50		
	21100 00100 120000000000000000000000000		77 75	
66	" of Previous year		$12 \ 25$	
46	Purchase of Live Stock		45 50	
66	Working Expenses		22 00	150 01
				158 21
	Balance due Treasurer			2 71
			,	
	Mountain.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
	Balance in hand		35	
66	54 Members' Subscriptions Legislative Grant		77 00 70 00	
cc	Miscellaneous Receipts		6 55	
	20004			153 90
	Cr.			
By	Prizes for Live Stock	60 00		
"	Field I foddets	$\begin{array}{cccc} 21 & 00 \\ 6 & 00 \end{array}$		
66	" Dairy "	3 70		
46	" Arts and Manufactures	15 60		
			106 30	
66	Working Expenses		28 45	
				134 75
	Balance in hand			19 15

REPORT.

The Officers and Directors of the Mountain Agricultural Society, in presenting their Annual Report, have nothing of importance to transmit in advance of any other Township in the County. The farm products have been far in advance of last year as far as plenty is concerned, but the quality is not as good as in some former years. As a Township we suffer most from disease in the potato crop. The Annual Fair was largely attended, but there is not interest enough taken in the matter by our farmers and mechanics, so as to make it what the Government intend it to be. As a general rule self-interest is first consulted, and not public advancement; this we deplore. The unsettled state of the weather

A. 1870-71

Williamsburgh.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		284	
" 138 Members' Subscriptions		138 00	
" Legislative Grant		125 00	
" Proceeds Sale of Bags		11 90	
A			277 74
Cr.			
By Prize Ploughing Match.	26 50		
" Purchase of Live Stock	70 50		
" Black Sea Wheat	141 53		
" Working Expenses	10 24		
			248 77
Balance in hand			28 97

Note.—The Society appears to be in an efficient state. Seventy bushels of imported Black Sea Wheat had been purchased and distributed, in small quantities, among the members for experimental purposes. The results as far as had been ascertained were favorable, the yield being generally abundant and of good quality. Improved arrangements had been made for distributing live stock, for the advancement of breeding, so as to extend the benefit more equally over the Township, and also to secure the keep of the animals without drawing on the funds of the Society. The Annual Ploughing Match in the Fall was well attended, and the competition greater, and the work better performed than on previous occasions.

Winchester.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		94 68	
" 189 Members' Subscriptions		214 00	
" Legislative Grant		140 00	
" Proceeds Sale of Live Stock		28 00	
" Miscellaneous Receipts		2 00	
A			478 68
CR.			
" Prizes for Live Stock	168 55		
" " Field Products	15 50		
" " Dairy "	8 50		
" " Horticultural Products	75		
" " Agricultural Implements	18 00		
" " Arts and Manufactures	33 50		
" " Ploughing Match	24 00		
·	268 80		
Unpaid	18 75		
		250 05	
" Preparing Show Grounds		$21 \ 15$	
" Purchase of Live Stock		31 00	
" Prizes of previous year		10 00	
"Working Expenses		53 34	
			365 54
Balance in hand			113 14

It is with pleasure that the Directors can report an increasing interest in the Society. Our books show an increase in entries and membership. Our annual exhibition was the largest ever held in the township, and the spirited competition in the various departments was an indication of the increasing attraction of the show. The stock shown this year is in excess, not only in quantity but in quality, of anything brought out at any of the preceding fairs. There was an excellent display of fat cattle on the ground. In wheat, corn and oats the samples were splendid. Roots; in this department there was a considerable number of entries, and the quality was excellent. The competition in dairy produce was also good. The close competition in the article of butter is causing more care and attention to be devoted to the making and curing of it.

It is gratifying to the Directors to be able to state that the debts of the previous year have been liquidated, and those incurred under the present Directors promptly paid,

leaving a balance in the Treasurer's hands. * * *

We would respectfully state our convictions, and presume that every member of this Society will coincide with us, that the introduction of an Agricultural Society in this Township has been productive of much good, and has materially assisted in promoting both agricultural and mechanical operations.

DURHAM, EAST.

Dr. To Balance in hand " 50 Members' Subscriptions. " Admissions to Show " Legislative Grant. " Sale of Seeds " Appropriation of Hope Society.	\$ cts.	103 35 50 00 230 12 700 00 13 50 152 74	\$ cts
Cr. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures. " L. G. to Township Societies " Working Expenses.	278 00 51 25 17 00 53 75 53 41 153 50	606 91 420 04 153 63	1180 58
Balance in hand			69 13

REPORT.

The Directors, in presenting their Annual Report of the Transactions of the Society for the past year, take this opportunity to thank the friends and patrons of the society for their support and co-operation. Your Directors are more and more impressed with the advantages attached to these institutions, believing they are well calculated to render great assistance to those who desire to improve their stock of horses, cattle, sheep, pigs, poultry, &c., as well as to give additional facilities for the improvement of agricultural productions in general. Agricultural societies have been the means of bringing farmers together, and their exhibitions have afforded opportunities for observation, and have

proved to demonstration what the country is capable of producing; and created a spirit of emulation amongst agriculturists that would never have existed had it not been for those

interesting gatherings.

The circumstances of the country, and the increasing burdens on the landed interest, call for increased exertions on the part of those engaged in agriculture; and how can they better meet those demands, than by uniting together and consulting each other on the business in which they are engaged. There are men to be found in this Province—and amongst the farmers too—who are bold enough to assert that agricultural associations have effected no good whatever in the community; others acknowledge their usefulness, but refuse to render any support in return for benefits received. While your Directors are thankful that they have been enabled to bring the operations of the society to a successful issue for another year, they feel that the society has not received that hearty support to which it is entitled, especially from that part of the community which it is most calculated to benefit. At the same time they desire to tender their thanks to those subscribers who are not directly connected with agriculture.

The Exhibition held at Port Hope in October last, was a United Exhibition of the East Durham and Township of Hope Agricultural Societies.—the Township appropriating all their available funds for this purpose. By this arrangement a much larger amount was offered in premiums than could have been by the County Society alone. This plan of holding union exhibitions has been successfully carried out for some years past with Hope and Cavan, alternately, and has given general satisfaction. It was inaugurated by the friends of the Society with the idea that it would extend its usefulness more generally, and we think that those hopes have not been disappointed. The Exhibition of last Fall—to use a common expression—was a success. The attendance was large, as shown by the receipts at the door, and the competition in most of the classes was quite spirited. In the class of Durham cattle the competition was not great. The Devons were well represented. Nathan Choate, Esq. exhibited a very fine herd of those beautiful and useful cattle. A few Ayrshires were exhibited by A Choate, Esq., who, we believe, intends breeding them extensively. A number of Durham and Devon grades were on exhibition

Of sheep, the long wools predominated. The competition in this class was very great. Southdowns and Merinos were exhibited chiefly by N. Choate, Esq. The show of pigs was small, but there were some good specimens of Berkshires. The poultry department was much larger than usual; Mr. Wm. Simpson being the chief exhibitor. The show of grain was good, and the dairy produce very superior; the butter was of the very best quality; also the cheese. The Hope cheese factory, and Mr. Thos. Agar's factory, were represented, the former taking the first prize. Domestic manufactures were numerous, and of good quality.

McNaughton & Co., of Port Hope, made a good show of cloth, blankets, flannel, &c. The ladies of Port Hope and the East Riding of Durham maintained their reputation in the exhibition of fine arts, needle work, &c. The apples, pears, plums, grapes, peaches, &c., were excellent, and the roots and vegetables very large, and of fine quality. Some splendid boots were on exhibition, by Messrs. Hamly and Oliver. The flowers of Messrs. Smart, Mitchell, and others, had a very pleasing effect, combining the beautiful with the useful. Altogether, the exhibition in the extensive drill shed, especially on the second

evening of the show, looked quite charming. * * * * *

As it is expected by the Bureau of Agriculture that all Agricultural Societies report on the improvements which are taking place within their respective limits, from year to year, we are pleased to observe that great improvements are taking place in our Riding with respect to the mode of cultivating the land, and in the amount of produce; while there is still a good deal of what is called bad farming, and over-cropping. The majority

of our farmers have made rapid strides during the past few years.

A large number of labour-saving machines are being introduced from year to year, as the farmers find it impossible to perform the required amount of work without them. The amount of land under turnips and other root crops has increased four-fold during the last few years, and the amount of beef and mutton has increased in the same ratio. This, we suppose, has, in a great measure, resulted from the failure of the fall wheat in this section

of the country, added to the ravages of the midge in the spring wheat. Turnips and ba ley are taking the place of wheat, in a great measure. The manufacture of cheese is car ried on somewhat extensively in this Riding. Two years ago, a joint stock company was formed in the Township of Hope (near Port Hope), for the manufacture of cheese and butter. The results are, so far, encouraging. The milk of about three hundred cows was made into cheese during the past summer, and it is the intention of the shareholders to extend their operations the coming summer. There are several what may be termed domestic factories in the Townships of Hope and Cavan.

We are also pleased to note an increase in the manufacture of woollen goods, within our Riding. McNaughton & Co. of Port Hope, whose goods attracted so much attention at our late Exhibition, are doing a good business, and Mr. Dyer, (late of Orono), has erected extensive buildings in the seventh Concession of Hope, near Perrytown, for the manufacture of woollen fabrics. A great portion of the rear of the Township of Hope was covered with pine, and as those pine forests become denuded, the saw mills which were erected for the manufacture of lumber, are falling into disuse; but these old sites afford rare facilities for the erection of factories. Mr. Dyer's factory is built on one of those old saw mill sites. Mr. James Elliott has, during the past year, erected a large grist mill on a site formerly occupied by a saw mill. There are a number of sites in this Township, which could be had at reasonable prices, affording the very best opportunity for the erection of factories, for our water power is almost unlimited, and the roads are good. The flouring mills in the Riding are capable of manufacturing immense quantities of flour, and do already turn out large quantities, as will be seen by the exports.

Mr. Beamish manufactures sixty thousand barrels of plaster annually, which is used partly in the Riding, and the balance sent to Peterborough, and surrounding country. There is another branch of industry which is carried on much more extensively than some people have any idea of, it is the manufactory of Mr. Craig, where seventy thousand sheep skins are plucked annually, and the pelts manufactured into leather. There is a button factory at Port Hope, and likewise a glue factory, which produces about sixteen thousand pounds of glue annually, and also a broom factory; and we have iron foundries, implement shops, &c. We now come to our harbour and railroad, and shall endeavor to show

the amount of exports of live stock, farm produce, &c., for the year 1869 :-

Farm Produce Exported from the Port Hope Harbour and forwarded by the Grand Trunk Railroad at Port Hope for the year 1869.

Flour	105,260	Barrels.
Wheat	195,274	Bushels.
*Barley	202,798	Do.
Peas	19,818	Do.
Other Grain	2,749	Do.
Flax	30	Tons.
Bran	773	Do.
Oatmeal.	89	Barrels.
Pot Ash	35	Do.
Cheese	84,810	Pounds.
Butter	496.870	Do.
Do	656	Kegs.
Fruit	91	Barrels.
Wool	29	Tons.
Eggs, Pork and Fish	100	Barrels.
Pork	1,848	Do.
Hogs—Live	373	
Hogs—Dead	1,473	
Sheep and Pigs	3,175	
Sheep	459	
Horses	140	
Cattle	2,127	
Cault	-,1-1	

^{*} Owing to the price of Barley being higher in Cobourg than in Port Hope, about 22,000 bushels were exported from that place, which otherwise would have been forwarded from Port Hope.

34

A. 1870-71

In reviewing the results of the labors of the past year with regard to our Society, as well as to the labor of the husbandman in general, we feel that there is much cause for thankfulness. It is true that the toils of the husbandman, owing to the great fall in the price of grain, and the loss of a portion of the apple and turnip crops by unusually early frosts, will not be so well remunerated as in some former years, yet there is no scarcity or want.

Looking to the future operations of the Society, we desire to be speak for it a more hearty support than it has received in the past, especially from those who are immediately concerned in its prosperity. We cannot refrain from expressing the opinion that too much selfishness prevails amongst the members of Agricultural Societies, that instead of coming forward freely to promote their interest, they have to be solicited as if you were asking them for alms, and before they subscribe their dollar they have to make the calculation what they are likely to get in return.

Our Societies during the past year were much injured by the advance in price of our agricultural periodicals, and we are glad to perceive that the publishers of the *Canada Farmer* have reduced it to something like the former cost. We hope this year that our Township Societies will be well sustained, as they have determined to give this periodical

to their members gratuitously.

We conclude this report by hoping that the Directors of the Society for the current year will be enabled to extend their operations, and that their object will be to encourage improvement in agriculture by the circulation of periodicals; the holding of meetings for the discussion of subjects relating to the theory and practice of improved husbandry; importing or otherwise procuring new varieties of seeds, plants and animals. And we think it would be well if the Directors would pay more attention to the subject of manures; this is becoming the great want of the Canadian farmer. Our land is becoming exhausted by the constant growing of grain crops, and we have not the means of restoring what is abstracted by this system. Our climate is not favorable for keeping stock and growing green crops extensively, as in some parts of Europe, where large quantities of manure are made by this means.

With the low price of grain, which is likely to continue for some time to come, and the present prices of butchers' meat and dairy produce, more stock will be kept and less grain sown, as our surplus stock finds a good market across the lines, notwithstanding the high import duties imposed by the American Government. Our long wool sheep are in great demand by the Americans, and will be a profitable branch of husbandry in Canada

for some time to come.

Cavan.			
DR. To Balance on hand " 154 Members' Subscriptions. " Admissions to Show " Legislative Grant.	\$ ets.	\$ cts. 79 34 182 25 83 30 172 40	\$ cts.
Cr. By Prizes for Live Stock	151 75 28 75		
" " Dairy "	4 75		
" " Horticultural Products	21 00		
" " Agricultural Implements	$ \begin{array}{ccc} 16 & 50 \\ 52 & 50 \end{array} $		
Arts and Manufactures		275 25	
" Preparing Show Grounds		5 59	
" Agricultural Publications		120 65	
" Working Expenses		40 75	442 24
Balance in hand			75 05

Hope.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		3 11	
" 90 Members' Subscriptions		118 00	
" Legislative Grant		108 58	
Cr.			229 69
By Appropriation of Funds to County for Union Exhibition.		152 74	
" Agricultural Publications		38 25	
" Working Expenses		38 70	
		-	229 69

The Directors of the "Hope Branch Agricultural Society," on retiring from office,

beg leave to report:

That the Dominion Parliament having imposed a postage on Agricultural Journals, the proprietors of the "Canada Farmer," made a corresponding increase in the price of their paper—the effect was such, that many old subscribers who had been members for several years, declined to pay the advanced rate, and ceased to be members of the Society. This will account for the small number of ninety names being recorded on the Secretary's books as members for the past year.

The Directors, however, are happy to report, that from circulars received by the Secretary, and which will be laid before you, the price of Agricultural papers are reduced to about their former price, and they have no doubt, will produce a very favorable influence on the operations of the Society during the present year, by a large increase of subscri-

bers.

They would impress on their successors in office, the necessity of making a diligent canvass in their respective neighbourhoods as soon as possible, in order that the members may receive their papers from the beginning of the year, and that an increased interest may be given to the business of the Society.

The Exhibition held last Fall, was in union with the County Society, and was very

successful.

Dairy

Horticultural Products......

The Directors regret, however, to report that several irregularities have been practised by parties from whom better might have been expected, by making entries of property which did not belong to them; and in other cases exhibiting produce not raised by the exhibitor. A continuance of such practices, would have a ruinous effect on the Society, and every means should be adopted to expose parties guilty of such an infraction of

It has been suggested that a resolution should be passed, forbidding the Treasurer to pay any premiums until the expiration of one month from the time of the Exhibition; this would afford an opportunity to the Officers of the Society, to find out cases of violation of the rules, and reporting them to the Treasurer, so that the premiums awarded might be forfeited.

Manvers.

"	Dr. Balance in hand. 52 Members' Subscriptions. Admissions to Show. Legislative Grant.		\$ cts. 59 55 55 00 27 11 47 62	
ćć	CR. Prizes for Live Stock	74 50 12 25		

4 25

9 00

By Prizes for Agricultural Implements " " Arts and Manufactures. " " for previous year. " Agricultural Publications " Working Expenses	\$ cts. 1 00 15 25	\$ cts. 116 25 3 00 6 00 37 05	\$ cts.
Balance in hand			26 98
PORT HOPE HORTICULTURAL SO	CIETY.		
Dr. To 102 Members' Subscriptions. "Admissions to Show "Legislative Grant. "Miscellaneous Receipts Cr.	\$ cts.	\$ cts. 102 00 46 53 91 44 8 50	\$ cts.
By Prizes for Fruit " " Flowers and Plants " " Vegetables " " Natural History, Ladies' Work, &c. " Preparing Exhibition Rooms " Working Expenses	19 75 58 50 31 00 28 75	138 00 8 55 60 30	206 85
Balance in hand			41 62

Your Directors have to congratulate you upon the pleasing fact that the success that has attended the efforts of the Society in this the first year of its existence, has been all that could reasonably have been expected—especially in view of a previous failure. The membership list contains the names of one hundred and two bona fide paid up subscribers, (the result principally of one gentleman's exertions) and we have no hesitation in saying that with proper efforts, this list could have been increased at least fifty per cent. Let us hope that the attempt to do so will be made for the coming year, and that a goodly number of gentlemen connected with the Society, will form themselves into a committee to canvass our citizens in a systematic manner for their subscriptions. The object to be attained is certainly worthy the effort. By this means our Society can be made much more efficient, and at the same time serve the object for which it was created, by enlisting the sympathy and co-operation of each individual in matters horticultural.

The past season, though somewhat backward hereabouts, was very favorable to the rapid growth of vegetables, and, generally speaking, to the culture of flowers and plants, the perfection to which that prince of flowers, the Dahlia, attained, being truly remarkable. In consequence of the backwardness of the season, the exhibitions were held rather later than would otherwise have been advisable. In all such matters, however, the Socion

ety's Directors will be guided from year to year by the force of circumstances.

During the past year two exhibitions have been held under the auspices of your Society—one, the summer exhibition, on the 15th day of July, and the other, the fall exhibition, on the 21st day of September. The entrance fee to these exhibitions was the small sum of ten cents, and one-half that amount for children. The receipts at the door for the first exhibition came to \$19.93, and for the second, to \$26.60, thus showing a

moderate increase in the interest taken by the public in the affairs of the Society. The increase in the number of entries of articles for the exhibition was still more marked; but this is in a great measure to be accounted for by the fact that in the second prize list there were a greater number of prizes and larger premiums than in the first. At the first exhibition there were only some 130 entries, and at the last there were over 300; while the prize money stood as \$40.50 to \$97.50. We allude to these matters in order to show that the Society is growing in favor with the community.

As the members of this Society are aware, our efforts at creating and cultivating a taste for flowers, have this year been confined to holding exhibitions and offering premiums, no part of our funds having been expended through the other channels specified by the statute under which we are acting. As the first year's business was of necessity experimental rather than otherwise, anything more was hardly to have been expected. But now that we have succeeded so well in what we have undertaken, the question naturally arises—would it not be well for the Society to encourage the culture of flowers and plants by procuring some horticultural journal for the members, the same as is done by Agricultural Societies; or might not something be done in the way of introducing rare varieties of seeds through the medium of the Society's officers? Your Directors respectfully submit these matters for the consideration of this annual meeting.

In conclusion, your Directors would merely remark for the encouragement of our friends, that the increase in the demand for, and sale of plants, flowers, &c., during the past half dozen years, has been such as to astonish gardeners and others engaged in the culture of flowers and plants, and is in itself a good guarantee for our continued prosperity as a Society. While a taste for the beautiful remains, so long have we need

for the Port Hope Horticultural Society, and no longer.

DURHAM WEST.		
Dr. To Balance in hand. "Members' Subscriptions. "Admissions to Show "Legislative Grant. "Subscriptions for Ploughing Match "Miscellaneous Receipts Cr.	\$ ets.	\$ cts. \$ cts. 201 93 92 00 274 25 700 00 28 00 10 50 1306 68
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	341 00 46 50 33 00 47 00 55 00 103 25 116 00	
" L. G. to Township Societies. " Preparing Show Grounds " Working Expenses		741 75 364 68 57 25 41 61 ———————————————————————————————————
Balance in hand		101 39

REPORT.

Your Directors have pleasure in tendering you their congratulations on this the 38th annual meeting of your Association.

The operations of the year require but little remark. The past year was one of general prosperity. Perhaps in no former year were the crops so plentiful within the

bounds of your Society's jurisdiction; but the fact that the plenty enjoyed by ourselves has been shared by those who are the purchasers of our surplus productions, has kept the prices very low, as compared with former years; and the sudden and severely cold weather, at a much earlier period than usual, quickly blasted the cherished hopes of months with regard to the fruit and root crops, a very large proportion of which were thus utterly destroyed; still we have enough and to spare, and it would ill-become us to feel envious that others are similarly favored. Kind Providence has showered His blessings upon us, and we have enjoyed them unmolested. It is true the year was not entirely free from apprehension from the ruffian band still existing in large numbers across the lakes, who look with envious eyes on the fruits of our industry. But these, with the other evil results of late the deadly struggle among our neighbours, will disappear as matters gradually assume their normal condition. As agriculture and commerce-twin sisterscan only thrive and expand under the fostering hand of peace, it is devoutly to be hoped that all irritating questions existing between ourselves and the nation with which we are most intimately connected, may be speedily and amicably adjusted, and a reciprocal system of trade established that shall be mutually beneficial.

The operations of this Association for the past year will compare favourably, your

Directors think, with those of any former year.

Your Directors made arrangements for a Ploughing Match, in a central locality, on the 27th April. The day was necessarily late, and the farmers very busy in consequence of the lateness of the season, still the respectable sum of \$116, which, including the liberal donation of \$50 from Mr. Blake, your Directors were enabled to offer in prizes, secured a spirited competition. Your Directors believe that a reasonable sum can be expended in no better way than by fostering a spirit of emulation in regard to this most important

item in successful agriculture.

The Fall Exhibition was a most successful one, notwithstanding the day proved unfavourable. The competition was spirited in nearly all the classes, there having been no less than 92 entries of horses, 109 of cattle, 103 of sheep, 26 of pigs, 20 of fowls, 40 of implements, 28 of dairy produce, 128 of fruits, 132 of vegetables, and 338 of domestic manufactures and ladies' work, making in all over 1,000. The amount of prizes paid exceeded by about \$100 that of any former year, and was about double the amount paid four years ago. The receipts for admission to the grounds, notwithstanding the day was very unfavourable, reached the respectable sum of \$274.25. It is gratifying to report that after paying the largely increased amount of prizes, and meeting all other engagements of the Society, your Treasurer has the respectable balance of \$101 in hand.

Your Directors are glad to be in a position to inform you that all the branch societies in connection with this Association are also in a most prosperous state, and with fairer

prospects than ever before.

Your Directors cannot close this Report without briefly referring to an enterprize, which, though not under the special supervision of this Society, is one well worthy, from its importance and its location within the Riding, of mention here. They refer to the Piscicultural operations of their colleague in the directorship, and for many years a promi-

nent member of this Association, Samuel Wilmot, Esq.

The object which Mr. Wilmot proposed to himself is one which, if successful, will prove of incalculable value to the people of this country; and the zeal and perseverance he has evinced in the prosecution of his new and difficult undertaking is worthy of all praise. Your Directors are happy to learn from Mr. Wilmot's Report to the Government—a paper of great interest and value—that he is sanguine of success, It appears that in the fall of 1866, when Mr. Wilmot commenced his operations, some half dozen salmon were all that could be procured for manipulation. Several members of this Association must have a pleasant recollection of the success of his first experiment, exhibited to them at their succeeding annual meeting. Last fall matters had so far improved, that some 700 adult salmon and gulse frequented the stream where his operations are carried on, besides some 80,000 young fry of the previous year's brood. Mr. Wilmot was also enabled to procure and lay down in his hatching room nearly half a million of eggs, the greater portion of which will (unless some unforeseen accident occurs) be hatched out next April. It is gratifying to notice that Mr. Wilmot's efforts are beginning to attract the notice they

deserve, and your Directors earnestly commend his enterprise to the Government, as well worthy of its encouragement and support.

Cartwright.			
Dr. To Balance in hand " 141 Members' Subscriptions. " Legislative Grant	\$ cts.	\$ cts. 66 00 158 00 98 70	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures.	104 50 18 75 8 00 6 50 3 00 35 75	176 50	022 (0
" Preparing Show Grounds " Working Expenses	6-	15 00 39 50	231 00
Balance due Treasurer			8 30
Clarke.			
Dr. To Balance in hand. "143 Members' Subscriptions. "Admissions to Show. "Legislative Grant. "Municipal Grant.	\$ cts.	\$ cts. 36 07 165 00 100 35 98 70 70 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures. " Prizes for previous year. " Preparing Show Grounds. " Agricultural Publications. " Working Expenses.	121 75 12 50 9 50 13 25 30 50 45 85	233 35 14 00 19 75 107 80 34 80	410 14
			409 70
Balance in hand			60 42

Note.—The Report speaks encouragingly of the progress and general usefulness of the Society, and the increasing support it receives from the inhabitants of the flourishing Village of Newcastle, as well as from other parts of the Township.

	Darlington.			
	$\mathcal{D}_{\mathcal{R}}$.	S cts	S cts.	S cts
To	Balance in hand	Q 0000	85 17	φυσι
66	186 Members' Subscriptions.		243 00	
66	Admissions to Show		342 00.	
	40		342 00,	

To Legislative Grant " Municipal Grant " Subscriptions to Exhibition Grounds " Grant of County Society to do	\$ cts.	140 00 200 00 288 30 50 00	\$ cts.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " " Growing Crops.	274 00 37 50 22 00 40 50 27 50 87 00 18 00		
Unpaid " Prizes of previous year " Preparing Show Grounds " Purchase of Exhibition Ground " Agricultural Publications " Working Expenses	506 50 42 50	464 00 47 00 2 18 803 69 85 50 39 56	441 93
Balance due Treasurer		_	93 46

Your Directors in submitting the special items of information indicated in the Statute' desire also—according to custom—to offer a few general observations on the operations of

the year.

It will be noticed with regret that the necessity which existed for raising the charge for membership has resulted in reducing the membership from 266 to 186—a reduction of 80 on the number of the previous year. It says little for the spirit and enterprize of the farmer who will allow his connection with the Society to be severed for the sake of a paltry two and sixpence, imposed for his own benefit. It is to be hoped, for the credit of the farmers of Darlington, that the most of those who have left the Society are not engaged in agricultural pursuits. The Society is, however, more than fifty dollars better off financially, notwithstanding the reduction in the number of members referred to.

The Fall Exhibition, all things considered, your Directors believe was one of the most successful ever held by the Society. The competition in nearly all the classes was excellent, there having been no less than 65 entries of horses, 77 of cattle and 95 of sheep, embracing some of the best animals in the Province. The show in the Floral Hall was perhaps, in several respects, the finest ever seen in this vicinity, and the competition quite spirited, there having been no less than 619 entries in this department. The amount paid in prizes was in advance of any former year. The receipts for admission to the grounds—\$342, it is true, were considerably less than last year, and much less than was anticipated by your Directors. This may be accounted for by several other exhibitions in the vicinity occurring so near the same time, and especially the Whitby show, which took place on the same day, which would naturally attract a large proportion of the people in the western portion of the Township. Perhaps the ill-considered efforts made during the year to weaken public confidence in the management of the Society, may also have affected the attendance to some extent.

Your Directors gratefully acknowledge the receipt of a grant of \$200 from the Township Ceuncil, and \$50 from the County Society, which has aided materially in relieving the Society of its financial embarrassment, with respect to the purchasing and fencing of

ground for exhibition purposes.

Your Directors are pleased to report this account as in a much more favourable light than at the last annual meeting. Then the Society was in debt for the whole \$1,000 which it had guaranteed to the purchased account, (for the \$500 paid had been paid with borrowed money), and a large amount of accumulated interest. During the year \$750 has been paid on the principal and over \$50 of interest, leaving still due \$250 of principal and say \$118 of interest. Your Directors earnestly hope that their successors may be able to wipe out this account during the present year, after which an unprecedented course of prosperity may safely be predicted for your Society.

BOWMANVILLE HORTICULTURAL SOCIETY.

DR. To Balance in hand " 43 Members' Subscriptions " Admissions to Show " Legislative Grant " Donation of President of the Society.	\$ cts.	\$ cts. 64 63 43 00 53 25 27 28 20 00	\$ cts. 208 16
Cr.			
By Prizes for Fruits	29 00		
" " Flowers and Plants	50 13		
" " Vegetables	35 50		
" " Fine Arts and Ladies' Work	20 00		
		134 63	
" Working Expenses		13 50	
			148 13
Balance in hand			60 03

REPORT.

The Officers and Directors of the Bowmanville Horticultural Society, at the close of their term of office, beg leave to submit the following brief report of their proceedings for the past year.

The Summer exhibition was held in the Town Hall on Thursday, the 16th day of July, and on the whole proved a decided success. The show of flowers was very fine, and far superior to any previous exhibition of the Society. The entries of vegetables considering the season of the year, were fully as great as could have been expected; and many of the articles exhibited in this department, evidenced great care and attention in their

The display of small fruits, such as cherries, gooseberries, currants, strawberries, &c., was but limited, which may be accounted for from the backwardness of the season.

The Fall Show of your Society was held at the Town Hall on Friday, the 17th day of September. This show, in all respects, was a decided success, and showed a marked improvement on any previous exhibition of your Society. The show of green-house plants and cut-flowers—particularly dahlias, asters and stocks,—was really splendid. There was also a fine display of table and hand bouquets, floral designs, &c., several of the latter arranged with great care and taste.

The display of fruits, particularly apples and pears, was excellent, fully showing the

great care and attention now bestowed upon the cultivation of these useful fruits.

The vegetables were far superior to any previous show of the Society. Many of the specimens exhibited in this department, were said to excel anything of the kind at the Provincial Exhibition.

The Directors, in now resigning their trust to their successors in office, do so with the hope that the same marked improvement that has been evidenced in the Exhibitions for

the past, may characterize those of the future.

ELGIN, EAST.

·			
Dr. To Balance in hand " 169 Members' Subscriptions " Legislative Grant " Proceeds Sale of Land in City of London " Miscellaneous Receipts	\$ cts.	\$ cts. 178 32 169 00 700 00 530 00 10 00	\$ ets.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	237 00 34 46 17 50 18 49 30 50 43 31		
" L. G. to Township Societies " Preparing Show Grounds " Paid West Elgin Society Share of sale of land in London. " Working Expenses.	381 26 22 40	358 86 418 00 121 51 171 72 88 31	1158 40
Balance in hand			428 92
Bayham.			
DR. To Balance in hand " 76 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 38 39 76 00 3 25 86 00	\$ cts
DR. To Balance in hand	\$ cts. 74 25 18 53 8 25 7 10 4 50 23 87	38 39 76 00 3 25	\$ cts 203 64
Dr. To Balance in hand	74 25 18 53 8 25 7 10 4 50	38 39 76 00 3 25	

Note.—An increased interest is reported as being felt by the farmers and others of the Township in the Society, which appears to be progressing.

Dorchester South.

Dorchester South.			
Dr. To Balance in hand "58 Members' Subscription "Admissions to Show "Legislative Grant "Subscriptions for Permanent Buildings "Miscellaneous Receipts	\$ cts.	\$ cts. 26 29 58 00 2 00 59 00 106 75 1 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures	63 75 21 75 4 50 3 00 14 50	107 50	
" Preparing Show Grounds " For Buildings " Working Expenses	e	92 00 28 10 25 44	253 04
Malahide.			
Dr. To Balance in hand " 116 Members' Subscriptions " Admissions to Show " Legislative Grant.	\$ cts.	\$ cts. 23 55 116 00 48 50 130 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match. " Working Expenses.	144 50 18 50 5 50 5 52 8 50 21 88 20 00	224 40 34 05	258 45
Balance in hand			59 60
77 17			
DR. To Balance in hand. " 139 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts.	\$ cts.	\$ cts. 82 95 139 00 141 00 49 50 2 50	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " Horticultural Products " " Agricultural Implements 44	154 80 19 67 4 50 4 56 0 75		

By Prizes for Arts and Manufactures	\$ cts. 23 14 5 00	\$ cts.	\$ cts.
Unpaid " " Previous years " Purchase of Live Stock " Working Expenses	212 42 27 29	185 13 33 71 60 00 57 11	335 95
Balance in hand			79 00
ELGIN, WEST.			
Dr. To Balance in hand " 146 Members' Subscriptions. " Admissions to Show. " Legislative Grant " Proceeds Sale of Booths " Miscellaneous Receipts	\$ cts.	\$ cts. 243 17 146 00 213 69 700 00 15 00 43 25	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	190 25 35 20 19 75 21 75 35 00 87 63		
Unpaid " L. G. to Township Societies " Preparing Show Grounds " Prizes of Previous Years " Working Expenses	389 58 16 25	373 33 280 00 264 51 47 20 177 96	1140.00
			1143 00
Balance in hand			218 11
Aldborough.			
Dr. To 165 Members' Subscriptions. " Legislative Grant. " Borrowed for Purchase of Stock. " Proceeds Sale of Live Stock. " Miscellaneous Receipts. Cr.	\$ cts.	\$ cts. 175 00 140 00 300 00 9 50 8 00	\$ cts.
By Balance due Treasurer " Prizes for Live Stock " " Field Products " " Dairy "	9 64 149 85 22 00 7 25		

By P	rizes for Horticultural Products. " Agricultural Implements. " Arts and Manufactures.	\$ cts. 6 60 11 50 43 65	\$ cts.	\$ cts.
" A	Unpaid " of previous year reparing Show Grounds urchase of Live Stock. gricultural Publications. orking Expenses.	240 85 88 75	152 10 43 85 27 80 334 78 13 10 60 79	642 06
	Balance due Treasurer			0.50
	Darance due Treasurer			9 56
To Ba " 14 " Ac " Le " Pr " Bo	Southwold & Dunwich. OR. Idance in hand 5 Members' Subscriptions Idmissions to Show Orceeds Sale of Live Stock Orrowed	\$ cts.	\$ cts. 15 47 145 00 2 00 140 00 249 25 100 00	\$ cts.
	Cr. izes for Live Stock. Field Products. Dairy Horticultural Products Agricultural Implements Arts and Manufactures.	107 85 22 50 18 00 8 10 19 00 48 10		
	Unpaid	223 55 22 40	201 15 255 97 82 34	$\frac{539\ 46}{112\ 26}$
	Database II Indiana.			
	ESSEX.			
To Ba	Or. Idance in hand	Ş cts.	\$ cts. 220 19 119 00 43 70 700 00	\$ cts 1082 89
By Pr	r. izes for Live Stock	155 40 43 11 11 50 24 62		

By Prizes for Agricultural Implements " " Arts and Manufactures " " Ploughing Match	\$ cts. 14 25 55 57 28 00	\$ cts.	\$ cts.
		332 45	
" L. G. to Township Societies		419 18	
" Prizes of previous year		6 10	
" Preparing Show Grounds		10 85	
" Working Expenses		70 33	
			838 91
To 1			
Balance in hand			243 98

The Directors of the County of Essex Agricultural Society at the expiration of their

term of office, report:-

That the Annual Exhibition for 1869 was held in the village of Kingsville, on the 7th and 8th days of October. The total number of entries was four hundred and fifty-two, viz.—for horses, sixty-five; for cattle, thirty-four; sheep, fifteen; pigs, four; poultry, seven; seeds and roots, eighty; fruit, eighty-five; dairy and provisions, eighteen; manufactures, seventy-six; ladies' work, sixty-eight. In comparing the number of entries made with those of 1867 and 1868, we find that they stand respectively 550 and 458.

The quality of most of the articles shown was excellent; but it must be acknowledged that with a little exertion on the part of the exhibitors themselves, the number of

entries might easily have been doubled.

Owing to the grounds being so situated that they could not be enclosed in one area, a fee was only exacted at the door of the hall, wherein the grain, roots, fruits and ladies' work were exhibited—the sum of forty-three dollars and seventy cents was so collected.

On the second day of the Show the Ploughing Match took place, which we admit did not come up to the expectations of the Directors. It is much to be regretted that more of the farmers did not take advantage of the very liberal inducements held out to

them by the Society, and also by Messrs. Middleditch and Son.

Mr. Middleditch himself, through the medium of the public press, was disposed to lay the blame on the Directors for its comparative failure, in what way they failed to do their duty, he does not clearly establish; his charges were vague and indefinite; his opinion seems to be, that men who take first prizes one year should not be allowed to compete the next.

In this opinion we do not coincide, for if we exclude those who are capable of doing the best work from competing, those who followed could never reach that high standard

of excellence so desirable for a ploughman to attain.

Various reasons are adduced why more interest is not taken in such things, but we think the true solution of the difficulties are cowardliness and pride, love of pleasure, and constitutional laziness; fear of being beaten may prevent some from trying, but it is a notorious fact, that the majority would rather be mere spectators and lookers-on, than take

part in so good and commendable an enterprise.

The Directors are happy to state that the crops, with the exception of Indian corn, have been excellent, but as answers to certain questions furnished by the Department of Agriculture, were sent to that Department in the month of August last, respecting the growth and yield of the various crops cultivated, it would be superfluous to add anything more at present. That the cause of agriculture is steadily advancing in the county, is evidenced by the marked improvement seen on every hand—commodious barns and stables are being erected, comfortable dwelling houses are erected, various labour-saving implements and machines are introduced. Farmers are now giving their attention to a better system of tillage than has hitherto been practised; the easiest and best mode of renovating old and worn out land, the saving and applying of labour to the best advantage, and a more effectual mode of drainage, are matters now engrossing their attention.

In conclusion, it is to be regretted, that some effectual means cannot be devised to remedy the evil of members withdrawing from membership during the years that the Fair is not held in their immediate neighbourhood; it is a lamentable fact that but a very few persons remain permanent members, a state of things which operates against the usefulness of the Society in more ways than one, and is seriously to be deplored.

Colchester.		
Dr.	\$ cts.	\$ cts.
To Balance in hand	72 42	
" 65 Members' Subscriptions	65 00	
" Legislative Grant	49 26	
" Proceeds Sale of Live Stock	205 00	391 68
Cr.		391 00
By Purchase of Live Stock	66 00	
"Working Expenses	138 90	
Working Daponsoo		204 90
Balance in hand		186 78
Gosfield and Mersea.		
Dr.	\$ cts.	\$ cts.
To Balance in hand	37.25	
" 97 Members' Subscriptions	97 00	
"Legislative Grant	90 21	
" Proceeds Sale of Live Stock	165 50	389 96
Cr.		300 90
By Purchase of Live Stock	322 99	
" " Seeds	13 65	
"Working Expenses	3 00	
The state of the s		339 64
TO 1 1		
Ba'ance in hand		50 32
		50 32
Maidstone and Sandwich, East.		
Maidstone and Sandwich, East. Dr.	Ş [†] cts.	50 32 \$ cts.
Maidstone and Sandwich, East. Dr. To Balance in hand	59 08	
Maidstone and Sandwich, East. Dr. To Balance in hand	59 08 56 50	
Maidstone and Sandwich, East. Dr. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant.	59 08 56 50 47 43	
DR. To Balance in hand " 56 Members' Subscriptions " Legislative Grant " Proceeds Sale of Live Stock	59 08 56 50 47 43 12 25	
Maidstone and Sandwich, East. Dr. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant.	59 08 56 50 47 43	
Maidstone and Sandwich, East. Dr. To Balance in hand	59 08 56 50 47 43 12 25	\$ cts.
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant "Proceeds Sale of Live Stock "Miscellaneous Receipts Cr. By Purchase of Live Stock	59 08 56 50 47 43 12 25	\$ cts.
Maidstone and Sandwich, East. DR. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts	59 08 56 50 47 43 12 25 49 10	\$ cts.
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant "Proceeds Sale of Live Stock "Miscellaneous Receipts Cr. By Purchase of Live Stock	59 08 56 50 47 43 12 25 49 10 ————————————————————————————————————	\$ cts.
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant. "Proceeds Sale of Live Stock. "Miscellaneous Receipts Cr. By Purchase of Live Stock. "Working Expenses.	59 08 56 50 47 43 12 25 49 10 ————————————————————————————————————	\$ cts. 224 36 205 40
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant "Proceeds Sale of Live Stock "Miscellaneous Receipts Cr. By Purchase of Live Stock	59 08 56 50 47 43 12 25 49 10 ————————————————————————————————————	\$ cts.
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant "Proceeds Sale of Live Stock "Miscellaneous Receipts Cr. By Purchase of Live Stock "Working Expenses Balance in hand,	59 08 56 50 47 43 12 25 49 10 ————————————————————————————————————	\$ cts. 224 36 205 40
Maidstone and Sandwich, East. Dr. To Balance in hand "56 Members' Subscriptions. "Legislative Grant "Proceeds Sale of Live Stock "Miscellaneous Receipts Cr. By Purchase of Live Stock "Working Expenses Balance in hand Malden and Anderson.	59 08 56 50 47 43 12 25 49 10 	\$ cts. 224 36 205 40 18 96
Maidstone and Sandwich, East. Dr. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts Cr. By Purchase of Live Stock. " Working Expenses. Balance in hand. Malden and Anderson. Dr.	59 08 56 50 47 43 12 25 49 10 ————————————————————————————————————	\$ cts. 224 36 205 40
Maidstone and Sandwich, East. DR. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts CR. By Purchase of Live Stock. " Working Expenses. Balance in hand. Malden and Anderson. DR. To Balance in hand	59 08 56 50 47 43 12 25 49 10 194 00 11 40	\$ cts. 224 36 205 40 18 96
Maidstone and Sandwich, East. DR. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts CR. By Purchase of Live Stock. " Working Expenses. Balance in hand. DR. To Balance in hand " 62 Members' Subscriptions.	59 08 56 50 47 43 12 25 49 10 194 00 11 40 	\$ cts. 224 36 205 40 18 96
Maidstone and Sandwich, East. DR. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts CR. By Purchase of Live Stock. " Working Expenses. Balance in hand. Malden and Anderson. DR. To Balance in hand	\$ cts. 177 44 81 75	\$ cts. 224 36 205 40 18 96 \$ cts.
Maidstone and Sandwich, East. DR. To Balance in hand " 56 Members' Subscriptions. " Legislative Grant. " Proceeds Sale of Live Stock. " Miscellaneous Receipts CR. By Purchase of Live Stock. " Working Expenses. Balance in hand. DR. To Balance in hand " 62 Members' Subscriptions. " Legislative Grant.	\$ cts. 177 44 81 75 76 02	\$ cts. 224 36 205 40 18 96

Cr.	\$ cts.	\$	cts.	\$ 0	ets.
By Purchase of Live Stock. " Agricultural Publications. " Working Expenses.		4	30 14 48 00 20 74		
				328	88
Balance in hand				64	33

Note.—The Society has used its funds principally in endeavouring to improve Live Stock. With that view, three Short-horn bulls have been employed. The crops generally proved productive, and the various kinds of fruit raised in the district were satisfactory.

Rochester.			
Dr. To Balance in hand " 104 Members' Subscriptions	\$ cts.	\$ cts. 19 07 104 00	\$ cts.
" Legislative Grant" Proceeds Sale of Live Stock		9674 2250	242 31
Cr. By Prizes for Live Stock " " Field Products " " Agricultural Implements	15 00 2 00 1 00	10.00	
" Purchase of Live Stock " Working Expenses		$ \begin{array}{r} 18 & 00 \\ 197 & 66 \\ 24 & 75 \\ \hline \end{array} $	240 41
Balance in hand			1 90
Tilbury, West.			
Dr. To Balance in hand " 65 Members' Subscriptions " Admissions to Show " Legislative Grant " Proceeds Sale of Live Stock	\$ ets.	\$ cts. 40 96 66 00 3 00 61 38 17 00	\$ cts.
Cr.			188 34
By Prizes for Live Stock " " Field Products	$\frac{47}{13} \frac{25}{00}$		
" " Dairy "	75		
" " Horticultural Products	$\begin{array}{ccc} 7 & 75 \\ 2 & 75 \end{array}$		
" " Arts and Manufactures	4 50		
	76 00		
Unpaid	40 00	36 00	
" Prizes previous year " Purchase of Live Stock " Working Expenses		37 25 43 00 8 88	
			125 13
Balance in hand			63 21

49

TO OVERNAL C			
Dr. FRONTENAC.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand	e ces.	373 07	ψ Cts.
" 147 Members' subscriptions		200 00	
" Admissions to Show		90 45	
" Legislative Grant " Proceeds Sale of Live Stock		700 00	
CR.		48 00	1411 52
By Prizes for Live Stock	238 75		1111 02
" " Field Products	37 25		
" Dairy "	18 75		
" Horticultural Products	33 50		
" Agricultural Implements	$\begin{array}{ccc} 22 & 25 \\ 82 & 25 \end{array}$		
" Growing Crops	21 00		
8			
	453 75		
" " Unpaid	$25 \ 75$	100.00	
" " Previous year		$\begin{array}{cccc} 428 & 00 \\ 6 & 00 \end{array}$	
" Preparing Show Grounds		353 10	
" L. G. to Township Societies		264 00	
" Working Expenses		191 30	
			1242 40
Balance in hand			169 12
			100 14
Pittsburgh.	Δ	<i>a</i>	Δ.
Dr. To Balance in hand	\$ cts.	\$ cts.	\$ cts.
" Members' Subscriptions		35 00	
" Legislative Grant		72 00	
Cr.			147 19
By Prizes for Live Stock	90 50		
" Field Products	18 50		
" " Dairy "	4 00	113 00	
"Working Expenses		29 86	
			142 86
To 1 . 1 . 1			
Balance in hand			4 33
Storrington.	•		
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		14 91 29 00	
" Legislative Grant		87 00	
CR.			130 91
By Prizes for Live Stock	75 30		
" " Field Products			
" Dairy " Horticultural Products	$\begin{array}{c} 6 & 43 \\ 2 & 45 \end{array}$		
" Agricultural Implements	5 57		•
" Arts and Manufactures			
		116 64	
" Working Expenses		10 73	105 05
			127 37
Balance in hand			3 54
50			J V A

_				
	Wolfe Island. Dr.	S cts.	Q ota	S ata
To	54 Members' Subscriptions	φ cis.	\$ cts. 73 00 105 00	\$ cts.
	Cr. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products.	89 00 20 50 6 00 6 00		178 00
"	" Arts and Manufactures " Ploughing Match	7 00 7 00	135 50	
"	Working Expenses		14 70	150 20
	Balance in hand			27 80
	GLENGARRY.			
66	Dr. 166 Members' Subscriptions	\$ cts.	\$ cts. 169 50 99 50 700 00	\$ cts.
т	Cr.		22 10	303 00
:: ::	Balance due Treasurer. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures.	242 50 77 00 37 50 4 50 55 25 79 77	496 52	
	" Previous year		13 76 280 00	
	Preparing Show Grounds		25 70 109 07	947 15
	Balance in hand			21 85
	Charlottenburgh & Lancaster.	\$ cts.	\$ cts.	\$ cts.
"	Balance in hand. 59 Members' Subscriptions. Legislative Grant.	Ψ 005.	275 03 88 50 123 00	
66	Cr. Working Expenses.		27 00	486 53 27 00
	Balance in hand			459 53

Note.—The Society held no exhibition, but is husbanding its funds for purchasing improved stock. More attention, it seems, is now being paid to cleaner husbandry, and improved quality of grain.

51

Lochiel and Kenyon.				
Dr.	\$	cts.	\$ cts.	\$ cts.
To Balance in hand			1 71	
" 45 Members' Subscriptions			101 50	
" Legislative Grant			140 00	
" Miscellaneous Receipts			17 00	
CR.				260 21
By Prices for Live Stock	109	90		
" " Field Products	16			
	23			
Dany	33			
Growing Crops	19			
Alts and mandactures		~ ~		
" " Ploughing Match	14	00	010 05	
			216 95	
" Working Expenses			$27 \ 75$	
				244 70
Balance in hand				15 51

Note.—The Society appears to be working satisfactorily. A new kind of oats called the Russian Grey, has been experimented on by several members, and the results so far, indicate their great fertility.

GRENVILLE, SOUTH.			
Dr. To Balance in hand " 218 Members' Subscriptions " Admissions to Show " Legislative Grant " Proceeds rent of Booths " W. Shanly, Esq., M.P., Donation " M Clarke, Esq., M.P.P., Donation " Amount of Directors' note	\$ cts.	\$ cts. 427 90 218 50 530 00 700 00 105 40 40 00 20 00 40 00	\$ cts.
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	257 50 127 50 40 00 61 50 26 50 194 00		
Unpaid " Prizes for previous year. " L. G. to Township Societies " Preparing Show Grounds " Purchase of Exhibition Grounds, &c.	707 00 117 00	590 00 79 00 140 00 41 26 643 42	
" Agricultural Publications " Amount of Directors' note " Legal Expenses and Survey " Watchmen, Sports, &c., at Exhibition " Working Expenses		11 50 40 00 22 70 95 00 228 47	1891 35
Balance in hand			190 45

The President and Directors of the South Grenville Agricultural Society, most respectfully beg leave to report that their Twelfth Annual Exhibition was held on the Society's Grounds, on the 29th and 30th days of September, and 1st day of October last, and are fully justified in stating that it was a great success in almost every department. The weather was all that could be desired. The influx of visitors was very large as shown by the number of tickets sold at the gate, particularly on the second day. There could not have been less than six thousand people on the ground.

Your Directors have the satisfaction to state that the arrangements made by them for the accommodation of visitors and exhibitors, seemed to give general satisfaction so

far as they could learn.

They were under rather straitened circumstances by the purchase of the grounds for which they have paid one thousand dollars down, and have got the deed. Your Directors borrowed the money on their own responsibility, but they are happy to say, that they have paid \$750, and the interest to the first of the present month, leaving only a balance of \$250 yet to be paid.

The new Board will now have an opportunity to increase the premium list, and also improve and ornament the grounds which they are happy to say is now completely in the possession of the Society. You now hold your Exhibitions on your own property, and

every dollar you expend will be safely and wisely invested.

Herein your Directors are pleased to add that the worthy member for the Riding, stated last Fall at the Fair, his willingness to assist in levelling the ground and ornamenting it by planting shade trees around the fences. And in remitting his donation of \$40 for last year, he again urges the necessity of the work next Spring, when he will generously assist us.

Taking the Fair of 1869, as a whole, we have great pleasure in stating that it was far in advance of former years. The show of horses was very creditable in number, but not the quality we would like to see on exhibition. The want of a good stock horse in these counties, is very noticeable, and it would be very desirable that the new Board should offer a liberal bonus to a good horse for his services in this riding for the

year 1870.

The cattle both in the purity of breed and number, excelled those of 1868, or any previous year, for the last three, at least. The best shown were by Messrs. Millar, McDougall and Morrison, between whom a close contest took place for the honors; and from the appearance of the bulls on exhibition, the judges are of the opinion that South Grenville will be able in a few years to compete with any part of central Canada, on the score of Durham and Ayrshire cattle.

A very marked improvement was discernible in sheep. Leicesters were both numerous and of excellent quality. South Downs were not so numerous, but of a good breed.

The number of entries in hogs was not more than an average, but of a good quality. The Directors would recommend to the new Board an increase in premiums in this department, as there might be an improvement in this class in specific breeds, for the raising of pork has now become a very profitable business. The show of grain was far in excess of any previous year since the Society has been in existence. The wing of the building set apart for that purpose was filled to excess, and the samples were excellent. The show of poultry was very creditable.

Your Directors have pleasure in stating that the display in the Hall in the year 1869, far exceeded that of any previous Exhibition since the Society has been organized. Field roots and garden vegetables were so numerous, and of so good a quality, that the judges had a very difficult task to decide of their respective merits, even after a whole day's labour. The show of fruit was far in excess of any of the former years. Bunches of grapes were on exhibition that no one would suppose could be raised in central Canada; and as for apples, they fairly eclipsed anything heretofore shown in this part of the Dominion. And your Directors are happy to say that the farmers of this Riding are beginning to pay more attention to the rearing of this healthful and profitable article.

The display of dairy produce was indeed very excellent, and the samples numerous. The ladies' department was morefully supplied this than any previous year, the Directors having

to set apart a great share of the west wing of the building in addition to the south wing, which has been heretofore amply sufficient. The cause of the increase in this class has been mainly due to the special prizes offered and given in this department, by our worthy members for this Riding, Messrs. Shanly and Clarke.

The display in machinery and iron work was very small, and only deserves a passing notice. There were several fine lots of furniture, and some elegant sets of harness, besides

a great many fine pieces of curious mechanism for the crowd to admire.

Your Directors expended a few small sums for foot races and other sports on the grounds, for which they were amply repaid by the increase of visitors, of which the receipts at the gate are a sure index, the amount exceeding any previous year by over \$100.

Now, gentlemen, in conclusion, your Directors would just say that in the year 1869, they were bound down by the purchase of your show grounds from making many necessary additions. The property now owned by the Society is convenient, and they would recommend to the incoming Board the ornamentation and improvement of their property.

Edwardsburgh.			
Dr. To Balance in hand " Members' Subscriptions	\$ ets.	\$ cts. 53 60 65 66	-11
" Admissions to Show " Legislative Grant " Miscellaneous Receipts		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
Cr.		Militarian Automa	284 77
By Prizes for Live Stock. " " Field Products. " " Dairy "	79 00 $79 00$ $13 75$		
" " Horticultural Products " " Arts and Manufactures	18 00 32 00		
" Working Expenses		221 75 44 45	266 20
Balance in hand			18 57

REPORT.

The President and Directors of the Township of Edwardsburgh Agricultural Society, most respectfully submit the following report:—That the Fourteenth Annual Exhibition of the Society was held at Spencerville on the 7th and 8th days of October last, and was attended with a fair measure of success; there has been a slight falling-off in the membership, but not enough to affect the character of the exhibition, the number of entries being about the same as last year. It will be seen by the Auditor's report, that the Society has expended \$266 20 in premiums and other incidental expenses, leaving a small balance in the Treasurer's hands of \$18 57. Your Directors very much regret not being in a position financially to purchase some pure bred animals for the use of the Society the coming season, our share of the Government Grant being so small, it was thought not advisable to spend any portion of it for that purpose. The show of stock, upon the whole, was good. Some very good horses were on exhibition, and in the cattle shown, there was a marked improvement over every other class of stock exhibited. The prize animals, with very few exceptions, were bred from the bulls owned by the Society four years ago, clearly showing the advantage of breeding from good stock. The show of sheep and swine was fully up to last year in number, but a marked improvement in quality. The grain department was well filled with the different kinds, and of superior quality, with the exception of Fall wheat, of which there were but few samples shown, and most of them of an inferior quality. The space set apart for roots and vegetables was filled to its utmost capacity, and in point of quality the best ever exhibited in connection with this Society. There were a number of mammoth squashes, which attracted a good deal

of attention, one of them weighing 165 lbs., and others only a few pounds less. Your Directors are much pleased to notice a growing disposition on the part of our farmers in devoting more attention to the cultivation of roots than formerly, as a larger amount of nutritious food for cattle can be obtained from an acre of land by raising roots and at less expense than any other cattle food, with less depreciation of the soil, and having the further advantage, which has been proved by experience beyond a doubt, that cattle will do much better through the winter with a quantity of root food, than they will entirely on dry fodder. The show of dairy products, about as last year. Your directors were much pleased with the display of fruit. Apples were on exhibition in great variety, from the small Siberian crab up to the twenty-ounce apple, and very many of them of the choicest kinds. The farmers of the township are giving much more attention to planting trees and growing fruit than formerly; there is scarcely a farmer in the township but what has an orchard, or is preparing to plant out trees to a greater or less extent. There was a very fair sample of grapes on exhibition, the quantity was very limited, as there has been but little attention paid to their cultivation as yet in this section of country. The ladies' department, as usual, was well filled with the most substantial and useful articles, and a good number of them displayed a good deal of ingenuity and taste, especially a pair of coverlids which attracted much attention, as being of excellent material and exquisite workmanship; also a large number of other superior articles, which show the decided interest which the ladies take in the welfare of the Society.

GREY, NORTH.			
Dr. To Balance in hand. "119 Members' Subscriptions. "Admissions to Show. "Legislative Grant. "Holland and Sullivan Society. "Miscellaneous Receipts Cr.	\$ cts.	\$ cts. 7 63 119 00 15 85 700 00 124 03 18 00	\$ cts. 984 51
By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " Prizes of previous year.	198 25 70 00 23 25 16 50 31 50 38 50	378 50 9 25	
" L. G. to Township Societies " Working Expenses Balance in hand		419 77 84 71	892 23 92 28
Dr. To Balance in hand	\$ cts.	\$ cts. 31 00 76 00 28 23 60 00	\$ cts.
By Prizes for Live Stock	81 00 18 00		

By Prizes for Dairy Products. " " Horticultural Products. " " Agriculture Implements. " " Arts and Manufactures. " Preparing Show Grounds. " Working Expenses. Balance in hand.	\$ cts. 6 25 7 50 9 00 13 00	\$ cts. 134 75 10 00 22 35	\$ cts. 167 10 28 13
Derby.			
DR. To Balance in hand " 62 Members' Subscriptions " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 5 26 63 00 50 24 3 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures. " Working Expenses.	51 00 18 00 8 25 2 25 4 25 8 50	92 25 29 01	$ \begin{array}{r} 121 \ 50 \\ \hline 24 \\ \end{array} $
St. Vincent.			
Dr. To Balance in hand " 135 Members' Subscriptions " Admissions to Show " Legislative Grant " Miscellaneous Receipts	\$ ets.	\$ cts. 28 84 135 50 6 25 99 00 8 50	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures. " " Ploughing Match " Preparing Show Grounds " Prizes previous years " Working Expenses.	96 75 20 00 5 00 2 00 23 00 40 00	186 75 2 80 7 25 41 03	237 83
Balance in hand			40 26

Dr. To Balance in hand "114 Members' Subscriptions "Admissions to Show	\$ cts.	\$ cts. 15 71 119 50 2 75 88 12	\$ cts.
" Legislative Grant. CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures	69 00 36 00 6 75 12 00 5 75 9 75		226 08
Unpaid " Prizes previous year " Working Expenses	139 25 7 00	132 25 4 25 49 64	186 14
Owen Sound Horticultural Society. DR. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant "Miscellaneons Receipts	\$ cts.	\$ ets. 127 77 70 00 43 30 66 49 3 61	\$ cts.
Cr. By Prizes for Fruits " " Flowers and Plants " " Vegetables " " Ladies' Work " Preparing Show Grounds " Working Expenses.	34 50 19 50 49 50 18 50	122 00 22 32 68 07	212 39
Balance in hand	\$ cts.	\$ cts.	98 78 \$ cts.
To Balance in hand	73 25 57 00 7 50	147 17 118 00 12 20 700 00	977 37

By Prizes for Horticultural Products	\$ cts.	\$ cts.
" L. G. to Township Societies. " Preparing Show Grounds. " Working Expenses.	 185 00 417 97 257 02 67 56	
Balance in hand		$\frac{927\ 55}{49\ 82}$

Note.—The Directors pay a grateful tribute of respect to Mr. Fletcher, their late Secretary and Treasurer, who was suddenly taken away by death. They also refer to the completion of permanent grounds and buildings, and recommend the establishment of a Seed Fair, and as funds admit, the purchase of improved male stock.

Artemesia.			
Dr. To 52 Members' Subscriptions. "Admissions to Show. "Legislative Grant. "Municipal Grant.	\$ cts.	\$ cts. 52 00 4 00 67 00 20 80	\$ cts.
Cr. By Balance due Treasurer "Prizes for Live Stock "Field Products "Dairy " "Horticultural Products "Arts and Manufactures "Working Expenses	59 00 18 25 2 00 5 00 3 75	88 00 20 53	122 83
Balance in hand			20 97
Dr. To Balance in hand . " 98 Members' Subscriptions " Legislative Grant " Miscellaneous Receipts.	\$ cts.	\$ cts. 100 21 101 00 123 84 3 60	\$ ets.
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	86 75 29 25 8 50 9 25 20 50 19 00		
Unpaid "Working Expenses	173 25 26 25	147 00 20 62	167 62
Balance in hand			161 03

DR. To Balance in hand	\$ cts.	\$ ets. 47 74	\$ ets.
" 62 Members' Subscriptions " Admissions to Show." " Legislative Grant		62 00 2 00 82 57	194 31
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " `Agricultural Implements.	45 50 17 40 6 50 4 75 8 25		
" " Arts and Manufactures" " Working Expenses	18 75	101 15 55 69	156 84
Balance in hand			37 47
Osprey.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		39 65 70 60 78 61	188 86
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	66 00 26 50 3 00 3 75 5 00 19 25 22 00	145 50	
" Working Expenses		32 25	177 75
Balance in hand			11 11
DR. To Balance in hand	\$ cts.	\$ cts. 13 00 54 00	\$ ets.
Cr. By Prizes for Live Stock	47 25 23 35		67 00
" - " Dairy " " Horticultural Products	9 25 75 13 75		
Unpaid	94 35 64 00	30 35	
" Preparing Show Grounds		1 00	

By Working Expenses	\$ ets. 31 20	\$ cts,
Balance in hand		4 45

Note.—In consequence of some misunderstanding with the Directors of the County Society, no Legislative grant had been received by the Proton Society, when the accounts were audited.

To Balance in hand	\$ cts.	\$ cts. 14 58 117 00 2 00 700 00	\$ cts.
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	201 50 19 00 7 50 17 50 29 00 26 00 35 00		
" L. G. to Township Societies. " Preparing Show Grounds " Working Expenses Balance in hand		335 50 394 74 4 00 69 55	$\frac{803}{29}$ $\frac{79}{79}$

REPORT.

We are again, in accordance with the Agricultural Act, called upon to submit to this Annual Meeting an account of all our proceedings during the past year. Your Officers and Directors held all the Exhibitions, viz.—Spring and Fall Shows, and Ploughing Match, and they all proved to surpass former years, excepting the Ploughing Match, which, on account of the frost, was not so well attended as on previous occasions. Your Directors are most happy to congratulate the farmers of this Province upon the bountiful harvest just reaped, and sincerely trust that the coming years may be as prolific as the one just passed. We would beg to remark further that the Agricultural Societies are increasing in magnitude and usefulness in every department, and trust our successors in office may add to the prosperity of the Society. We would also urge the necessity of training up the young boys and men, as well as girls, in agricultural pursuits—they may learn the theory by reading books, but it is most essential that they should learn the practical part. The young men now-a-days think it is a disgrace to work (or the most of them), and farmers' daughters must go to boarding schools, learn music and all the fine arts. It is all very well, but teach them to work also. Teach them all the branches of industry, and if they can live without working so much the better.

Dun and South Cayuga.			
Dr.	\$ cts.	\$ cts.	S cts.
To 115 Members' Subscriptions	*	117 00	4 0002
" Admissions to Show		2 50	
		200	

By Legislative Grant	\$ cts.	\$ cts. 78 53 10 00	\$ cts.
Cr. By Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Arts and Manufactures. "Ploughing Match. "Preparing Show Grounds. "Working Expenses.	81 75 27 00 7 50 5 75 13 25 14 00	149 25 4 50 43 10	196 85
Balance in hand			11 18

Your Directors, in presenting their first Annual Report, beg leave to state that although this Society was organized late in the season and virulently opposed by the Rainham Society, yet, through your liberal patronage and noble exertions we can congratulate you on the great degree of success attained, and if we may take the Fall Fair as a criterion the Society stands second to none in the county. There were 533 entries in all at the Fall Fair, and 11 at the Spring. The small number of entries for the latter was occasioned by the dam between this Township and Dunnville, being impassable, but those that were displayed were of a superior quality, including some animals that would compare favourably with any in the County.

The horses exhibited at the Fall Show speak well for the taste of the farmers in those two townships. Many were really handsome animals, exhibiting fine bone, muscle and action. The class of two year olds was especially well represented, there being 22 animals present, and all of such good quality that the Judges had great difficulty in deciding which pair was the most excellent. Seldom has a finer group of colts been seen

together on the continent.

The show of cattle was most interesting and satisfactory, nearly every grade being represented, and included some animals that would not have done disgrace to the Provincial exhibition. The display of sheep was rather limited, but there were some choice animals. Your Directors would take the liberty to recommend the farmers of these low Townships to pay more attention to this class of stock, as they believe they are more productive if the stock is carefully selected and properly attended to, than any other class of animals.

Pigs and Poultry were also poorly represented, but there were some fine specimens in each of those classes. The display inside the hall was all that could be desired by the most fastidious. The specimens of grain were excellent in every department. The fruit displayed was of fine appearance and excellent quality, and could not be surpassed by any in the Province, especially the peaches, which would tempt the taste of the greatest epicure. The vegetables were large and of excellent quality. The display in the Ladies' department was really grand, and reflected great credit on the ladies of these two townships, who thus exhibit a taste for the manufacture of ornamental as well as useful articles for their homes and families.

The Ploughing Match was rather a failure in point of numbers, but the work done was very creditable. Thus, taking every difficulty with which a society has to contend the first year, and also the inconvenience experienced by you of a small hall and poor show grounds, the Fall Fair may be considered as a great success, and by extending the same patronage, and putting forth the same exertion, this Society will be second to none

in the Province.

7) * 7			
Rainham.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		76 50	
" 112 Members' Subscriptions		112 00	
" Legislative Grant"		75 80	
"Migaellancona Passinta			
" Miscellaneous Receipts		4 00	
			268 30
Cr.			
By Prizes for Live Stock	132 00		
" " Field Products	19 25		
Darry	5 25		
" " Horticultural Products	$2 \ 50$		
" " Agricultural Implements	$14 \ 75$		
" " Arts and Manufactures	9 50		
" " Ploughing Match			
" " Ploughing Match	16 00		
	199 25		
Unpaid	6 00		
	0 00	102 25	
· " Dianamatan		193 25	
" Prizes previous year		10 00	
"Working Expenses		29 61	
			232 86
			202 00
Delenes in head			0.7
Balance in hand			$35 \ 44$
Seneca, Oneida and N. Cayuga.			
	Α .		
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		7 08	
" 160 Members' Subscriptions		160 00	
" Legislative Grant"		100 38	
6 Municipal Counts			
" Municipal Grants		$35 \ 00$	
			$302 \ 46$
Cr.			
By Prizes for Live Stock	185 50		
" " Field Products			
" " D : "	26 25		
Dany	6 50		
Tiordicultural Froducts	7 25		
" " Agricultural Implements	13 50		
" " Arts and Manufactures	16 00		
TALOS WITH THE THEORY OF THE STATE OF THE ST	10 00	0== 00	
(W. J. D.		255 00	
" Working Expenses		38 48	
			293 48
Balance in hand			2 02
District III Haller and an an an an an an an an an an an an an			8 98
Walpole.			
Dr.	\$ cts.	\$ cts.	e oto
	e cus.		\$ cts.
To Balance in hand		172 22	
" 245 Members' Subscriptions		245 00	
"Admissions to Show		4 50	
" Legislative Grant		140 00	
" Miscellaneous Receipts			
Direction in the contraction of		1 90	
			563 62
Cr.			
By Prizes for Live Stock	239 50		
" " Field Products			
	34 00		
Dairy	11 00		
0.0			
62			

By Prizes for Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " Working Expenses.	\$ cts. 6 50 30 00 36 00 22 00	\$ cts. 379 00 54 50	\$ cts-
Working Expenses			433 50
Balance in hand			130 12

Note.—The number of members is not quite so large as last year, nor did the quality of the horses appear so uniformly good, but in other live stock, and in the number of entries, the Exhibition was equal, if not superior.

(0)1177			
Halton.	a 1.	0	O ata
Dr.	\$ ets.	\$ cts. 273 00	\$ cts.
To 273 Members' Subscriptions		562 32	
" Admissions to Show		700 00	
" Legislative Grant		100 00	•
" Municipal Grant" " Proceeds of Rent of Grounds		23 00	
" Proceeds of Rent of Grounds			1658_32
Cr.			شه
By Balance due Treasurer		71 27	
" Prizes for Live Stock	394 50		
" " Field Products	51 75		
" " Dairy "	24 50		
" " Horticultural Products	45 00		
" " Agricultural Implements	54 50		
" " Arts and Manufactures	197 00		
" " Ploughing Match	36 00		
	000 05		
	803 25 48 00		
" Unpaid	40 00	755 25	
T. C		420 00	
" L. G. to Township Societies		30 50	
"Prizes for previous year		167 64	
" Purchase of and Preparing Show Grounds" " Working Expenses		168 77	
Working Expenses			1613 43
Balance in hand			44 89
District in Manager, 1997			
Esquesing.			
Dr.	S cts.	\$ cts.	\$ cts-
To Balance in hand		117 37	
" 176 Members' Subscriptions		228 50	
" Admissions to Show		50 55	
" Legislative Grant		114 35	
" Municipal Grant		40 00	
			550 77
Cr.			
By Prizes for Live Stock	175 50		
" " Field Products	44 00		
" " Dairy "	8 50 20 50		
" "Horticultural Products	20 50		
63			

By Prizes for Agricultural Implements	\$ cts. 11 00 38 50 32 00	\$ cts.	\$ cts.
" Preparing Show Grounds" Working Expenses (including Secretary's Salary for two years)		330 00 9 00 99 86	
Balance			$\frac{438\ 86}{111\ 91}$
$Nassagaweya. \ \ $			
Dr. To Balance in hand	\$ cts.	\$ cts. 12 50 171 50 8 50 80 76	\$ cts.
			273 26
CR. By Prizes for Live Stock "Field Products "Dairy " "Horticultural Products "Agricultural Implements	157 25 41 50 14 25 10 25 12 00		
" Arts and Manufactures	17 25	252 50	
" Working Expenses		26 53	070 00
			279 03
Balance due Treasurer			5 77
Nelson.			
Dr. To Balance in hand " 137 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant	\$ cts.	\$ cts. 13 69 178 00 40 00 94 00 30 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	184 00 35 25 14 75 7 75 11 25 26 75	279 75	
" Working Expenses		28 75	308 50
Palauce in hand			47 19
$\it Trafalgar.$			
Dr. To 301 Members' Subscriptions " Admissions to Show	\$ cts.	\$ cts. 301 50 67 15	\$ cts.

To Legislative Grant	\$ cts.	\$ ets. 142 94 50 00 17 32	\$ cts.
Cr.			578 91
By Balance due Treasurer " Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures	280 75 61 75 19 00 24 50 18 50 72 00	7 58	
Arts and manufactures	12 00	476 50	
" Previous years " Preparing Show Grounds " Working Expenses		1 25 23 00 78 55	586 88
Balance due Treasurer			7 97
Danielo de Trombator			1 31
HAMILTON.			
Dr. To Balance in hand	*	\$ cts. 196 57	\$ cts.
nals		349 25	
" Legislative Grant " Proportion of Exhibition Surplus of Amalgamated So-		350 00	
cieties		93 45	
			994 27
CR. "Grant to Wool Growers' Association		50 00	
"Amount to Union Exhibition	•	600 00	
"Agricultural Publications		162 80	
" Working Expenses		97 60	910 40
			010 40
Balance in hand			83 87
Report.			

The accompanying financial statement contains a list of the names of the members of the Society, the amount paid by each, and a summary of other receipts, with account of the expenditure during the year. The balance now standing to the credit of the Society is \$83.87.

It will be observed that the balance is considerably less than last year. This is owing to an amount of fifty dollars having been granted by this Society to the Wool Growers' Association of Ontario to be expended in prizes at their annual Sheep Shearing meeting on the Queen's Birthday, and also to the unfavorable weather which prevailed on the

days of the exhibition, whereby the receipts were very materially affected.

The Directors entered into an arrangement with the proprietors of the Canada and Ontario Farmer newspapers for a supply of these periodicals, and one hundred and forty-two copies of the former, and seventy-three of the latter were supplied to members who subscribed the sum of one dollar and fifty cents. Each subscriber had the privilege of choosing the journal he preferred, and the Directors have reason to believe that all were satisfied with the contents of their respective papers, and were benefited by the amount

6

of information furnished to them at a rate which the most rigid economist could not but admit was liberal.

The Directors of the North and South Ridings of Wentworth Agricultural Societies at a meeting held on the 10th April, arranged with the Directors of this Society to amalgamate their funds for the purpose of holding a joint exhibition in this city, and the 15th and 16th of October were the days fixed upon for that purpose. The joint boards elected Mr. William Hendrie, President, and Mr. W. A. Cooley, Secretary and Treasurer of the Amalgamated Societies; and the receipts and expenditure of the exhibition are contained in Mr. Cooley's report, which accompanies this.

The Directors take pleasure in stating that the exhibition, as regards the animals and articles exhibited, was a great success. Unfortunately for the finances of the Society, the weather proved very unfavorable; and this Board would suggest to their successors the advisability of holding their next exhibition at an earlier date, as it would ensure to a certain extent more settled weather, and the stock would be less liable to injury from

exposure than they were at the last Show.

The Directors cannot allow this opportunity to pass without referring to the marked improvement in the Horticultural Department. The committee appointed to revise the prize list made considerable additions thereto, particularly in fruits, by extending the list and offering larger premiums, and the result was a finer display than has ever been seen at any previous exhibition of the united Societies.

HASTINGS, NORTH.			
DR. To Balance in hand "187 Members' Subscriptions "Admissions to Show "Legislative Grant	\$ cts.	\$ cts. 87 88 189 00 6 70 700 00	\$ cts. 983 58
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures. " L. G. to Dungannan Society. " Agricultural Publications. " Working Expenses	149 00 78 30 15 25 14 00 68 45 60 75	385 75 75 00 80 25 70 63	611 63
Balance in hand			371 95

REPORT.

The North Hastings Agricultural Directors of 1869, beg leave to submit the following few remarks:—That their Annual Exhibition of 1869, October 12, was as good as common. There were about eleven hundred entries; the competitors being from Huntingdon and Rawdon Townships, with the exception of about seven from Madoc Township. That the annual exhibition prize system appears to give the most general satisfaction to the subscribers and members; though some few would be in favor of purchasing with the money good stock to breed from. The money would purchase but few of such stock, and the few persons ablest to purchase would have the use and benefit of the animals, and nobody would want to keep them, the property of the public, during winter. The Directors in North Hastings tried the experiment a few years ago, by purchasing three thoroughbred bulls

in the spring, and in the fall nobody wanted them, so they had to sell them for a quarter

of the price paid for them.

They consider the better way would be for some few individuals to purchase improved stock to breed from for their own use, and allow their neighbors the use of said stock at a reasonable rate; and directors of agricultural societies to offer in their annual prize lists reasonable prizes to be competed for by the exhibition of such stock at annual fall shows. Township shows seem to be the choice of the people in general; in rear Townships roughly situated, and thinly populated, to go a distance of ten miles to an exhibition, driving stock, drawing grain, and other articles is as far as any one wants to go, and return back home, in one day; and to spend two days does not pay. In this part of the country cheese manufacturing joint stock companies are coming into use among the farmers, and seem to pay much better than raising grain and other crops. Grade cattle and good common cattle seem to be most suitable when well kept for six months in the year—a good cow will yield the value of thirty dollars clear of all expenses, except feed.

Dungannon and Faraday.					
DR. To 50 Members' Subscriptions " Admissions to Show " Legislative Grant " Miscellaneous Receipts	\$	cts.	50 00 4 50 75 00 5 75		
				135	25
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures	5				
" Preparing Show Grounds" Agricultural Publications" Working Expenses			101 25 80 10 50 7 86	120	41
Balance in hand				14	84

REPORT.

In presenting this report of the proceedings of the past year, the Directors beg to congratulate the members on the success which has attended the Society, although the Society has been in operation five years—the past is the first year that it has been able to obtain recognition by the Government, and to become entitled to share in the Legislative Grant. Having made such an advance, your Directors think it may be interesting to trace the progress of the Society from the beginning. Starting in 1865 with a subscription list amounting to about five dollars, it received a great impetus in 1866, through the exertions of Mr. J. C. George, the then President, who was the means of raising the list of subscriptions to twenty dollars. In 1867 the amount subscribed, including a balance in hand, was twenty-four dollars; this was owing in great part to the countenance and support of Mr. Gander, who subscribed five dollars for himself and two sons, which induced liberal subscriptions from Mr. J. C. George, Mr. J. Cleak, and Mr. William Johnston. In 1868 the amount subscribed was nearly thirty dollars, owing principally to a recommendation urged by the Secretary-Treasurer, Mr. P. Harding, being adopted, of raising the subscription from twenty-five cents to fifty, in view of still further raising it to a dollar the next year, which was done in 1869, and by the exertions of the President, Mr. John Wilson and the Secretary, aided by other influential members and friends, the requisite number of members was obtained, and the Society fairly started as an organization in connection with the Electoral Division Agricultural Society of North Hastings. The amount subscribed the past year was fifty dollars from as many members; there was also a sum of four dollars fifty cents paid by exhibitors who were not enrolled on the list of members; a further sum of four dollars fifty cents additional subscriptions from nine members to entitle them to a copy, free, of the Ontario Farmer; another amount of one dollar twenty-five cents arrears of members in former years of the Society; which with seventy-five dollars from the County Society, makes the income of your Society for the past year amount to \$135.25.

Your Directors advert with much pleasure to the success of the first exhibition under the extended operations of the Society. There were 291 entries, and many of the articles were particularly good. The show of cattle was such as your Directors believe was not surpassed at some exhibitions in the front country. There were 60 head of horned cattle on the ground, besides horses and sheep. The best lot was by Mr. D. Kelly, who took a prize for every animal he exhibited. The show of grain was very fine, several samples of spring wheat weighing 63½ lbs. to the bushel. Some common mixed oats weighed 42½ lbs. the bushel, and potato oats 43½ lbs. The show of roots was good, many samples of very fine and sound potatoes being exhibited. The Secretary reports that he exhibited some fine shorthorn carrots, and some long Altringham carrots, from seed which he imported from England, and which were much admired. Also some yellow Aberdeen turnips from English seed, which took a prize. The show of needle work, and articles of domestic manufacture although good in quality, was not extensive, owing, as your Directors believe, to the gentlemen who drew up the list of premiums not feeling justified in appropriating a greater amount to that department.

In resigning their office into your hands they must again congratulate you not only on the success the Society has already achieved, but on the improving prospects thereof, as they have reason to believe a much larger amount will be available for the purposes of the Society next year than was last. And recognizing as they do that the object of these Societies so liberally supported, and so well regulated by the Hon. John Carling, Commissioner of Agriculture, is to encourage Agriculture in all its branches, they strongly urge future Directors to give liberal prizes to any member who will introduce valuable and varied kinds of seeds, grain, roots, &c., and superior breeds of cattle and sheep.

Madoc.

Note.—From the imperfect return made by this Society, it appears that the balance in hand January 16, 1869—\$148.95—has been reduced by incidental expenses to \$134.76 January 18th, 1870. The report contains a minute of the officers elected at the annual meeting, held January 8th, 1870, but no account of the number of members, or of having held an exhibition for 1869; nor does any portion of the Legislative Grant appear to have been paid to this Society.

		HASTINGS, EAST.			
	DR.	, , , ,	\$ cts.	\$ cts.	\$ cts.
		e in handers' Subscriptions		$103 \ 75$ $170 \ 00$	
66	Admiss	sions to Show		13 70	
66	Legisla	tive Grant		$700 00 \\ 100 75$	
	Dubsel.	iptions to Building Fund		1	088 20
	Cr.				
By	Prizes	for Live Stock	2 20 75		
"	"	Field Products	77 67		
66	"	Dairy "	12 50		
"		Horticultural Products	8 25		
66		Agricultural Implements	65 75		
66	66	Arts and Manufactures	$72 \ 75$		
				457 67	

By L. G. to Township Societies. " Preparing Show Grounds " Agricultural Publications " Working Expenses.	\$ cts.	\$ cts. 140 00 250 74 114 75 115 04	\$ cts.
Balance in hand			10 00

The President and Directors, in presenting their second Annual Report, have much pleasure in expressing their satisfaction at the prosperous condition of the Society, and the success that attended the exhibition last autumn. Although the day was wet and cold, yet the attendance was great, and the number of entries in the several classes amounting in all to 1,127.

The show of horses in their several grades of draught, general purposes, as well as

brood mares and young colts, was excellent.

The display of cattle was good, particularly Durhams and grades, there being many fine animals of both classes on exhibition. Also, a goodly number of Devons and Ayrshires.

In the sheep department the competition was very great, especially in Leicesters, Southdowns and Merinoes. The Cotswolds were few in number, but were really splendid animals.

As fine a display of pigs, of the Suffolk, Berks and Yorkshire breeds was shown as

could well be found; the exhibitors having spared no expense in procuring choice animals

of the the different kinds to breed from.

The show of the different kinds of cereals was really good, especially wheat, barley and peas, in all of which this Riding particularly excels; this division having long been considered as the granary of the Bay of Quinte section of the country. The roots and other vegetable productions were also good.

There was of carriages and agricultural implements a goodly supply, and quite in

keeping with the usual interest taken by manufacturers in this department.

In domestic manufacture the exhibition particularly excelled, especially in articles manufactured from wood.

The dairy productions were truly excellent, there being many old established dairies in the riding; also several well conducted cheese factories, which produce an article second to none in the Dominion or in the neighbouring States.

In fruits a very choice collection of the various kinds were shown; and the plants and flowers, together with the ladies' contributions to the floral department, rendered the

Agricultural Hall, where the articles were exhibited, very attractive indeed.

Your Directors would remark that general improvements are going on briskly. Elegantly finished houses, large and commodiously built barns, and other out-buildings have been erected. Much land has been drained, and preparations are being made to drain on an extensive scale the coming season, if laborers can be obtained. There is a large addition to the agricultural implements since last report. Your Directors recommend more attention to the proper rotation of crops, and the keeping down of weeds, for what will support one big thistle will support at least one stalk of wheat. Drain your farms three feet deep, and you will find it pay you better than buying new land, or any other way you can invest your money.

err ·	
Tueno	linaga.
- 90,000	· · · · · · · · · · · · · · · · · · ·

Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		29 24	
" 84 Members' Subscriptions		84 00	
"Legislative Grant"		140 00	
8			253 24

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Live Stock	99 75	-	
" " Field Products	37 75		
" Dairy "	6 75		
" " Horticultural Products	5 70		
" Agricultural Implements	21 75		
" " Arts and Manufactures	31 50		
		203 20	
" Preparing Show Grounds		11 51	
"Working Expenses		16 90	
			231 61
Balance in hand			21 63

The Society still continues in a prosperous condition, the membership being about the same as last year; and the annual exhibition of this year was, on the whole, considerably in advance of any ever before held in this Township.

The show of cattle, though fair, was not equal to that of 1868, and certainly not

what might be expected from a Township like Tyendinaga.

In horses, the show was better and the number of entries greater than last year. The sheep and swine were also very good.

The samples of grain and roots on exhibition were excellent in quantity and quality, and would compare favourably with any of the neighbouring Township or Division Shows.

The farming Implements shown, in some departments (especially waggons), were creditable to the makers. Domestic manufactures and dairy produce were large, and of good quality.

Some fine varieties of fruit were also on exhibition; and, altogether, the annual ex-

hibition of 1869 was a success, and creditable to all concerned in it.

The crops throughout the Township generally were good, though saved with some difficulty on account of the heavy rains during the latter end of harvest; and had it not been for the very general use of improved reapers, mowers, and other labour-saving machinery, a good deal of grain would have been lost entirely.

The reapers that seem to be most approved by farmers here are the Kirby's self-raker,

Ohio, and Buckeye.

	HASTINGS, WEST.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
To	Balance in hand		40 28	
66	175 Members' Subscriptions		175 00	
	Admissions to Show		89 86	
66	Legislative Grant		501 00	
66	Miscellaneous Receipts		25 - 32	
				831 46
	Cr.			
By	Prizes for Live Stock	162 20		
•••	" Field Products	57 25		
66	" Dairy "	36 00		
66	" Horticultural Products	16 50		
46	" for Agricultural Implements	56 50		
46	" Arts and Manufactures	114 55		•
			443 00	
66	" previous year		58 25	
46	Agricultural Publications		128 75	

186 30

By Working Expenses	\$ cts.	\$ cts. 99 83	\$ cts.
•			729 83
Balance in hand			101 63
			
HURON, NORTH.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To 666 Members' Subscriptions " Legislative Grant		666 00 700 00	
" Canada Company's Donation		30 00	
" Miscellaneous Receipts		7 00	1403 00
Cr.			1100 00
By Balance due Treasurer. " Prizes for Live Stock.	374 00	0 22	
" " Field Products	85 00		
" " Dairy "	$\begin{array}{cccc} 22 & 50 \\ 43 & 50 \end{array}$		
" " Agricultural Implements	60 50		
" " Arts and Manufactures	68 50		
	654 00		
Unpaid	70 75	583 25	
" L. G. to Township Societies		420 00	
" Prizes for previous year		27 25	
" Working Expenses.		185 98	1216 70

REPORT.

The Directors of the North Riding of Huron Agricultural Society have much pleasure

in presenting to the meeting this their second annual report.

Balance in hand

As far as the interests of the Society are concerned, the past year has been one of success equal to the most ardent expectation of the most sanguine well-wishers of the Society. The Directors have much pleasure in reporting this the largest, and, consequently, wealthiest Agricultural Society in the Dominion, which, of itself, speaks volumes for the intelligence, industry and perseverance of the agriculturalists of North Huron; and, while our Society is so far ahead, in point of numbers and wealth, of the Societies in the older and wealthier Counties, we are not far behind them in the excellence of our stock and manufactures, as evidenced by the exhibitions of the Society during the past year.

The exhibitions (three in number) held under the auspices of this Society, were all that your Directors could wish, excelling, in number of entries and quality, that of any show ever held in the County heretofore. And your Directors would call special attention to the number and excellence of the entire horses exhibited at the Spring Show of this

vear.

Your Directors feel regret at being compelled to notice the comparative failure of the crops, especially wheat, in the Riding during the past season, which, to a great extent, was no doubt owing to the untoward weather, thereby causing, no doubt, embarrassment to the poorer class of our farmers.

Ashfield and Wawanosh.			
Dr. To Balance in hand " 100 Members' Subscription " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 20 82 106 50 28 60 83 64	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures	74 75 16 00 10 75 18 75 36 00	156 25	200 00
" Working Expenses		30 38	186 63
Balance in hand			52 93
Grey.			
Dr. To Balance in hand. "Members' Subscriptions. "Admissions to Show. "Legislative Grant	\$ cts.	\$ cts. 67 65 85 00 22 32 29 65	\$ cts.
Cr. By Amount of Prizes " Working Expenses		104 25 7 47	204 62111 72
Balance in hand			92 90
Howick.			
Dr. To 78 Members' Subscriptions "- Admissions to Show " Legislative Grant.	\$ cts.	\$ cts. 78 00 22 00 72 88	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Arts and Manufactures	51 75 29 75 6 00 52 25		172 88
" Working Expenses		139 75	171 08
Balance in hand			1 80
Morris.			
Dr. To Balance in hand	\$ cts.	\$ cts. 42 25 87 00 56 06	\$ cts.
F 2			185 31

Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures. " Preparing Show Grounds " Working Expenses	\$ cts. 71 00 15 00 5 00 6 00 5 50 15 75	\$ ets. 118 25 17 18 22 88	\$ cts 158 31
			100 01
Balance in hand			27 00
Turnbérry.	A	Ø -1	© ota
Dr. To Members' Subscriptions. " Legislative Grant.	\$ cts.	\$ cts. 120 00 112 16	\$ cts.
" Proceeds Sale of Seed Wheat		2 00	234 16
CR. By Amount of Premiums and Incidental Expenses		210 16	210 16
Balance in hand			24 00
Wawanosh, East. •			A 1
Dr. To Balance in hand " 128 Members' Subscriptions " Admissions to Show " Legislative Grant " New Members' Subscriptions	\$ cts.	\$ cts. 18 84 98 00 10 80 65 42 16 21	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	55 75 15 25 5 75 3 00 5 00 8 62		
" Prizes previous year " Preparing Show Grounds		93 37 3 50 103 75	
"Working Expenses		8 65	209 27
DR.	\$ cts.	\$ cts. 46 00	\$ ets.
To Balance in hand		144 00 700 00 252 00 97 99	
" Miscellaneous Receipts		31 00	1270 99

-	Cr.		Ø oto	e ota	\$ cts.
ic		for Live Stock	\$ cts.	\$ cts.	\$ cts.
46		Field Products.	85 50		
66	"	Dairy "	19 00		
46	66	Horticultural Products	35 50		
.66	"	Agricultural Implements	50 00		
66		Arts and Manufactures	65 50		
46		Mowing and Reaping Matches	33 00		
46	"	Bands and Essay on Turnip Culture	30 00		
				680 00	
46	"	L. G. to Township Societies		414 53	
26	Work	ing Expenses		$176 \ 46$	
					1270 99

We, the Directors of the South Huron Agricultural Society, in connection with our Annual Report, beg leave to say, that, as far as Agricultural Societies are concerned, we are progressing favourably. We have five Branches and one Horticultural in connection with our Society. There is only one Township in our Riding without a branch, but we

expect one will be established there in good time.

The past season, upon the whole, has been rather a backward one for the agriculturalist, being too wet for the generality of our soils; and the price of agricultural products, especially of grain, rather below a paying figure. Wheat, both fall and spring, was considerably below an average; other grain crops about an average, especially oats, which were an extra good crop. All root crops were generally below an average. Fruit about an average crop—a large quantity of apples were destroyed by frost early in the fall. The early setting in of winter also prevented many from saving their root crop, considerable quantities of turnips and potatoes being still in the ground. The manufacture of dairy produce is largely on the increase. We have to report eight cheese factories in operation in our Riding, which turned out something like 120 tons of cheese the past season, and more factories are building, to come in operation next season. The tendency of the times appears to be to grow less wheat, and to go more into dairy produce and stock raising.

The past season has demonstrated more and more the necessity of some extended system of underdraining. We would gladly welcome any municipal or governmental scheme which would tend to assist or encourage our farmers to drain their soil.

Hay.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		42 75	
" 97 Members' Subscriptions		104 75	
" Legislative Grant		58 12	
" Proceeds Sale of Seeds		1 00	
			206 62
Cr.			
By Prizes for Live Stock	67 25		
" Field Products	20 50		
" " Dairy "	7 50		
" " Horticultural Products	11 00		
" " Agricultural Implements	7 00		
" " Arts and Manufactures	9 15		
The state Literature of the state of the sta		122 40	
" Prizes for previous year		17 00	
"Working Expenses		24 55	
Working mapenses		24 00	163 95
			100 00
Balance in hand			42 67

Stanley.			
Dr. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant "Miscellaneous Receipts CR.	\$ cts.	\$ cts. 80 12 70 00 22 75 43 75 13 25	\$ cts.
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	61 00 7 00 5 50 4 75 11 00 18 50 26 00		
" Unpaid " Preparing Show Grounds " Prizes of previous year " Working Expenses.	133 75 14 25	119 50 28 19 3 50 21 50	172 69
Balance in hand			57 18
Report.		/	

We find that, during the past year, a growing interest has been manifested by our farmers and the public generally in agricultural and horticultural products, and, not-withstanding the scarcity of money that has prevailed for the past year, we, as a Society, were never in a more prosperous condition than we are at present. On the whole, we are prospering favorably; our stock is improving very rapidly, especially horses and sheep. We have, however, to regret that a deeper interest is not taken in the raising of thoroughbred cattle. We hope, however, that ere long this will be attended to, and that we will take our place in the foremost ranks among the Agricultural Societies in the Province of Ontario. With regard to grain, we are a little on the advance, but in poultry we are behind the times. But our Farmers and others are waking up in this particular. On the whole, we may say that things among us are moving in the right direction.

Stephen,			
Dr.	\$ cts.	\$ cts.	\$ cts.
To 141 Members' Subscriptions		141 00	
" Admissions to Show		104 80	
" Legislative Grant.		72 50	
" Municipal Grant		20 00	
" Miscellaneous Receipts		5 50	
CR.			343 80
By Prizes for Live Stock	172 75		010 00
" " Field Products	23 75		
	11 00		
Daily			
norticultural Products	18 00		
Agricultural Implements	50		
" " Arts and Manufactures	59 95		
		285 95	
"Working Expenses		54 11	
			340 06
Balance in hand			3 71
Datamee III Hallu			0 12

de garage y a comment and a comment of the comment		al de sir continue	
Tuckersmith.			
Dr. To 270 Members' Subscriptions		\$ cts. 285 75	\$ ets.
To 279 Members' Subscriptions. " Admissions to Show		365 25	
" Legislative Grant		140 00	
" Municipal Grants		120 00	
" Proceeds Sale of Seeds		46 00	
C P			957 00
Cr. By Balance due Treasurer		47 74	
"Contribution towards prizes of Union Society		252 00	
" Prizes at Spring Show		31 00	
" for previous year		19 75	
"Paid in purchase of Grounds		125 00	
"Preparing Show Grounds		402 17	
" Purchase of Seed " Working Expenses		29 10 46 54	
Working Expenses		40 34	953 30
Balance in hand			3 70
Note.—This Society united with the South Huron Society	ciety, and	held the	Show at
Seaforth. Usborne.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand	Q CLS.	13 14	ep cos.
" 58 Members' Subscriptions		60 25	
" Admissions to Show		15 88	
"Legislative Grant		35 73	
" Proceeds Sale of Seeds		1 70	126 70
CR.			120 10
By Prizes for Live Stock	43 75		
" " Field Products	13 25		
" " Dairy "	5 00		
" " Horticultural Products	3 50		
Agricultural Implements	1 00		
Arts and Brandractures	7 65 7 50		
" " Growing Crops	1 00	81 65	
" Preparing Show Grounds		2 25	
" Working Expenses		24 05	
			107 95
Balance in hand			10 75
			18 75
Goderich Horticultural Society.			
DR.	\$ cts.	\$ cts.	\$ cts.
To 96 Members' Subscriptions		126 25	
" Admissions to Show Legislative Grant		36 96 64 38	
" Miscellaneous Reccipts		80	
			228 39
CR.			
By Prizes for Fruit	43 00		-
£ 10 Wels	20 75 38 75		
" " Vegetables" " Ladies' Work	2 00		
SACTOR II VIAL HITTING		104 50	
76			

By Preparing Show Grounds " Horticultural Publications. " Working Expenses.	\$ cts.	\$ cts. 16 80 17 96 52 00	\$ cts.
Balance in hand			37 13

This Society was organized and incorporated in January, 1869.

The members of the Society have held monthly meetings during the year. A library of Horticulture has been established, and the books have been in circulation amongst the members.

Discussions have also been held during the year upon the following subjects, viz.: "The insects injurious to our fruit trees." "The most desirable class of small fruits for cultivation." "The capabilities of this section of country as regards soil and climate for raising apples, pears, and plums." "The most profitable varieties of strawberries for cultivation." "The Circular from the Honourable John Carling, Commissioner of Agriculture, requesting information as to the kind of fruits best adapted to this section of country."

The Horticultural Exhibition was held upon the 15th day of September. There

were two hundred and sixty-eight entries made.

KENT.		
Dr. To Balance in hand " 130 Members' Subscriptions " Admissions to Show " Legislative Grant. " Municipal Grant. " Proceeds Sale of Seeds. " Miscellaneous Receipts Cr.	\$ cts.	\$ cts. \$ cts. 112 14 130 00 83 43 700 00 35 00 4 75 43 50 1108 82
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	223 00 33 25 16 50 6 75 15 50 40 00	
" " Ploughing Match	37 00 28 00	
" L. G. to Township Societies " Preparing Show Grounds " Working Expenses		400 00 420 00 32 10 160 04 ———————————————————————————————————
Balance in hand		96 68

REPORT.

Your Directors in making their Annual Report, although they cannot state that the Society has made many additions to the membership, are happy to be able to say that the numbers as compared with the year before show a slight increase, and they have no doubt

if efforts are made that a permanent improvement would take place in the subscription list. Your Directors therefore trust that steps will be taken to obtain subscriptions, as with so many competing societies in existence, it is absolutely necessary to use exertions if

the position of the Society is to be maintained.

Your Directors are glad to see that in addition to the large amount raised by the different Townships for the purpose of drainage, that the Local Legislature has appropriated a considerable sum for the same object; and as part of this County requires leading channels to serve as arteries to the private drains, it is to be hoped that a portion will be applied here, as these leading drains are beyond the means of private individuals to carry out.

It is satisfactory to see that machines are being invented, and brought forward to facilitate the formation of under drains, as by this means the expense will be much lessened, and thus remove one of the great hindrances in the way of this desirable

improvement.

It must be a source of congratulation to observe the advance made of late years by the manufacturers of the Province, in the production of articles, such as implements, &c., required by the farmers. Your Directors allude to this with the greater pleasure as the capital of this County fairly maintains its position with the rest of the country, there being several manufacturing establishments in Chatham that would be a credit to any city in the Dominion.

Although the season of the past year was one of an exceptional character, the crops were abundant on the whole, and to the farmer must have been remunerative, notwith-

standing the low price of wheat.

With regard to new seeds, &c., the only things introduced into this county the last season were potatoes of the Early Rose and Harrison sorts, which, your Directors are

informed, did well.

Your Directors would mention with pleasure the fact that our farmers continue to manifest a growing interest in regard to the improvement of sheep and cattle, several choice and valuable animals of both these classes having been purchased during the past season, and brought into the county.

The usual Exhibitions were held during the year. The Spring Show was an average, but owing to the poor character of the stallions competing for the County Prize, the

judges very properly withheld the premium.

The Fall Fair was good, with the exception of the display inside the Fxhibition Building, which was a falling off as a whole. The Ploughing Match—a small turn out of ploughmen took place, but the ploughing was good.

County of Kent Agricultural Society, Chatham, 19th April, 1870.

Hon. John Carling, Commissioner of Agriculture, Toronto.

Sir.

Mr. Buckland having given me to understand that you were desirous of being put in possession of any facts connected with the agriculture and manufactures of this county, which might be of sufficient interest to be worthy of quotation in connection with the publication of the Annual Report of the County Agricultural Society, I beg leave to embody the following, with the hope that they may be of service.

As the drainage of our lands is of primary importance in connection with agricultural improvement, the following statement, showing the amounts raised and expended, under the powers given in the Municipal Act for drainage purposes, by the different

townships, will be interesting.

	Amount raised by By-law.	Expended.
Raleigh	\$21,977	\$18,000
Howard	15,967	12,954
Camden	4,026	1,605
Orford	. 2,300	2,206
Zone	6,054	3,133

	Amount raised by By-law.	Expended.
Dover		\$2,436
Tilbury East		1,800
Chatham		3,880
Harwich	12,062	12,062
Romney	1,296	529
	\$94,533	\$58,605

These amounts will be increased, as the process of raising money for this purpose is still going on, shewing that the farmers are getting fully alive to the benefits arising from the outlay, the whole being, as you are aware, a self-imposed tax by the majority of the owners of the property so drained.

The manufacture of tiles for underdraining, has likewise been commenced in the county, there being two or three parties now engaged in making them, to what extent I

am not able to say, but one party made about 100,000 last year.

In the manufacture of cheese, this county is making progress, before the abrogation of the Reciprocity Treaty, nearly all the cheese consumed in this county, was imported from the States; now I am happy to say, we make all that we require, consequently we are becoming exporters.

We have two cheese factories established in the county, making about 60,000 lbs. per annum; there are likewise several dairy farms which turn out 40,000 to 50,000 lbs. more. I cannot speak with that correctness I could wish to do, in consequence of several of the

cheesemakers not having answered my letters of enquiry.

As you are aware, a large export of grain and lumber takes place from this county. Last year barley was shipped from this part to Chicago! This was quite a new feature in the barley trade, whether it may continue or not remains to be seen; however, it shows our barley must have great acceptance in the American market in spite of their protective duty, or our shippers would not have ventured upon such a speculation.

I am not able to say much about the export of fruit from this quarter, as the only reliable information I could get was that of the quantity sent to the States, to which market only between 500 and 600 barrels of green fruit were sent. Many parties are now planting grape vines in the County, the sort mostly brought to market has been the Concord, which every one says does well here. Buyers from the other side are continually

here purchasing the choicest of our live stock.

As the improvement of this town is an index of the general advancement of the

neighbouring country, I add a few facts showing the progress made here.

Lately a very good and commodious Woollen Factory has been built at considerable outlay, for the manufacture of Tweeds, Fulled Cloths and Flannels. It is what is called a two-set mill. A large and commodious Foundry has been erected, at which they manufacture machinery of various kinds, and Steam Engines. The first Steam Fire Engine ever made in this Province was manufactured there last year. They likewise make a variety of Farmers' Implements, Threshing Machines, &c. There are two other Machine Shops, for the manufacture of Steam Engines, Mill work, &c.; and a Foundry for castings, such as Stoves. There are, in addition, several Grist Mills, Saw Mills, a Pump Factory, two Fanning Mill Fectories, Sash Factories, &c.

The last two or three years a great number of private dwellings and stores have been

built, many of them first-class brick buildings, all showing a marked improvement.

I have the honor to be, sir,

Your obedient servant,

JAMES HART, Secretary.

P. S.—The cheese factories, &c., include both divisions of the County.

Chainans.			
Dr. To Balance in hand	\$ cts.	\$ cts.	\$ cts.
" 93 Members' Subscriptions		93 00	

07 ... 17

To Legislative Grant	\$ cts.	\$ cts. 75 27 1 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	49 25 17 65 4 00 4 75 4 00 19 00		
" Unpaid" Prize of last year " Preparing Show Grounds " Working Expenses	98 65 1 00	97 65 1 00 9 00 36 69	144 34
Balance in hand			37 95
To Balance in hand " Members' Subscriptions " Legislative Grant " Amount of Notes Collected " Proceeds Sale of Grain and Stock	\$ cts.	\$ cts. 50 09 122 50 128 68 262 63 324 86	\$ ets
CR. By Prizes for 1869 " " for previous year " W. Clarke in account of Loan " Working Expenses		119 00 15 25 572 51 54 23	888 76 760 99
Balance in hand			127 77

The Board, in presenting their sixteenth annual Report, are happy in having to say that the Society, financially and otherwise, is in a sound, healthy condition.

Since our last annual Report, your Board purchased a car-load of grain, at a cost of \$509.65; also a car-load of sheep, at a cost of \$200.55. When put up for public competition, the grain sold for \$551.70; the sheep for \$168.17. Although having lost one of the most valuable sheep, there is yet a small profit of \$9.67 on the whole transaction.

The Society numbers 130 members.

Our annual show was good. There were 440 entries, and \$123.50 paid in prizes.

Your Board have great pleasure in reporting the crops generally good.

Fall wheat was excellent; would average 30 bushels to the acre, and a much larger breadth sown than in 1868. The best varieties were the Scott and Treadwell, also being the most prolific.

Spring wheat—very little sown, and below an average crop. Average about 15 bushels to the acre. Oats were excellent; would average 50 bushels to the acre, and large breadth sown. Rye—good quality, but little sown. Barley—a fair crop; more sown than last year. Average 35 bushels to the acre.

Pease—less sown than in 1868; will average 20 bushels to the acre. The Bunch Pea, imported for the Society by Wm. Clark, Esq., has proved the best, being early, more free from bug, and the most prolific yet introduced into the Township.

Beans—some damaged, but a fair average sample. Yield about 20 bushels to the acre.

Hay—good, and well saved; will average 1½ tons to the acre.

Corn, owing to the heavy spring rains, was late, and not so much sown as the year previous; but is about an average crop.

Potatoes—a large quantity planted, and of excellent quality. Slightly affected by rot

in some localities.

Turnips—very few cultivated.

Carrots—remarkably good; not many cultivated.

Parsnips—very few cultivated.

Mangold Wurtzel—large crop, and good; large breadth cultivated.

Apples—below an average.

Peaches—good; more prolific than last year. Pears—not largely cultivated, but good.

Tobacco—Grown successfully; sample good; 40 to 50 acres cultivated.

Your Board have much pleasure in announcing the purchase of a car-load of seed peas and barley, by Wm. Clark, Esq., for the Society, of the sale of which due notice will

be given.

Your Board have heretofore alluded to the subject of drainage. During the last two years, Harwich has made 49 miles of drain, benefitting over 30,000 acres of land, at a cost of nearly \$10,000. In connection with this, under-drainage should not be lost sight of. It is one of the great foundations of agricultural improvement. We cannot too strongly recommend its great usefulness and almost absolute necessity to the thorough success of the farmer.

Raleigh.			,
DR. To Balance in hand. " 94 Members' Subscription " Legislative Grant. " Proceeds Sale of Seeds. " Loan	\$ cts.	\$ cts. 67 79 94 00 94 70 674 00 500 00	\$ cts.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures	82 37 26 69 8 50 4 11 18 07	139 74	
" Preparing Show Grounds " Purchase of Seed " Cash paid on Loans " Working Expenses		1 70 621 95 518 41 56 47	1338 27
Balance in hand			92 22

REPORT.

Your Directors purchased largely of seed grain: Barley, 250 bushels; peas, 120 bushels; Oats, 70 bushels, which were sold by auction, to the members only, at a small gain to the Society. We are happy to state that the quality was good, and appeared to give entire satisfaction to the members, and many have expressed themselves well pleased with the exta fine crops they realized, believing the change of seed to have had a beneficial effect.

856 75

The Annual Show was held as usual, but was not altogether a success, though in many of the departments the show was good. In sheep and pigs we believe nothing in the County has equalled it. Many of the animals would have been a credit to the Provincial Exhibition. The ladies did their part well, which added very much to enliven the appearance of the hall. We think they should receive more encouragement by making the prizes larger and a greater variety of articles.

The crops for the past year have been good—the best for many years, though the pea crop, as usual, was almost totally destroyed by the bug. The farmers feel this to be a great loss, as we are of the opinion that a good pea crop leaves the ground in a better

condition for wheat than any other.

The farmers in the Township are in a healthy and prosperous condition, though

prices are very low for the main staple grains.

We cannot close our Report without a deep regret that the authorities of this thriving Dominion, of which we form a part, have not seen fit to look closely after the interests of the farming community. We particularly refer to the right of our neighbours bringing in all kinds of grain into this Province free of duty, while we have to pay for the same articles 20 per cent. We would like to see free trade between two countries so approximate and closely identified. But if we have it, we want it reciprocal, and not a one-sided affair as we have it, to the damage of the farming community in this Province. Farmers are in general too backward; we hope yet to see them stand up for their rights better than they have done heretofore. Ontario is an agricultural country, and if that fails, everything else must.

The municipal authorities of this Township have done a great deal in drainage during the past year. The benefits will be largely felt; yet there is a large portion of our flourishing Township yet undrained. That portion known as the Raleigh Plains requires a large sum expended in making an outlet to Lake St. Clair. We have great pleasure in observing that \$200,000 have been appropriated during the past Session of the Provincial Legislature for draining such lands, and have reason to hope that we, as usual, will not

be neglected.			
Tilbury, East.			
Dr.	8 cts.	\$ cts.	\$ cts.
To Balance in hand		36 77	
" 120 Members' Subscriptions		120 00	
" Legislative Grant		123 54	
CR.		120 01	280 31
7.77	54 55		200 01
By Prizes for Live Stock			
Field Froducts	15 75		
Dairy	3 00		
" " Horticultural Products	4 00		
" " Agricultural Implements	1 50		
" Arts and Manufactures	$20 \ 25$		
" Ploughing Match	21 00		
3 0		120 05	
" Preparing Show Grounds		2 12	
" Purchase of Live Stock		139 28	
" Working Expenses		15 00	
ti otking mapenees		10 00	276 45
			210 40
70 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1			0.00
Balance in hand			3 86
gifted and the state of the sta			
KINGSTON.			
		<i>(</i> h) <i>(</i>	0
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		165 13	
" 130 Members' Subscriptions		239 50	
" Admissions to Show		102 12	
" Legislative Grant		350 00	
~			~~~ ~~~

Cr.		\$ cts.	\$ cts.
By Prizes for Live Stock	34 25		
By Prizes for Live Stock	26 00		
" " Dairy "	12 75		
" " Horticultural Products	240 75		
" Arts and Manufactures	135 25		
	449 00		
Unpaid	6 00		
•		443 00	
" Preparing Show Grounds		13 62	
" Working Expenses		239 - 21	
WORKING EXPENSES			695 83
Balance in hand			160 92

Throughout Canada the past season has been a most abundant one. In our own "Electoral Division" all sorts of roots, fruits, vegetables, grasses, and cereals were most abundant. The crops of apples, pears, and plums, save for that terrible pest the curculio, of strawberries, raspberries, gooseberries, and currants were both large and fine. Kent cherry was also most plentiful. Outdoor grapes were, owing to the abnormally cool and damp season, the sole exception. Of those of which I had any personal experience or observation, the Delaware and Hartford Prolific were the earliest and ripest.

I am glad to see that the numbers of conservatories, of orchard houses, and of cold graperies under glass, are on the increase, and that by and by we are likely to have a fair

supply of foreign grapes.

The insect enemy, and his name is legion, is one source of danger. White hellebore, coal oil, crizylic soap, tobacco, pyretheum roseam, quassia, lime, potash, &c., have been singly and in combination variously recommended, and more or less successfully employed. Jarring the trees has been found hitherto to be the only effectual mode of preventing the ravages of the curculio, though lately there have been rumours of the discovery of a remedy. Open mouthed bottles, containing sweetened water, and lamps at night have been proved by some to be an effectual method of trapping various moths and insects, and he who traps one moth does more good than he who destroys many caterpillars. These plans, however, are subject to a few drawbacks, as we are liable to destroy some friend amongst many enemies. And here I am reminded that this is a question with which the true horticulturist ought to make himself conversant, for there are some insects which belong to the class of carnivora, and which ought to be encouraged as our natural allies in the work of destruction.

But what avail the efforts of the individual, if the gardens of his neighbours are suffered to be nurseries for every injurious seed and destructive insect. There ought to be some law passed to enforce the destruction of, at least, the gooseberry and currant worms, or in the event of this duty not being performed, of the trees themselves.

I am glad to observe that the love of flowers is growing and spreading, and we have some professional and amateur Floral Establishments, and a nursery or two for trees, which, if still small, yet yield to none in the vigour, beauty, and healthfulness of their productions.

At our Spring Show the ent	ries were
Total	1445
The number of members	130
The Receipts of the year 1869	\$691.62

—— 1396 90

140 53

Balance from 1868 Amount paid in Premiums and Expenses	
Balance on hand May 1st, 1870	
Barance on hand 1110, 100, 101	J. A. ALLEN,
	President.
Accessed 201	
LAMBTON.	
Dr.	\$ cts. \$ cts. \$ ct
To Balance in hand	$ \begin{array}{r} 97 & 34 \\ 222 & 00 \end{array} $
" 214 Members' Subscriptions" Admissions to Show	
"Legislative Grant	700 00
" Municipal Grant	150 00
" Proceeds Sale of Seeds" Extra Subscriptions for Special Prizes	
"Agricultural Publications	33 00
C-	1537 4
Cr. By Prizes for Live Stock	312 19
" " Field Products	. 106 13
" Dairy "	
" for Horticultural Products	
" " Arts and Manufactures	45 62
" " Ploughing Match	. 152 00
	712 99
Unpaid	
" Prizes previous year	664 86
"Legislative Grant to Township Societies	389 10
" Purchase of Seed	111 05
" Preparing Show Grounds " Agricultural Publications	. 10 22 33 00
"Premiums for Horses at Spring Show	
"Working Expenses	

REPORT.

Balance in hand.....

In presenting their Report for the past year, your Board teel that they have but little of interest to communicate. The past season was probably one of the wettest and coldest that we have ever known. Seeding was late, and the ground generally in bad condition. The excessive wet of June and July did a great deal of damage both to the grain and roots, also causing a late harvest, which, from the slow ripening of the grain, was prolonged to a most unusual length for this country. Notwithstanding these drawbacks, the harvest, as a whole, was better than might have been expected. Fall wheat was the best crop we have had for a number of years. Oats were probably the largest crop ever reaped in this County. Spring wheat, pease and barley were below the average. Hay was a most abundant crop; though, from the wetness of the weather, it was very difficult to secure it in good condition. Potatoes, in some cases, were very good, but in many instances they were greatly injured by the wet, and afterwards with the rot. Carrots and Mangold Wurtzel

were good; Swedes were very inferior. Pastures, throughout the season, were good, but, owing to the severe frosts in October and November, feeding commenced much earlier than usual.

Prices of all kinds of grain have been low, which has had a depressing effect on general business. Cattle and hogs, however, have been in good demand, and at very remunerative prices, vast numbers of both having been bought up for the United States markets.

The past season added another signal proof of the advantages of thorough drainage. Where land was well drained, crops were excellent; where there was little or no drainage, they were, in many cases, almost worthless. Until the lands in this County are well

drained, crops will be always uncertain, either in very wet or very dry seasons.

For some years past, it has been thought by not a few of the members of this Society that one day did not afford sufficient time for the annual exhibition. As an inducement to hold the exhibition for two days, extra subscriptions, to the amount of \$165, were obtained, payable on this condition. The Directors finally resolved to make the experiment of holding the show for two days, and being satisfied that this is an improvement, would recommend its continuance to their successors.

The exhibition was held at the Society's grounds, in the Town of Sarnia, on the 6th and 7th October. The weather was favourable, and the display, in most departments, was creditable. Horses were well represented. The improvement over those that used to be exhibited twelve or fifteen years ago, is very marked indeed. In cattle, the improvement is not so great. Pure bred animals are not numerous; but every year adds to their number, and, doubtless, ere long there will be some good herds in the county. Long woolled sheep, especially Leicesters, were, as usual, well represented. Merinoes and other finewoolled breeds have never been favorites in this county, and very few of them have been exhibited. A few very good hogs were shown; though, from the difficulty of bringing out these animals, the number exhibited is always scanty. The high price of pork, combined with the low price of grain, has made hogs a very profitable stock this season, and increased attention is now being paid to the improvement of the different breeds.

Lately, we have not had anything like so good a display of wheat as we used to have twelve or fourteen years ago. This year, however, there were some very fine samples of fall wheat; one, especially, of Deihl Wheat, was certainly the best that has been exhibited here for a number of years. This variety is being introduced into the County, and, if it succeed, will be of very great advantage, as it is greatly superior in quality to the midge-proof, in common use. Of other varieties of grain, the entries were numerous and the

quality good.

The Fruit crop, especially apples, being very good, a large quantity and very numerous varieties were exhibited, which either for beauty, size, or quality, we think it would be very difficult to surpass.

Of Dairy Produce, Domestic Manufactures, and Ladies' Work, there was a very

creditable display.

* * * *

At the request of your Board the County Council made the liberal grant of \$150 to the Society for the purpose of getting up two ploughing matches in different parts of the County. Arrangements to carry out this design were accordingly made by your Board. The first of these matches took place on the farm of Mr. Jones, Township of Warwick, on the 26th of October, and the other on the farms of Mr. Mackenzie and Mrs. Galloway, in the Township of Moore. The weather at the time was very unfavorable, but in both cases, very good work was done. At Warwick, prizes to the amount of \$75 were awarded and at Moore (including extra prize of \$5, offered by Mr. Pardee) to the amount of \$77. Doubtless such matches, when properly managed, tend greatly to the improvement of this important branch of Agriculture.

In conclusion, your Board are happy to be able to congratulate the members of this Society on the peace and quietness we enjoy, and the general prosperity of the community. As a people we have abundant cause for gratitude and thankfulness to the Author of all good, who causeth us all things richly to enjoy—who has again crowned the year with His

goodness, and surrounded us with His loving kindness and tender mercies.

Bosanquet.			
Dr.	\$ ct	s. \$ cts.	\$ cts.
To Balance in hand		24 24	
" 107 Members' Subscriptions		111 25	
" Admissions to Show		43 15	
" Legislative Grant		47 00	
Cr.			225 64
By Prizes for Live Stock	46 0	0	
" " Field Products	15 2	5	
" " Dairy "	6 2	5	
" " Horticultural Products	11 - 7	5	
" " Agricultural Implements	9 2		
" " Arts and Manufactures	17 8		
" " Ploughing Match	32 2		
110000000000000000000000000000000000000		- 138 55	
" Prizes for previous year		10 00	
" Preparing Show Grounds		9 00	
" Purchase of Live Stock		12 00	
"Working Expenses		43 88	
Working Daponsos			213 43
			210 40
Balance in hand			12 21

Note.—The Directors congratulate the Society on being out of debt, and the success of the Ploughing Match and Fall Exhibition.

	Brooke.				
Dr.		\$ cts.	\$ cts.	\$	cts.
To Balance in hand			100 44		
" 195 Members' Subscriptions			254 00		
" Legislative Grant			117 00		
" Proceeds Service of Live Stock			37 75		
				509	19
Cr.					
By Purchase of Live Stock			270 00		
"Working Expenses			202 33		
0 1				472	33
Balance in hand				36	86

Note.—The Society held no Exhibition during the year, but devoted its funds to the purchase and improvement of live stock.

Enniskillen.			
$ m D_{R.}$	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		35 90	
" 89 Members' Subscriptions		111 00	
" Legislative Grant"		50 00	
" Municipal Grant		125 00	
"Grant of Petrolia Corporation		50 00	
" Miscellaneous Receipts		16 00	
222000000000000000000000000000000000000			387 90
CR.			00, 00
By Prizes for Live Stock	107 00		
" " Field Products	30 70		
" " Dairy "			
" " Horticultural Products	11 70		
" " Agricultural Implements			

60 11

22 8	0	\$ cts.
	- 181 85 14 50 62 05	258 40
		129 50
\$ et	s. \$ cts. 1 72 175 18 14 00 79 63 30 00 91 28 16 37	\$ ets.
21 5 13 2 3 2 6 7	2 0 0 5	
	22 8 202 1 20 2 \$ ct 78 5 21 5 21 5 23 2 6 7	\$ cts. \$ cts. 172 175 18 14 00 79 63 30 00 91 28 16 37 78 52 21 52 13 20 6 75 10 30 133 49 3 95 19 00 96 38 36 00

EXTRACTS FROM REPORT.

We commenced the year with a balance on hand of \$1.72, and a clean sheet. We then considered the propriety of importing a quantity of seed grain, which we considered was well recommended, as Plot's Midge-proof Spring Wheat, 40 bushels at \$2 per bushel. We succeeded in distributing it to the subscribers at some loss on the first cost, but we consider any losses sustained in this way may be gained by such changes in seed grain. The wheat has not proved as profitable in yield as anticipated by the grower. We cannot omit noticing the generous and liberal spirit manifested towards this Society by the Directors of the Grand Trunk Company, in responding to the request we made, in reducing the charges to half price.

Our Society this year comprises one hundred and forty-nine members, subscribing the sum of \$175.18, receiving 47 Agricultural Papers, as follows:—Canadian Farmer, Ontario Farmer, Farmer's Advocate, and the American Agriculturalist, all of which we con-

sider may have left their impressions as guides to the farmer.

Balance in hand......

The past year has, we consider, been a year of an unusual character—a variety of changes in the atmosphere, a very late spring, followed by a late and cool summer, a dreary and endless harvest, an unexpected wintry fall, very disastrous to cereals and vegetables; a year of deplorable and unhappy consequences all over the continent,

Our Exhibition at Moortown this year was a fair sample of our country produce; the previous day being stormy, must have had a bad effect in preventing parties from a distance of approaching the ground; but considering that drawback, we had a fair display of stock, produce, and feel satisfied that when the number of 509 tickets of entry were made, it must compare favourably, after all, with former years. Cattle and Horses, Poultry, Pigs, Fruit, Fancy Articles and Sheep were amongst the classes carrying off about the same amount of prizes as last year, although we should wish to see a better and fuller competition. The Dairy, Grain, Roots and Implements were not represented as equal to last year.

Plympton.			
Dr.	S cts.	S cts.	S ets.
To 103 Members' Subscriptions	n · · · · ·	103 00	*
" Torislative Crosst	*******	49 00	
"Legislative Grant			
" Municipal Grant	• • • • • • •	25 00	*** 00
			177 00
Cr.			
By Balance due Treasurer		5 80	
" Prizes for Live Stock	88 25		
" " for Field Products	27 00		
Daily			
" " Horticultural Products			
" " Agricultural Implements	2 25		
" " Arts and Manufactures			
THE CO. PLANCE STRUCK S		134 25	
// TIT - 1-in - Ti-manage		24 75	
" Working Expenses		4± 10	104 00
			164 80
Balance in hand			12 2 0
Sombra.			
Dr.	8 cts.	\$ cts.	S cts.
	D D	11 57	ಲ್ಲ ೮೯೯.
To Balance in hand			
" 55 Members' Subscriptions		55 00	
" Admissions to Show		268	
" Legislative Grant		24 25	
" Miscellaneous Receipts		3 25	
miscenaneous neceipts		0 20	96 75
8			30 10
Cr.	22.25		
By Prizes for Live Stock			
" Field Products	10 44		
" " Dairy "	2 12		
" " Horticultural Products	2 60		
" " Arts and Manufactures			
Arts and manufactures		57 11	
"		57 11	
" Agricultural Publications		6 20	
" Working Expenses		$20 \ 46$	-
			83 77
Balance in hand			12 98
88			
00			

	Warwick.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
T_0	Balance in hand		41 61	
66	Members' Subscriptions		100 00	
66	Legislative Grant		46 50	
"	Miscellaneous Receipts		18 44	
				206 55
	Cr.			
	Prizes for Live Stock	66 87		
66	" Field Products	24 61		
66	" Dairy "	6 75		
66	" Horticultural Products	4 35		
66	" Agricultural Implements	9 00		
66	" Arts and Manufactures	2 6 48		
			138 06	
46	Working Expenses		46 43	
	•			184 49
	Balance in hand			$22 \ 06$

In again tendering you the Annual Report of the Warwick Agricultural Society, we do so under circumstances the most satisfactory. Our Society, as to numbers, is about equal to former years, but in interest a great deal in advance of its predecessors. There seems to be a growing interest to procure stock of all kinds of improved breed. We have bulls of the Durham, Devon, and Galloway species in our midst, and of course there is a diversity of opinion as to which of the breeds is the best, being ruled by taste than otherwise, and we have no doubt that each has its own peculiar merits. In sheep a growing improvement is visible—the Leicesters and Cotswolds seem the favourites. In hogs we have had some good introductions of improved Berkshires, which in some localities has gone far to do away with the old thistle diggers we so often met with in days gone past. The Fall Exhibition was a complete success, the interest taken and the quality of the articles shown would well come up to townships far in advance of us in age. Out of a society comprising one hundred members we had five hundred entries of animals and articles exhibited, and a prize list of one hundred and thirty-eight dollars and six cents. The members of our society sent for a quantity of seed—spring wheat—from a distance for which the society paid freightage, but from the wetness of the season, or other causes, we did not see an improvement over seeds grown in our own locality; but this will not deter us from another trial trip to ascertain the advantages of imported seed over that grown in the vicinity. So that you see we are not idlers on the plain, but in years to come hope to give a better account of ourselves and agriculture generally.

LANARK, NORTH.

	Dr.	\$ cts.	\$ cts.	\$ cts.
To	Balance in hand		147 39	
66	Members' Subscriptions		317 13	
66	Legislative Grant		700 00	
66	Municipal Grant		400 00	
	Proceeds Sale of Seed		38 00	
66	" of Note on Merchants' Bank		293 04	
66	Ramsay Society, Fund for Union Show		216 65	
66	President's Subscription for 2 years		10 00	
	1		2	,122 21

Cr.	\$ cts	. \$ cts.	\$ cts.
By Premiums for 1869		265 50	
" Prizes for previous year		$123 \ 45$	
" L. G. to Township Societies		420 00	
" Exhibition Grounds, &c		1095 32	
" Agricultural Publications		93 00	
" Working Expenses		110 75	
" Life Subscriptions to Messrs. Campbell & Glossop		13 50	
			2121 52
Balance in hand			0.69

LANARK, SOUTH.

Dr. To Balance in hand "Members' Subscriptions. "Admissions to Show "Legislative Grant. "A. Morris, Esq., M.P., Donation "A. Code, Esq, M.P.P., Donation "Receipts for Union Exhibition "Miscellaneous Receipts	\$ cts.	\$ cts. 286 11 127 00 36 44 700 00 20 00 10 00 54 60 15 75	\$ ets.
CR. "Prizes for Live Stock "Field Products "Dairy "Horticultural Products "Agricultural Implements "Arts and Manufactures "Special Prizes in Butter and Cloth "L. G. to Township Societies "Preparing Show Grounds "Purchase of Live Stock "Agricultural Publications "Working Expenses	148 75 42 50 32 75 37 75 31 00 65 00	357 75 30 00 301 56 55 93 145 40 37 00 28 00	955 64
Balance in hand			294 26
Dr. To Balance in hand " Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 35 15 89 00 80 96	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements	54 00 57 00 10 50 7 25 8 00		

By Prizes for Arts and Manufactures	\$ cts. 25 00	\$ cts.	\$ cts.
" Agricultural Publications. " Working Expenses.		161 75 27 00 15 64	
			204 39
Balance in hand			72

Note.—In consequence of the unusual lateness of the harvest the exhibition was not equal to some preceding years, yet taking all things into consideration the number of exhibitors and visitors was pretty satisfactory.

Montague.			
DR. To Balance in hand " 68 Members' Subscriptions " Legislative Grant. CR.	\$ cts.	\$ cts. 1 26 238 64 140 00	\$ ets.
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	48 07 22 23 6 81 2 91 1 30 11 51		
" Purchase of Live Stock. " Purchase of Seed " Agricultural Publications " Working Expenses		92 84 66 50 168 05 21 80 29 67	378 86
Balance in hand			1 04

LEEDS AND NORTH GRENVILLE.

	Dr.		\$	cts	\$ cts.	S	cts.
To	Balanc	ee in hand			160 61		
66	85 M	embers' Subscriptions			193 22		
66	Admis	ssions to Show			248 14		
		ative Grant			700 00		
66	Procee	eds Sale of Live Stock			104 00		
						1405	97
	C_{R} .						
By	Prizes	for Live Stock. Field Products	213	85			
"	66	Field Products	30	60			
66	66	Dairy "	13	70			
46	66	Horticultural Products	34	64			
66	66	Agricultural Implements	43	00			
66	66	Arts and Manufactures	41	08			
.66	66	Growing Crops	75	00			
		3 1			451 87		

By L. G. to Township Societies " Preparing Show Grounds " Purchase of Live Stock Paid by Treasurer By Working Expenses. Balance in hand	\$ cts.	\$ ets. 420 00 13 75 219 00 17 00 150 29	\$ cts.
Datance in nand			101 00
DR. To 52 Members' Subscriptions. "Legislative Grant. "Miscellaneous Receipts.	\$ cts.	\$ cts. 56 00 61 60 2 00	\$ cts.
CR. By Purchase of Live Stock "Keep and Expenses, &c.		80 00 48 40	128 40
Balance due Treasurer			8 80
Note.—The Society held no exhibition, but devoted its: Stock. Kitley and Elmsley. Dr. To Balance in hand	funds to th	\$ cts. 66 10 147 50	se of live \$ cts.
" Legislative Grant. CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Arts and Manufactures. " " Ploughing Match. " " Keep of Live Stock. " Purchase of Seed. " Agricultural Publications. " Working Expenses.	75 00 22 00 9 12 1 50 15 08 11 00	133 70 10 00 154 66 47 00 22 26	367 62
Balance in hand			8 70
Dr. " 40 Members' Subscriptions. " Legislative Grant.	\$ cts.	\$ ets. 88 81 125 40	\$ cts.
Cr. By Prizes at Exhibition.	179 11		179 11
Balance in hand			35 10

92

LEEDS, SOUTH.

	Dr.	\$ 0	ets.	\$ cts.	\$ 0	ts.
To F	Balance in hand			21 22		
	2 Members' Subscriptions			80 50		
	Legislative Grant			700 00		
66 T	Leeds Township Society			243 12		
1	Leeds Township Society			240 12		0.4
					1044	04
	Cr.					
By I	Prizes for Live Stock	125				
66	" Field Products	50	25			
66	" Dairy "	28	50			
66	" Horticultural Products	16	00			
66	" Agricultural Implements	35	00			
6	" Arts and Manufactures		50			
	Arts and manuactures	12	90	327 25		
				· - · - ·		
"]	L. G. to Township Societies			420 00		
" I	Preparing Show Grounds			13 13	5	
46 E	Agricultural Publications			35 45		
	Working Expenses			30 00)	
	The contract of the contract o				825	83
						0
	D 1 ' 1 1				010	Δ1
	Balance in hand				219	OT

REPORT.

The Directors of the Society have to congratulate the members on the success of farming operations during the past year. Ploughing and sowing began about the middle of April, and went steadily on till the end of May, when the Spring work may be said to have been finished. During June and July the weather continued favorable for crops—being moderately warm with frequent showers, and at the beginning of August the crops presented a most luxuriant appearance. Labor was scarce, but with an ample supply of these invaluable machines—the "Mowers" and "Reapers"—the crops were cut down, and secured in excellent order; and when the "thrashers" came on the result was highly satisfactory, the yield of all kinds of grain being much larger than they had been for many previous years. The "weevil" made its appearance at the usual period, but did not do much damage; in fact, the "Black Sea" wheat, which was the variety principally enlivated, escaped with almost entire impunity. Hay, potatos and root crops generally, were all excellent. Prices. however, have ruled very low—so low, indeed, that many of our farmers have refused to sell their grain, and still hold on to it, waiting a more favorable state of the market. Whether they are acting wisely or not remains to be seen.

Butter and cheese both sold at highly remunerative prices; and this has encouraged our farmers to go more into keeping cows. Several cheese factories went into operation last year in this neighborhood, and it is expected that this year the number will be in-

creased.

As the Leeds Township (formerly called Gananoque) Agricultural Society, has lately been very weak, and was almost entirely kept up by members of this Society, it has been dissolved, and the funds on hand, amounting to more than \$200, handed over to this Society.

The manufactures of Gananoque are still in a flourishing state, and give employment to a large number of people who benefit the agricultural community by consuming many

articles of farm produce, which could not be profitably exported.

At the Annual Exhibition of the Society, held on October 7th, the attendance was unusually large, and much interest was excited. These annual "gatherings" are likely to become one of the best institutions of our country, affording, as they do, a fine opportunity for our farmers and their friends to meet after the busy season is over, and derive mutual advantage from the exchange of products and ideas.

			=======================================
${\it Crosby}.$			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		90 188 00	
" Legislative Grant		136 00	
" Miscellaneous Receipts		5 50	
Co	-		330 40
Cr. By Prizes for Live Stock	111 00		
" Field Products	44 00		
" " Dairy "	15 00		
" for Horticultural Products	$\begin{array}{ccc} 8 & 00 \\ 79 & 00 \end{array}$		
" " Growing Crops	16 00		
		273 00	
" Working Expenses		20 50	000 50
			293 50
Balance in hand			36 90
Lansdown.			
To Relence in hand	\$ cts	\$ cts.	\$ cts.
To Balance in hand		62 72 $106 00$	
" Legislative Grant		76 50	
" Miscellaneous Receipts		3 50	
Cr.			248 72
By Prizes for Live Stock	36 00		
" Field Products	$20 \ 25$		
" Dairy "	13 75		
" " Agricultural Implements	$\begin{array}{ccc} 8 & 50 \\ 16 & 65 \end{array}$		
" " Ploughing Match	20 00		
// The second of the second of		115 15	
" Preparing Show Grounds " Purchase of Live Stock		$582 \\ 7137$	
" Purchase of Seeds		38 91	
" Agricultural Publications		2 00	
" Working Expenses		13 83	0.17 00
			247 08
Balance in hand			1 64
Yonge and Escott.	Ö a4.	6	Ö ,
Dr. To Members' Subscriptions	\$ cts.	\$ cts. 105 16	\$ ets.
" Legislative Grant		73 50	
Cr.			178 66
By Prizes for Live Stock	49 15		
" " Dairy "	11 31 5 45		
" " Growing Crops	22 50		
" " Agricultural Implements	8 95		
" Arts and Manufactures	11 30		
	108 66		
0.4			

By Prizes Half retained	\$ cts.	\$ cts. 54 33 3 00 67 00	\$ cts.
Balance in hand			54 33
LENNOX.			
Dr. To Balance in hand " 215 Members' Subscriptions. " Legislative Grant	\$ ets.	\$ cts. 3 36 226 87 700 00	\$ cts.
Legislative Grant			930 23
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	222 25 40 87 14 50 32 00 71 00 75 25		
Unpaid	455 87 25 75	430 12	
" Prizes for Previous year " L. G. to Township Societies " Working Expenses		13 50 354 00 86 85	884 47
Balance in hand			45 76
Adolphustown and South Fredericksbur	ĩa.		
D_R	\$ cts.	\$ cts. 51 00	\$ cts.
To 51 Members' Subscriptions. " Legislative Grant		50 75	101 75
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures.	68 50 8 00 4 00 2 50 8 00	01 00	
" Working Expenses		91 00 10 75	101 75
DR. To Balance in hand	\$ cts.	\$ cts. 17 92 50 00 50 00	\$ cts.
Cr. By Prizes for Live Stock. Field Products	77 63 17 25		X 2 1 0 m

=				
Ву "	Prizes for Dairy Products " Horticultural Products " Arts and Manufactures	\$ cts. 2 25 4 25 5 62	\$ ets.	\$ cts.
ડદ	Working Expenses		9 00	116 00
	Balance in hand			1 92
To	Dr. Ernestown. 72 Members' Subscriptions	\$ cts.	\$ cts. 102 00 81 00	\$ ets.
٤٤	Legislative Grant		0 50	183 50
By	Balance due Treasurer. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures	95 25 9 00 3 25 4 75 11 75 15 50	19 02 139 50	7
٤٤	Working Expenses.		24 98	183 50
	Fredericsburgh, North.			
66	Dr. Balance in hand 88 Members' Subscriptions. Legislative Grant.	\$ cts.	\$ cts. 9 29 88 00 88 00	\$ cts.
	Cr.			
By	Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures.	85 50 10 50 6 00 11 50 15 00 26 62	155 12	
66	Preparing Show Grounds		9 40 22 58	187 10
	Balance due Treasurer			1 81
	7)* 7 . 7			
To	DR. 53 Members' Subscriptions	\$ cts.	\$ cts. 94 00 85 00	\$ ets.
	CR. Balance due Treasurer		11	179 00
	Prizes for Live Stock96	89 25		

By Prizes for Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Working Expenses Balance due Treasurer	\$ cts. 15 95 4 00 7 60 8 25 20 61	\$ cts	. \$ cts
DR. To Balance in hand To 246 Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grant "Grantham Society CR.	\$ cts.	\$ ets. 232 20 268 00 182 65 700 00 225 00 316 44	\$ cts.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Unpaid " L. G. to Township Societies " Piece of Plate to Treasurer for 11 years gratuitous service	555 50 101 75 13 50 64 25 17 00 181 75 933 75 80 75	853 00 417 60 55 00	
" Working Expenses. Balance in hand		272 11	1597 71 326 58

The Directors of the County of Lincoln Electoral Division Agricultural Society, in making this their twelfth Annual Report, would congratulate the Members of the Society generally, for the great measure of success that has attended the working of the Society during the past year. It was gratifying to see our list of Members enlarged and consequently our funds increased, so that we were enabled to extend our Prize list-but it was more gratifying when we come to make the entries for our Fall Show to find them numbering 2289, about one third more than at any previous exhibition.

Our Exhibitions held during the year and the success attending them, we consider unmistakeable evidence of progress—as many of the articles, both of produce and manufacture, were superior in their kind and we believe, might have competed successfully at the Provincial Exhibition. We congratulate you on the almost total disappearance of the midge during the past year, and if it should prove that their days are numbered and the farmer be enabled to return to the cultivation of white winter wheat, it will be a great

advantage.

Winter wheat of nearly all kinds that was sown, succeeded pretty well.—There has

been some new varieties introduced, the most successful of which seems to be the Deihl.—

Wherever it was sown, it gave a satisfactory return.

The "Deihl" is a white wheat, bald, and of very superior quality, quite equal to the far famed Soule's. There has been a considerable quantity sown last Fall, and should it meet the expectations of those who are cultivating it, there is no doubt but in a short time it will be generally raised. By the way we would caution farmers not to sow too much wheat, or at most, not more than they can cultivate and prepare thoroughly. We recommend to farmers cultivating Barley, that they all raise the same kind, as mixing, detracts from its value, for the reason that, different kinds of Barley differ in malting—some varieties requiring a much longer time than others to malt, hence, when mixed, when one variety is done, another will be overdone and vice versa. The variety preferred by maltsters is the four or six rowed variety.

We also recommend Farmers and Orchardists to pay more attention to their Trees and Orchards. We have soil and climate well adapted to the cultivation of some of the most valuable kinds of fruit, (particularly the apple,) and if a considerable portion of the land in this locality was planted in orchard, we believe it could not be more profitably occupied—but if you plant do not forget that it is also necessary to cultivate and to

prune.

We would also wish to impress on the minds of all farmers, if they aspire to raise Cattle or Sheep successfully, the almost necessity of raising a sufficient quantity of Roots, either Turnips, Mangolds or Carrots to feed them through our long winter and spring—for whatever the breed may be, if they are not properly fed, in a short time they will deteriorate and become any thing but a credit to the owner.

Clinton.			
DR. To Balance in hand	\$ cts.	\$ cts. 8 06 85 00 61 20 18 85	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Horticultural Products " " Arts and Manufactures " Working Expenses Balance due to Treasurer	79 73 19 41 15 41 28 28	142 83 49 56	192 39
Grantham.			
DR. To Balance in hand " 114 Members' Subscriptions " Legislative Grant " Municipal Grant		\$ ets. 37 79 114 00 138 96 80 00	\$ cts.
CR. " Paid for Union Show " Working Expenses Balance in hand		316 '44 16 52	370°75 332 96 37 79

Note.—This Society united with the County Society for the purpose of holding a Union Fall Show.

Grimsby.				
Dr.	S	cts.	\$ cts.	\$ cts.
To Balance in hand			40 00	
" 70 Members' Subscriptions			76 50	
" Admissions to Show			11 12	
" Legislative Grant			75 60	
" Municipal Grant			40 00	
withitipal Grant	•		40 00	a (9 aa
Classical				243 22
CR.	7.3	2 00		
By Prizes for Live Stock	. 13	6 00		
" " Field Products	. 2.	5 75		
" " Dairy "		3 25		
" " Horticultural Products	. 19	00		
" " Agricultural Implements		2 00		
" " Arts and Manufactures	. 2	2 00		
			208 00	
" Preparing Show Grounds			9 00	
Working Expanses	•		26 22	
" Working Expenses			20 22	210.22
D				243 22
Report				

The Show was held in Smithville on the 11th October, 1869, and was very satisfactory—an increasing interest being apparent, from the results showing that the Fair was above the average. The entries were about 600—but to judge from them, would hardly be a safe way of estimating the strength of the Fair, or the amount of competition, when we consider that exhibitors were restricted in the number of entries to only one of a kind in Produce and Manufactures—a questionable plan, though no doubt good so far as to induce exhibitors to select their choicest articles. Quite a number of excellent grade cows were shown, and were well spoken of for their dairy qualities—a consideration of particular importance in this section, as we lay claim to the reputation of being extra butter makers, and also in having in this Township two excellent cheese factories. In sheep, Leicesters seemed to be the favorites. There was strong competition in this class, a large number of good sheep being shown, Southdowns being next in numbers, and of Merinos there was a fair display—though by no means fair to look upon, appearances being decidedly against them. Yet there is value and comfort in their oily fleece.

A large number of good teams, such as farmers specially require, were shown for

general purposes.

In the Hall there was a large display, proving good crops and the industry of the people. The appearance of the grain was very satisfactory. Our staple wheat was certainly much above the average of many years, both in sample and yield, the growth in this section being from 22 to 40 bushels per acre. The most of the prizes were taken by the South and Western part of the Township. The quanity of fruit shown, and of so many varieties, was certainly highly to the credit of the exhibitors in this department. Quite a number of prizes were taken by fruit grown on the mountain; but of course most of the best fruit was from first-class orchards in the vicinity of Grimsby. Our home-made Fulled Cloth, Flannel, Wool and Rag Carpeting, in the quantity and quality shown, spoke well for the industry of the Ladies in this Township, in whose department there was a fine display of ornamental and useful articles, for particulars of which see Prize List. In the competition for the special prize in packed butter—our wholesale buyers would no doubt have been pleased to have examined the jars—the uniform color and fine flavor told well for the makers, and fully corroborated the belief that first-class butter is made in this vicinity.

	Louth.			
	Dr.	3 ets.	\$ cts.	\$ cts.
To	Balance in hand		20 33	
66	74 Members' Subscriptions		134 00	
66	Legislative Grant		95 04	
	č			249 37

70	CR.	C. Tim Saal		\$ cts.	\$ cts.
By	Prizes	for Live Stock	144 90		
66	66	for Live Stock. Field Products			
46	6.6	Dairy "	2 25		
6.6	44	Horticultural Products	22 25		
66	66	Agricultural Implements	5 50		
66	66	Arts and Manufactures	28 86		
			215 21		
		Unpaid	5 00		
				210 21	
66	Work	ing Expenses		25 50	
					235 71
					-
		Balance in hand			13 66

The Officers and Directors of the Louth Agricultural Society, in presenting this, their Sixteenth Annual Report (as required by statute), have much pleasure in saying that their Annual Show and Fair for 1869 was, in all the essential features of success, the equal of any preceding one. The different departments were well maintained, the rivalry animated and cordial; which was especially the case in the Show of Horses, which, as usual in this Township, was of surpassing excellence, and, as far as quality is concerned, was not inferior to most County Exhibitions. In this Township Light Horses seem to be most numerous, but improvement has been made of late years in Draught Horses, by the introduction into this locality of two Heavy English Horses by Mr. Cooke.

In the Department of Cattle and Sheep the show was unusually fine, and it is very gratifying to observe the increased interest manifest in the introduction and breeding of thorough-bred stock. In Cattle the class of Durhams appear to be the most popular one, of which many worthy specimens were on exhibition. But in Sheep, particularly in the Long woolled Class, there appears to be the most marked improvement, of which some Leicesters, introduced into this Township by Mr. Wyatt, were well worthy of special notice. The show of Swine was not large, but comprised some fine and weighty specimens,

chiefly Suffolks.

In Poultry, as there were no premiums offered, the show was very meagre, being only one entry.

We notice with regret the absence of Agricultural Implements, which should occupy

a prominent position at every Agricultural Society.

The Grain and Roots were very good in quality, but not in such quantities as our abundant harvest would call for, which was probably owing to the very small premiums offered in these departments.

The Horticultural display, considering the late and unfavourable season, was unexpectedly fine; and it is very pleasing to note that there is more attention paid to fruit culture than formerly. Probably an incentive is the ever increasing demand, fruit being

annually exported to Montreal and Europe from this Township.

In the dairy department there were several samples of butter which, judging from appearances, was of an excellent quality. But there was no cheese on exhibition, and a cheese factory started in this locality proved a decided failure from want of co-operative support.

Articles of home manufacture were not largely represented, but were in quality

creditable to all.

The ladies also contributed many articles, which elicited much commendation from the novelty and ingeniousness displayed in their construction.

The prize offered by the President was for the best collection of grapes, but owing

to the failure of this fruit there were but few competitors.

Under-draining, as yet, has not received as much attention as its importance merits

there are, however, a few in this Township who have tried it, and appreciate the result ing advantages.

Fertilizers, beyond that which is derived from the barn-yard, are scantily employed. Farmers as yet don't appear to have awakened to their importance. Where they are

used, ashes, gypsum and superphosphate are the kinds usually employed.

In general, agriculture, as practiced throughout this Township, has not presented a very alluring and brilliant field to the "ambitious and intelligent young man." It is, therefore, with satisfaction that we observe that a "new order of things" is gradually supplanting the "old narrow-minded routine." And we think and hope that the generous advantages offered by the "Ontario Veterinary College," and "Board of Agriculture" will do much in improving and exalting all rural pursuits.

	LONDON.			
	Dr.	S cts.	\$ cts.	\$ cts.
To	Balance in hand		837 75	
66	222 Members' Subscriptions		222 00	
66	Legislative Grant		350 00	
66	Municipal Grant		193 78	
46	Interest		9 68	
66	Held over from 1868 for purposes of Provincial Exhibition		300 00	
	1 1		***************************************	1913 21
	Cr.			
By	Prizes for previous year	1	13 00	
"	Paid on Exhibitiong Building, &c		302 00	
By	Working Expenses		55 42	
•	· .			370 42
	Balance in hand			1542 79

Note.—This Society held no Show in consequence of the Provincial Exhibition taking place in the City of London.

REPORT.

The Directors of the City of London Horticultural and Agricultural Society, in meeting the members here to-day, have but little to report of their doings as a Society for the past year. They deemed it best, in view of the Exhibition of the Provincial Agriculture Association being held in London during the year 1869, to husband their funds for the present year, 1870, and the Treasurer's account, which has been duly audited, when submitted to you will show a balance in his hands of \$1,544.79, and this without adding interest, the accounts not being made up in the bank. Of this a sum of about \$995.65, arising from the Western Fair receipts, would be divisible with the East Middlesex Agricultural Society, if called for, and in proportion to the amount contributed by them, and the sum of \$547.14, the net receipts of the past year, belong exclusively to this Society. In addition to this, your Directors gave lumber towards preparing for the Provincial Exhibition, to the amount of about \$300, from Western Fair property.

With reference to the future, your Directors would call the attention of the members of this Society, and of the Directors whom they may now elect, to the excellent condition of the principal buildings, sheds, &c., on the Exhibition Grounds, the interior fittings have all been left as they were used at the Provincial Exhibition, and they are in such a state that the expenditure of a very small sum only will be required to put them in proper condition for holding any Exhibition that may be required for 1870. The large expenditure of moneys in 1868 by the Western Fair Committee, and the still larger expenditure of moneys in 1869 by the Provincial Exhibition Association and the Local Committee

have furnished all the accommodation that can possibly be required.

The sources from which the funds for 1869 were received are as follows:—

«« ««	City of London County of Middlesex East Middlesex Agricultural Society Sale of sundries on Ground Lumber from Western Fair	500 200 211	$00 \\ 00 \\ 25$
		\$3,711	25

The Association spent in fitting up interior of main building, agricultural hall, poultry shed and coops, and repairs on carriage shed and cattle rings, \$2,934.15. Thus the sum of \$6,645.40 was expended in 1869 on buildings and grounds. Several additional buildings were asked for by the Provincial Association, which would have cost some hundreds of dollars more, but the want of funds on the part of the Local Committee prevented their erection.

The Provincial Exhibition of 1869 developed the great resources of our country in all its departments, and particularly this western section, the superiority of which, in an agricultural point of view, was proved by the entries made prior to, and the sale of tickets during the week of the exhibition, the latter being much in advance of any previous exhibition held in any part of this Province.

Your Directors, in resigning the trust reposed in them for the year 1869, believe that their successors have every reason to anticipate a very successful exhibition in connection with the Western Fair of 1870. That of 1868 was an experiment, and a successful one, yet there were many imperfections in matters of detail. These faults may and ought this year to be avoided. In 1868 there were no funds to commence with, and the prize list was got up by faith in the future. This year there is both money and experience. A much larger prize list may be ventured upon; the co-operation of additional County Societies may reasonably be looked for, and a Western Fair, second only to the Provincial Exhibition, in London, be the result.

MIDDLESEX, NORTH.

Dr. To Balance in hand	€ cts.	\$ cts. 61 55 255 00 180 80 700 00 350 00 45 57	\$ ct.	
CR. By Prizes for Live Stock "Field Products "Dairy "Horticultural Products "Agricultural Implements "Arts and Manufactures	307 50 49 30 16 75 17 55 25 50 56 25	472 85		
" L. G. to Township Societies " Preparing Show Grounds " Working Expenses. " Balance due Treasurer		420 00, 674 47 96 33	$\frac{1663}{70}$	65

Address given by Lio E. Shipley, Esq., President of the North Middlesex County Society, and Vice-President of the Provincial Agricultural Association, at the annual meeting of the members of the North Middlesex Society, held in the Town Hall, Ailsa Craig, on the 20th January, 1870:

GENTLEMEN,—At the close of a two years campaign in the service of the North Middlesex Agricultural Society, two of the first years of its history, it will not be amiss for me to trespass on your attention with a few remarks. During the past year, the doubtful and perilous experiment of changing from a one day to a two day's show, has been successfully tested. The toils and anxieties attending such change, has been mingled with many gratifying incidents of generous and noble spirited enterprise, which have gone far to relieve those upon whom the burthen of the labour devolved. When reviewing the large number of articles and animals exhibited at the late fall show, I do not see how we possibly could have held the show in one day. I consider the change, from having our stock and implements in one place, poultry in another, roots and vegetables in a third, and fruit and ladies' work in a small town hall, to our present fine grounds and commo dious agricultural hall, in one enclosure, is a change that has resulted in a vast amount of benefit to the society and a convenience to all, visitors as well as members. This great undertaking has been accomplished by an amount of labour, expense and loss of time to the committee and other members of the society, which people unacquainted with the details, could never imagine, owing, in a great measure, to the very wet summer making the roads almost impassable. But, notwithstanding all this, through the energy and determination of the committee, some of the members, and also the contractors, all was in readiness in time for the fall show. The energy and enterprise exhibited by many of the members is truly gratifying, some giving timber for the building, some drawing it to the ground, some hauling lumber and fence posts, and others making approaches and levelling the ground, thereby showing the great interest taken by the yeomanry of North Middle-sex in the Association. The plan adopted by the committee of charging an entrance fee at the gate, is also a good idea, netting to the society the first year the nice sum of \$180, to be applied towards the building and fence. I say this amount must be considered a very handsome sum, especially when we take into consideration that all members and herdsmen were admitted free. These figures also show that there must have been not less than 1800 visitors at the late show, so that with visitors, members and judges and others admitted free, there must have been over 2100 people present. I understand the inhabitants of Ailsa Craig have, with great liberality, subscribed a handsome sum to be paid next fall, which amount will go towards liquidating the debt which still exists on the building and fence, so that we must consider the society in a very prosperous condition, and I fully trust that in a short time we shall be in a position to wipe off the debt altogether.

But in our exultation we must not forget that we have only commenced to lay the foundation upon which is yet to be built a structure whose usefulness and influence will be continually increasing with experience and proper management of its affairs. Creditable as its former record is, yet every year developes deficiencies and opportunities for improvement. Agricultural Societies in this County are yet in their infancy, and indeed the mass of the people are not yet prepared to fully appreciate their high mission, or to comply with the laborious duties which will be required to develop their highest utility. It must be confessed that by the present system, or rather want of system of conferring awards, but very little satisfaction can be given, and comparatively little good can result from it, hence it is that we so often have that uncomplimentary word "humbug" in connection with our gains, even at the present day when agricultural exhibitions have become fixed facts. There are comparatively few who appreciate their real and legitimate purposes, and that the award of prizes is but one of the means to the accomplishment of an end. The paltry award of premiums must not be compared with the mighty results which accrue from the gathering together of the great mass of intellect which guides and controls the productive industry of the country. Here we find people comparing views and experiences, and thereby acquiring information nowhere else to be attained. To those viewing it in this light, I would say the award of premiums becomes a mere trifle, and but little more than the expressed opinion of three men, whose judgment, like other human beings, is liable to be warped or biased. "What, then," says one, "would you

abolish the system of awards and offer no prizes? Would you offer nothing to stimulate competition in the different classes? If you will not permit persons of superior judgment to decide on superior merits of the article, how are the inexperienced to know which to admire or emulate?" That awards should be made if competent persons can be found willing to discharge faithfully that duty, no one can doubt. A great difficulty arises from the selection of judges. No doubt our Directors have been generally very successful in securing the services of competent men, but the question arises, will these men all attend. Alas, when the day of the show comes we too often find many of them absent; and then one of the most trying duties devolving upon Directors is experienced, namely, the selec-

tion of judges to fill the place of the absentees.

The Directors of this Society have been very careful in the selection of judges, generally making it a point to select them from different localities, and persons of known judgment in their class and also of integrity. As far as I am aware, from the commencement of this society, the judges have given very general satisfaction. I am much gratified in seeing so many ladies taking part in adding numerous articles for the exhibition. Their contributions are always very attractive and pleasing, and their presence amongst us we always feel and appreciate. The very full report of our Secretary will show you in detail the operations of our Society for the past year, and its financial condition, which, considering all the improvements which have been made and the amount which has been given in prizes, is in the highest degree satisfactory. Among the most gratifying features of our late fair, was freedom from gambling, thieving, and drunkenness. To those gentlemen who have been actively associated with me in the management of the affairs of the Society, is due this public acknowledgment of my esteem and gratitude for their kindness and forbearance in our numerous meetings together in the past, and I can testify to their earnest wish and endeavours to promote the interest and welfare of the Society. To the Secretary and Treasurer, whose constant devotion to the duties of his post has only been equalled by the intelligence with which those duties have been performed, too much credit can scarcely be given. It only remains with me to thank you and the people of this county for the spirit and liberality with which the efforts of the Managers have been so nobly sustained; regretting only that the imperfect discharge of my own duties should have been so poor a return for the distinguished consideration and uniform kindness with which I have at all times been greeted. I sincerely hope that the triumphant success which has thus far attended our efforts, is only a prelude to a still more useful and glorious future.

Adelaide.			
Dr.	3 cts.	\$ cts.	\$ cts.
To Balance in hand		24 76	
" 62 Members' Subscriptions		62 00	
" Legislative Grant		52 10	
			138 86
Cr.			
By Prizes for Live Stock	41 62		
" " Field Products	7 04		
" " Dairy "	1 50		
" " Horticultural Products	1 48		
" " Agricultural Implements	1 25		
" " Arts and Manufactures	1 50		
		54 39	
"Working Expenses		24 25	
			78 64
Balance in hand			60 22
Biddulph.			
D _R .	3 cts.	\$ cts.	\$ cts.
To Members' Subscriptions		101 00	
" Admissions to Show		13 00	

To Legislative Grant	\$ cts.	\$ cts. 83 70	\$ cts.
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	98 00 14 25 7 25 1 00 11 50 12 25		
" Agricultural Publications " Working Expenses		144 25 10 00 39 31	193 56
Balance in hand			4 14
Lobo.			
Dr. To Balance in hand " 115 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 7 25 138 00 112 80	\$ cts.
CR. By P 'zes 'or Live Stock " " Field Products " " Dairy " " " Horticultural Products	65 95 16 10 2 00 11 60		258 05
" " Agricultural Inducts " " Agricultural Implements " " Arts and Manufactures. " Agricultural Publications	$\begin{array}{ccc} 2 & 65 \\ 15 & 25 \end{array}$	113 55 86 25	
" Working Expenses		34 75	234 55
Balance in hand			23 50
McGillieray.	A .	A 1	O
DR, To Balance in hand " 54 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 76 45 73 25 1 60 59 60	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy Products " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	92 75 21 75 1 00 8 00 8 00 3 00	uncuran familiar (dame)	210 90
Unpaid	134 50 20 00	114 50	
" Preparing Show Grounds" " Prizes for previous year" " Working Expenses"		3 00 56 25 10 50	184 25
Balance in hand105			26 65

7771771 77 ,			
Williams, East.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		8 30	
" 55 Members' Subscriptions		55 00	
" Legislative Grant		41 31	
Ŭ			104 61
Cr.			101 01
By Prizes for Live Stock	74 25		
" " Field Products	60		
and the second s			
Dany	1 70		
norticultural Products	40		
Agricultural Implements	1 00		
" " Arts and Manufactures	2 00		
		79 95	
" Prizes of previous year		1 00	
" Working Expenses		14 59	
			95 54
Balance in hand			9 07
20000000 110 11001001111111111111111111			0 01
Williama West			
Williams, West.	6	(2)	A .
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		74 09	
" 86 Members' Subscriptions		88 00	
" Admissions to Show		51 11	
"Legislative Grant." "Miscellaneous Receipts		68 80	
"Miscellaneous Receipts		4 50	
1			286 50
Cr.			200 00
By Prizes for Live Stock	109 00		
" " Field Products	22 50		
Daily	6 00		
Horticultural Froducts	8 50		
Agricultural Implements	8 75		
" " Arts and Manufactures	17 75		
" " Ploughing Match	$21 \ 00$		
	193 50		
Unpaid	9 00		
1		184 50	
" Preparing Show Grounds		6 00	
" Prize previous year		10 50	
" Working Expenses		39 66	
working tapenses		33 00	940 00
			240 66
Balance in hand			45 84
BETTATE TRATES TO COM			
MIDDLESEX, EAST.			
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		2 19	
" 334 Members' Subscriptions		334 00	
" Legislative Grant		700 00	
" Miscellaneous Receipts		49 37	
T			1085 56
CR.			1000 00
By L. G. to Township Societies		120 00	
For renging Typhibition Ruildings		420 00	
For repairing Exhibition Buildings		200 00	
106			

By Paid Treasurer of Provincial Association	\$ cts. \$ cts. 334 00 98 75 1052 75
Balance in hand	32 81

Note.—The Society held no show, as the Provincial Exhibition took place in London the past year.

REPORT.

It is part of our duty as Directors of this Society, to lay before you, at the annual meeting, a report of our proceedings during the year, together with such remarks and suggestions upon the Agriculture and Horticulture of the County, and the Arts and Manu-

factures therein, as we may be enabled to offer.

The past season has been remarkable for the extraordinary quantity of rain that has fallen, and the unusual cool temperature that prevailed during most of the summer months, resembling, in that respect, the humid climate of Scotland rather than the usual warm, dry summer of Canada. The effect of the abundant moisture on the crops has been to produce an immense growth of straw; but the grain, in many instances, has been injured in

quality by being lodged in the field, and also by the frequent rains in harvest.

Still, we have great reason to be thankful that our country is blessed with an abundance for all. Fall wheat, this year, has been an average crop. Spring wheat was generally poor. There seems to be an especial necessity for some new kind of spring wheat, as the Fife is not nearly so prolific as when first grown here; and, although many kinds have been tried, we have not hitherto found anything likely to take its place. Barley and oats were both very heavy crops. The root crop was also very good. The country has derived great advantage from several new kinds of potatoes lately introduced; but, unfortunately, the winter came on so early that many were injured by the frost, or left in the ground altogether.

In comparing the present state of agriculture in this County with what it was a few years since, we believe there is a constant improvement taking place; and in no department is this improvement more conspicuous, than in the large number of labor-saving implements and machines that have been constructed for the use of the farmer, rendering the hardest work on the farm expeditious and easy, compared with the slow and laborious methods of former days. And we think the manufacturers established in our midst certainly deserve our cordial thanks for their unceasing and successful efforts to improve all

kinds of mechanical appliances to facilitate the operations of the farm.

As the Provincial Exhibition was held this year in London, of course we have had no County Show to report. It has always been usual hitherto for our County Society to hand over the whole of our funds to the Provincial Association, when their Exhibition was held here.

As to the Provincial Show itself, comment is unnecessary—it was universally admitted to have been a splendid success, far exceeding any former Exhibition. The people of the west have reason to be proud of the fact that they have always stood pre-eminent for energy and public spirit in supporting Agricultural Shows, or anything else calculated to benefit the community. And, when this year, on account of the visit of Prince Arthur, the inherent loyalty of Canadians was added to the usual motives for attendance, the

turn out was something astonishing.

We feel that we have good reason to congratulate the members on our prospects for the future. If we can unite on fair terms with the City Society, as we did in 1868, to hold a Western Fair in this city, we are in a far better position at present than we were at that time to ensure its success. * * * We have ample accommodation ready for our use without further expense. At that time, too, the Western Fair was an untried experiment, and many were very doubtful of its success; now these doubts have been succeeded by a general feeling of confidence. The manner in which the inhabitants of both county and city cast aside every vestige of sectional jealousy, and nobly united their energies in support of the first Western Fair, has convinced every one that there is

no fear of failure in future as long as the people are animated by the same patriotic spirit, and the Directors take care to avoid even the appearance of partiality in the management.

Dorchester, North.			
DR. To Balance in hand	\$ cts.	\$ cts. 38 16 85 00 72 20 7 00	\$ cts.
Cr.			404 JU
By Prizes for Live Stock	90 00		
" " Field Products	26 50		
" " Dairy "	8 00		
" " Horticultural Products	2 75		
" " Arts and Manufactures	8 00		
" Working Expenses		135 25 17 50	
			152 75
Balance in hand			49 61

Note.—The Society is reported to be in an improving condition, and the amount of articles exhibited at the last show, exceeded that on any former occasion. With continued perseverance the Directors are of opinion that this Society will attain to a position second to no Township in the country.

to no 20 miship in one continue.			
DR. To Balance in hand "141 Members' Subscriptions "Legislative Grant "Municipal Grant "For Reaping Match	\$ cts.	\$ cts. 186 84 141 00 140 00 20 00 10 00	3 cts
CR. By Prizes for Live Stock. "Field Products. "Dairy " Horticultural Products. "Agricultural Implements. "Arts and Manufactures. "Preparing Show Grounds. "Working Expenses.	199 25 27 00 3 25 5 50 10 25 25 25	270 50 2 00 47 00	$\frac{320\ 40}{177\ 44}$
Dr. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant	\$ ets.	\$ cts. 8 65 113 00 4 00 107 60	\$ cts.

CR. By Prizes for Live Stock	\$ ets. 95 25 23 00 7 25 12 75	\$ cts.	\$ cts.
" " Arts and Manufactures " " Ploughing Match " Preparing Show Grounds " Working Expenses	17 35 10 00	165 60 8 00 18 70	192 30
Balance in hand			40 95
Westminster.			
Dr. To Balance in hand	\$ cts.	\$ cts. 11 99 108 00 100 20	\$ cts.
Cr. By Prizes for Live Stock " " Field Products " " Dairy "	85 25 44 25 1 75 7 85		220 10
" " Horticultural Products " " Agricultural Implements. " Working Expenses.	4 50	143 60 29 10	172 70
Balance in hand			47 49
DR. To Balance in hand " 105 Members' Subscriptions " Legislative Grant " Proceeds of Farmers' Pic-Nic " Miscellaneous Receipts	\$ cts.	\$ cts. 193 03 119 50 700 00 153 83 17 00	\$ cts.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	170 45 34 00 10 70 18 55 26 00 59 60		1100 00
Unpaid	319 30 45 80	273 50	
" L. G. to Township Societies " Preparing Show Grounds " Purchase of Exhibition Grounds, &c " Prizes previous year " Working Expenses.		405 90 183 00 104 00 42 55 101 81	1110 76
Balance in hand			72 60

109

The season of 1869 was unusually wet after 1st of June, producing an abundant crop of all kinds, grain. roots and hay of good quality, except potatoes, many of which rotted in the ground. The weather at harvest time was showery, but cool, damaging hay and discoloring grain, thereby depreciating the value thereof.

The winter set in about the middle of November, and before the roots and fruit were

all gathered, a large quantity of apples were frozen on the trees and lost, and a portion

of the root crops still remains in the ground.

Drainage by open and covered drains is much more practisd than formerly; more attention is paid to rotation of crops, and a decided improvement is visible in agricultural implements and farm management. The Show Fairs prove that a gradual and satisfactory improvement has been in all kinds of domestic animals and domestic manufactures, as well as fruit, especially the smaller kinds.

Caradoc.			
Dr. To Balance in hand " Mémbers' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 20 55 58 00 10 50 51 51	\$ cts.
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures. Unpaid " Working Expenses " Balance in hand.	71 25 19 75 3 00 9 00 3 75 106 75 9 85	96 90 29 37	$\frac{126 \ 27}{14 \ 29}$
Ekford.			
DR. To Balance in hand	\$ cts.	\$ cts. 44 01 92 25 8 20 73 63 8 00	\$ cts. 226 09
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures. Unpaid	123 85 32 60 7 05 5 10 16 50 16 55 201 65 37 05		,
" Preparing Show Grounds		164 60 5 00	

By Working Expenses	\$ cts.	\$ cts. 26 68	\$ cts.
Balance in hand			29 81

Note.—The Report remarks that "the standing of the Society financially is pretty good, and taking everything into account we are progressing very favourably."

${\it Metcalfe}.$		
Dr.	S cts.	e ets.
To Balance in hand	53 21	
" 119 Members' Subcriptions	153 50	
" Legislative Grant	139 63	
" Legislative Grant " Proceeds Sale of Stock	30 50	
	***************************************	376 84
CR.	900 05	
By Purchase of Live Stock.	306 25	
"Working Expenses	$12 \ 25$	
	Philippine Communication (Company)	318 50
		-
Balance in hand		58 34

Note.—The Society is reported to be making steady progress; it held no exhibition, devoting its funds to the improvement of live stock.

Mosa.			
Dr. To Balance in hand		s. \$ cts. 5 27	\$ cts.
" 148 Members' Subscriptions		206 50	
" Legislative Grant " Municipal Grant (Wardsville)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
" Miscellaneous Receipts		1 40	
Cr.			378 17
By Prizes for Live Stock.	139 00		
" " Field Products	31 00 9 75		
" " Horticultural Products	9 50		
" " Agricultural Implements	18 25		
" " Arts and Manufactures	33 20	240 70	
" Preparing Show Grounds		21 88	
" Working Expenses		43 49	306 07
Balance in hand			72 10

REPORT.

The President and Directors think they have reason to congratulate you on the great improvement be h in stock breeding, and in agriculture, within the limits of the Society. It is gratifying to see such great interest taken by members of this Society, as was shewn by our last fair. There were more entries made than at any two former shows. We would urge on members the great necessity of changing their seed grain; also, in getting several of the new kinds of potatoes and give them a trial, as our old kinds have degenerated so very much. Owing to the great searcity of farm labourers in this part of the country, much attention is being paid to the introduction of labour-saving machines—no less than fifteen or twenty combined reapers and mowers were brought into the township

during the past year. On account of the unfortunate state of the weather last fall, we could not hold a ploughing match, which is the cause of the large amount of cash on hand. We would conclude by saying that as far as this Society is concerned, it has, to a great extent, been the cause of introducing, year after year, improved stock, consisting of horses, cattle, and especially sheep and swine.

	MONCK.					
66 66 66	DR. Balance in hand. Members' Subscriptions. Admissions to Show Legislative Grant. From Pelham Society, for Union Show. Donation of J. C. Rykert, Esq. Donation of the President. Miscellaneous Receipts.	\$ (cts.	\$ cts. 188 38 95 00 112 00 700 00 102 00 8 00 15 00 8 00		ets. 28
« « « « « « « « « « « « « « « « « « «	Cr. Prizes for Live Stock. "Field Products. Spring Exhibition. "Horticultural Products. "Agricultural Implements. "Arts and Manufactures Prizes of Previous Year. L. G. to Township Societies Preparing Show Grounds Working Expenses.	215 66 46 15 46 72	75 00 00 00	462 25 25 25 317 55 13 00 166 65) 5))	1 42
	Balance in hand				244	4 86

REPORT.

The Officers and Directors have much pleasure in submitting this their second annual

Report as follows:-

They believe that the Society may now be considered as permanently established, and that the opposition offered the Society has died away. That in accordance with a resolution passed at the first meeting of the Society in the year 1869, the annual Fall Show was held at Fenwick on the seventh and eighth days of October, and that the show was not inferior to that of 1868. That the number of entries was eleven hundred and twenty-one, being about four hundred more than the fair of the previous year. The weather was pleasant during the two days of the show, and the attendance was quite large.

Your Directors are of the opinion that it is advisable to fix upon a suitable place, as near central as possible, for holding the annual Spring and Fall Shows permanently, as the perambulating system does not appear to work satisfactorily. Had the Society been in possession of a suitable plot of land, properly fenced, for holding the last annual show, the receipts, as entrance fees, would have been more than double, judging from the number of

visitors who attended.

Your Directors cannot close their report without congratulating your Society on its success, thus in its infancy, and they feel an assurance that with perseverance and proper management, your future shows may excel the past, and not be inferior to any County Shows in Ontario, as they fully believe they have the acting material, as well as the soil and climate, equal to any in the Province for agricultural purposes in stock, grain, roots and vegetables of all kinds; and all that is required to make the County of Monck equal in importance to any in the Province, is a proper development of its natural resources.

Caistor.	₽ ota	D (1+1)	de ata
Dr. To Balance in hand	\$ cts.	\$ cts. 20 93	\$ cts.
" 53 Members' Subscriptions		65 50	
" Legislative Grant		62 40	
" Municipal Grant		35 00	
			183 83
Cr.			
By Prizes for Live Stock	79 75		
" " Field Products	13 70		
" " Horticultural Products	3 00		
" " Agricultural Implements	9 00		
" Arts and Manufactures	10 45	778 64	
		115 90	
" Agricultural Publications		19 64 20 99	
" Working Expenses		20 99	156 53
			100 00
Balance in hand			27 30
Darano ii kala			
Gainsborough.			
Dr.	\$ cts.	\$ cts.	\$ ets.
To Balance in hand	,,	18 18	
" 54 Members' Subscriptions		54 00	
" Admissions to Show		2 - 30	
" Legislative Grant		53 23	
" Municipal Grant		25 00	
" Miscellaneous Receipts		1 06	150 77
			153 77
Cr.			
By Prizes for Live Stock	56 36		
" " Field Products	13 45		
Dairy	$\begin{array}{ccc} 2 & 99 \\ 12 & 18 \end{array}$		
" " Horticultural Products	4 00		
" " Arts and Manufactures	11 96		
11 05 and manufactures		100 94	
" Working Expenses		13 31	
			114 25
Balance in hand			39 52
Pelham.			4
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		29 46	
" Members' Subscriptions		104 00	133 46
			100 10
CR.		104 00	
" Paid County Society for Union Show		104 00	104,00
			101,00
Balance in haud			29 46
Datance in nana			

Note.—The Society held no separate show, but united with the County Society for a fall exhibition.

Wainfleet.			
Dr., To Balance in hand " Members' Subscriptions " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ ets. 4 73 62 65 61 92 1 50	\$ ct
Cr.			130 8
By Prizes for Live Stock " " Field Products " " Horticultural Products	81 25 20 20 3 70		
" " Arts and Manufactures	14 75	119 90	
" Working Expenses		10 06	129 9
Balance in hand			8
Western Branch (Dunnville).			
DR. To Members' Subscriptions " Admissions to Show " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 162 50 19 00 139 61 2 00	\$ ct.
Cr.			323 1
By Prizes for Live Stock. " " Field Products. " " Horticultural Products. " " Arts and Manufactures.	$ \begin{array}{c} 101 \ 50 \\ 24 \ 50 \\ 7 \ 50 \\ 46 \ 75 \end{array} $		
" Preparing Show Grounds " Agricultural Publications.	40 10	$\begin{array}{ccc} 180 & 25 \\ 27 & 00 \\ 4 & 00 \end{array}$	
" Working Expenses		21 80	233 0
Ealance in hand			90 0

Immediately on taking office, an effort was made to effect an arrangement with the County Society, whereby the County Fall Show might be held at Dunnville, and, as an inducement for so doing, made the following propositions, viz.:—To furnish all grounds, pens, sheds and other buildings suitable for the accommodation of animals, grain, roots, implements, &c., &c., that might be brought for exhibition, at the expense of this Branch Society; and, in addition to the above, to merge the funds of this Society with those of the County Society, and guaranteed a sum of not less than \$150. This proposition having been declined, and the County Show having been located at Fenwick (a very remote part of the County), your Directors determined to hold a Branch Show at this place; and as all are aware, such show was held on Tuesday, the 12th day of October last. The entries numbered 501, and the amount paid out in prizes was \$180.25. It was the intention of the Directors to have had a Ploughing Match in the month of November last, but as the weather was so unfavourable, they were obliged to postpone it. The unfavourable season prevented the members from making as good a show of agricultural products as was anticipated. The stock, however, was much better. The show of implements and ladies' work was fully up to the average, and on the whole, the Fall Show of 1869 will compare favourably with any branch show in this section of the Province.

NIAGARA.			
DR. To Balance in hand		\$ cts. 81 57 120 00 32 05 350 00 110 00	\$ cts 693 62
CR. By Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Growing Crops. "Arts and Manufactures. "Previous year. "Preparing Show Grounds. "Working Expenses.	164 00 49 25 14 75 76 50 20 00 46 60	371 10 27 50 12 00 138 95	549 55
Balance in hand			144 07

Before giving you an account of the receipts and disbursements which your Committee are happy to say, are in a very satisfactory state, we would say that the Exhibition of 1869, has in no wise fallen behind its predecessors, especially in those articles for which your Society is so peculiarly favored—the orchard and garden—while the grains, potatoes, roots and other field products compare favorably with any other show in the Province.

Two new features have been introduced into your Society during the past year, one is the admitting of the members of the County of Lincoln Society to exhibit in our show upon payment of two dollars each; this we feel has had a happy effect, and the members of this Society have not suffered from the friendly competition, and it tends to smooth down any little jealousies that may exist between different Societies, and draw closer together those engaged in the same pursuit. Another feature is the offering of prizes for the heaviest yield of turnips, carrots and mangold wurtzel; the judges to decide by measuring and weighing the crops on the ground. The results prove that as great crops of the above roots can be grown in Canada as in any other country; the yield of turnips being thirty tons per acre, carrots twenty-five tons, and mangold wurtzel forty-two tons per

Your Committee are glad to learn that at least one Farmers' Club has been formed within the bounds of your Society, with the most beneficial results, and hope that the

example may be followed in every school section.

The past season has been like the one before it, what might be called a trial season. 1868 was extremely dry, and showed the necessity of deep cultivation. 1869 was very wet, and rendered patent to all the advantages of thorough draining; it is to be hoped that the lessons so plainly taught may be well remembered. Your Committee while noticing with pleasure the gradual improvement in stock, regret that the portion of Canada covered by this Society is very much behind other portions of the Province in first class stock. We are as well situated, and even have some advantages, as shorter winters and milder climate over other parts of the Province. It is to be hoped that these defects will soon be remedied, and that we shall add good stock and dairy products now too much neglected to the results of our orchards and fields, rendering our Electoral Division in reality, as it is intended to be by nature, "the Garden of Canada."

NORTHUMBERLAND, EAST. \$ cts. \$ cts. \$ cts. Dr. 100 92 To Balance in hand..... " 115 Members' Subscriptions 115 00 24 17 " Admissions to Show 700 00 " Legislative Grant..... " Miscellaneous Receipts..... 4 20 944 29 Cr. By Prizes for Live Stock..... 224 75Field Products..... 38 73 Dairy " 11 25 66 Horticultural Products 3 30 Agricultural Implements..... 19 50 60 84 Arts and Manufactures 358 37 Ploughing Match Prize of previous year..... 2 50358 00 " L. G. to Township Societies.... "Working Expenses 39 85 758 72 Balance in hand..... 185 57

EXTRACTS FROM REPORT.

Your Directors feel satisfied in stating that agriculture in this Riding is steadily improving, but not in so marked a manner that we are able to make any particular note.

In Horticulture we are much pleased in being able to state there is a great improvement in this Riding, there being a large breadth of land set out in fruit trees, and several persons have gone into the culture of grapes.

In mechanical and manufacturing arts we have nothing to submit, as there are no large

manufacturing establishments in this Riding.

Brighton.			
DR. To Balance in hand	\$ cts.	\$ cts. 25 89 52 50	\$ cts. 78 39
By Working Expenses		5 60	5 60
Balance in hand			72 79

Note.—This Society appears not to have received any portion of the Legislative Grant, nor to have held any exhibition during the year.

Cramahe.						
Dr.		\$	cts.	\$ cts.	\$	cts.
To Balance in hand				88 00		
" Members' Subscript	ions			86 50		
	· · · · · · · · · · · · · · · · · · ·			15 40		
2 - 0	******************************			101 00		
146810140110 011444					290	90

	Cr.		\$		\$ cts.	\$ cts.
Bv	Prizes	for Live Stock	78	30		
ii	44	Field Products	8	70		
44	66	Dairy "	4	00		
66	٤.	Horticultural Products	7	55		
66	66	Agricultural Implements	7	65		
66	66	Arts and Manufactures		35		
66	66		11			
		Growing Crops			144 55	
41	A	Itamal Dublications			49 50	
• • •	Agrici	ultural Publications				
66	Work	ing Expenses			33 83	
		0 1				227 88
		Balance in hand				63 02
		Daranco in nand				000

* * * * * * * * *

In comparing 1869 with 1868 your Directors regret to state that there has been considerable decrease in membership, in 1868 the number of members was 157, while in 1869 it was but 70, making a difference of 87—why this should be so your Directors cannot fully ascertain; in the meantime they attribute it to the change which took place in the Postal Law in reference to agricultural periodicals—preventing the publishers from furnishing them to Societies as cheap as formerly.

As it regards the number of entries at the late Annual Exhibition, the decrease was

more apparent than in membership.

Notwithstanding the above discouragements your Directors have hope for the future, inasmuch as the articles exhibited in the Town Hall (with the exception of fruit) if not so numerous were of a better quality than usual, showing conclusively that the soil in this locality is well adapted for the growing of grain and roots of every description, and it is the opinion of your Directors that classes 14 and 16 were more fully represented than at any former Exhibition, showing at once the decided interest taken by the ladies not only in what is useful but also in what is beautiful.

77	9"			
N	121	203	2/1	28
- LV.	L ee	1 1	$\epsilon \iota$	4.

		v v			
	DR.		\$ cts.	\$ cts.	\$ cts.
To	Balan	ce in hand		18 01	
"	Memb	pers' Subscriptions		$113 \ 25$	
66	Admi	ssions to Show		16 47	
66	Legis	lative Grant		128 00	
"	Trent	lative Grauton Corporation		50 00	
	110110				325 73
	Cr.				
Bu	0 = ++	s for Live Stock	116 65		
15 y	11120	s for Live Stock	13 95		
			1 00		
46		Dairy "	15 25		
46		Horticultural Products			
		Agricultural Implements	12 10		
66	64	Arts and Manufactures	48 82		
				207 77	
46	Work	ring Expenses		36 14	
	11 011				243 91
		Balance in hand			81 82

Percy.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		50 35 112 25	
"Legislative Grant		129 00	
220822000			291 60
Cr.			
By Prizes for Live Stock	$103 \ 25$		
" " Field Products	19 80		
" " Dairy "	5 50		
" " Horticultural Products	7 20		
" " Agricultural Implements	10 00		
" " Arts and Manufactures	21 80		
		167 - 55	
" Agricultural Publications		61 62	
" Agricultural Publications " Working Expenses		26 75	
0 1			255 92
Balance in hand			3 5 68

NOTE.—The Directors intimate that the interest in agriculture is steadily increasing, and that their last show was in advance of its predecessors.

Seymou r.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		6 03	
" 43 Members' Subscriptions		43 00	
" Miscellaneous		1 00	
			50 03
C _R .			
By Prizes of previous year		2 50	
" Agricultural Publications		$33 \ 52$	
" Working Expenses		5 32	
<u> </u>			41 34
Balance in hand			8 69

Note.—This Society held no Show, nor received any amount from the Legislative Grant. The manufacture of draining tiles has been commenced in the Township, and most of the land would be greatly benefited by judicious under-draining.

NORTHUMBERLAND WEST.		
Dr.	\$ cts.	\$ cts. \$ cts.
To Balance in hand		101 40
" 192 Members' Subscriptions		192 00
"Admissions to Show		92 70
" Legislative Grant		700 00
		1086 10
Cr.		1000 10
By Prizes for Live Stock	282 25	
" " Field Products	106 00	
" " Dairy "	15 50	
" " Horticultural Products	19 25	
" " Agricultural Implements	34 75	
" 'Agricultural Implements " Arts and Manufactures	82 50	
		540 25

Cr. By L. G. to Township Societies " Preparing Show Grounds " Working Expenses	\$ cts. \$ cts. 393 78 14 50 73 34
	1021 87
Balance in hand	64 23

Your Directors have again to congratulate you on the increase of members, the number now being 192—an increase of 12 from 1868, and of 64 from 1867. In the Spring your Directors offered premiums for entire horses and fat cattle and sheep in connection with the Fair held at Cobourg, and have to regret that there were so few entries made. The Fall Show was held at Cobourg for two days, and the samples of grain, fruit and roots have never been surpassed, the number of entries at the two shows was 1,209.

The crops in this section have been in a great measures over an average, but were late in harvesting. The root crop was very abundant, but owing to the early frost about a month sooner than usual, a larger quantity of turnips, and in some places potatos, are still in the ground.

Alnwick.			
Dr. To 53 Members' Subscriptions " Admissions to Show " Legislative Grant.	\$ cts.	\$ cts. 54 00 30 22 54 40	\$ cts_
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures " " Ploughing Match " Preparing Show Grounds " Working Expenses	27 25 15 05 1 40 2 55 5 45 9 00	60 70 3 00 5 96	69 66
Balance in hand			68 96
Haldimand.			
DR. To Balance in hand " 120 Members' Subscriptions " Admissions to Show " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 5 69 120 00 65 78 133 00 89 65	\$ ets.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements	92 50 35 50 8 50 15 50 16 25		414 1
" " Arts and Manufactures " Ploughing Match	58 50 61 00	287 75	

	Cr.	\$ cts.	\$ cts.	
]	By Working Expenses	48 71	336 46	
	Balance in hand		77 66	

Your Directors in bringing before you their annual report, beg leave to state that

the Society as regards finances is in a favorable position.

A ploughing match took place in November; it was well attended, and very good work done, the boys particularly deserving credit. We would suggest that the Society have an annual ploughing match, in order to induce young men to greater proficiency in

this respect

The annual show was held in October, and proved about equal to former years, but your Directors cannot allow this opportunity to pass without urging upon all agriculturists the necessity of improving both stock and seed by importation, the first from England or Scotland, and the latter, particularly spring wheat, from some cold climate, say Russia or elsewhere. We are sorry to report that spring wheat in this Township has dwindled down to about an average crop of not more than eight or ten bushels per acre, and advise that some steps be taken to remedy the evil.

Your Directors are pleased to find than an improvement has been made in the dairy department. The cheese factory started here a few years ago, has proved a success, and farmers are now turning their attention to the manufacture of cheese, finding it far

more profitable than raising grain at the prices now paid.

	Hamilton.			
Dr.		S cts.	S cts.	\$ cts_
Balanc	e in hand	*		
170 M	embers' Subscriptions			
Admia	ciona to Char			
			020-	
Legisia	tive Grant		140 00	170 00
				412 09
O 2.01				
Prizes	for Live Stock	145 25		
44	Field Products	53 50		
66		5 50		
6.6	Horticultural Products	13 25		
64	Agricultural Implements	16 00		
66	Arts and Manufactures	45 75		
66				
	oroning crops	10 00	208 75	
Duesses	in a Cham Cham de			
Trepar	ing snow Grounds		20 00	
Worki	ng Expenses		43 20	
				357 95
	Balance in hand			54 14
	Balanc 170 M Admis Legisla CR. Prizes """ """ """ """ """ """ """ """ """ "	Dr. Balance in hand 170 Members' Subscriptions Admissions to Show Legislative Grant. Cr. Prizes for Live Stock "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures "Growing Crops	Dr. \$ ets. Balance in hand 170 Members' Subscriptions Admissions to Show Legislative Grant Cr. Prizes for Live Stock " Field Products " Dairy " " Horticultural Products " Agricultural Implements " Arts and Manufactures " Growing Crops Preparing Show Grounds Working Expenses	Dr. \$ cts. \$ cts. Balance in hand 50 17 170 Members' Subscriptions 170 00 Admissions to Show 51 92 Legislative Grant 140 00 Cr. Prizes for Live Stock 145 25 " Field Products 53 50 " Dairy 5 50 " Horticultural Products 13 25 " Agricultural Implements 16 00 " Arts and Manufactures 45 75 " Growing Crops 19 50 Preparing Show Grounds 16 00 Working Expenses 43 20

REPORT.

Your Directors, in coming before you at the present time, regret to have to inform you that in the number of members for the past year there has been a great deficiency, compared with the preceding year, which numbered 273, the past year only 170. There has been no agricultural periodical taken by the Society, which is one great reason, we believe, of causing the deficiency.

From the reports generally received from the Township, the yield in cereals was fully an average, but on account of the very low prices paid for all kinds of grain, farmers

have not realized what they anticipated.

The root crop was abundant, although, owing to the very wet and cold season, all crops were much later in maturing, and, therefore, much later in being secured than for many years past; the frost setting in so early prevented many from securing their roots, a great quantity still remaining in the ground. The potatoe crop was good in yield, but much affected by rot, in many fields one half being destroyed.

Fruit was also abundant, particularly apples, but the very hard frost coming on so

early in the season, there is a large portion still in the orchards not gathered.

The Annual Show of this Township was held at Cold Springs, on the 15th of October, and in some of the classes the articles were highly creditable. The horses and sheep, and some of the cattle were good, no animals, however, in the Galloway class being exhibited. There was a fair sample of grain, and the roots were very good. The deficiency seems to have been caused, we believe, in a great measure by the lateness of the season-time being limited with a great many parties.

Cobourg Horticultural Society.			
Dr.	\$ cts.	S cts.	\$ cts.
To Balance in hand		23 90	
" 74 Members' Subscriptions		74 00	
" Admissions to Show		69 63	
" Legislative Grant		05 - 38	
			232 91
Cr.			
By Prizes for Fruits	43 00		
" " Flowers and Plants	59 38		
" " Vegetables	35 00		
		137 38	
" Preparing Show Grounds		30 00	
" Preparing Show Grounds. " Working Expenses.		14 88	
			182 26
Balance in hand			50 65

REPORT.

We regret to say that there has been quite a falling off of members the past year. There are but 74, against that of 100 of the previous year. It is impossible to account for the change, but we think it advisable that a more thorough and energetic system of getting members should be adopted.

We consider that there is quite an advance of previous years in our Exhibitions, both in quality and quantity. But there are a great many persons, both members and non-members of the Society, who have both the means and ability of forwarding the interests of the Society, who have not taken any active part with us; we think it the duty of the

Society to endeavour to secure the co-operation of these individuals.

With regard to the financial position of the Society, we deem it most encouraging. After holding the two Exhibitions, and offering an increased amount and an extension of the prize list, we have to our credit the sum of \$50. The Society must bear in mind that this is owing to the Legislative Grant, and the only way which we can secure any thing like a respectable share is to keep up our membership.

NORFOLK, NORTH.

Dr. \$ cts. \$ cts. \$ cts.

To Balance in hand 261 24

"154 Members' Subscriptions 154 00

		~	
Dr. By Admissions to Show. "Legislative Grant "South Riding. "Loan on Mortgage. "Miscellaneous Receipts.	\$ cts.	\$ cts. 430 86 700 00 400 00 1100 00 90 30	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	401 00 102 75 30 25 40 25 59 25 89 80 19 00	742 30	
" L. G. to Township Societies " Purchase of Show Grounds " M. Stanhoff, Building Contract " Working Expenses		322 86 642 22 1460 00 136 64	3304 02
Balance due Treasurer			167 62
NOTE.—The North and South Ridings' Societies united and the above are the total awards.	for purp	oses of ex	hibition'
Middleton.			
DR. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant	\$ cts.	\$ cts. 6 28 100 00 10 00 111 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Grownig Crops	101 26 23 11 2 75 3 95 1 50 26 87 5 60	. 165 04	24: 20
" Preparing Show Grounds " Working Expenses		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	196 31
Balance in hand			30 97
Townsend.			
DR. To Balance in hand " 217 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 51 74 217 00 13 00 140 00	\$ ets.
			421 74

Cr. \$ cts. \$ cts. By Prizes for Live Stock 116 00 " Field Products 34 30 " Dairy " 19 85 " Horticultural Products 6 00 " Agricultural Implements 38 65 " Arts and Manufactures 16 70 " Working Expenses 31 88	\$ cts ⁻ 263 38 158 36
Windham.	
DR. \$ cts. \$ cts. To Balance in hand 12 75 " 66 Members' Subscriptions 74 10 " Legislative Grant 71 17	\$ cts. 157 92
CR. By Prizes for Live Stock. 67 50 " " Field Products. 17 50 " " Dairy " 6 75 " " Horticultural Products 3 00 " " Arts and Manufactures 10 50	
" Preparing Show Grounds	$\frac{117}{40}$ $\frac{75}{17}$
	10 17
NORFOLK, SOUTH.	
DR. \$ cts. \$ cts. To Balance in hand. 225 26 " Members' Subscriptions. 50 00 " Legislative Grant. 700 00 " Miscellaneous Receipts. 7 50	\$ cts. 982 76
CR. By Prizes for Ploughing Match 22 62 " L. G. to Township Societies 283 00 " A. W. Smith, for Boards 103 00 " H. Groff, for Union Show 400 00 " Agricultural Publications 10 50	10
" Working Expenses	876 98

Note.—The South Riding Society united with the North Riding, for a Union Exhibition.

Charlotteville,			
Dr. To Balance in hand " 79 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 29 58 79 00 72 00	\$ cts.
			180 58
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	79 33 22 73 2 65 2 55 2 25 6 80		
" Working Expenses		116 31 15 25	131 56
Balance in hand			49 02
Walsingham.			
DR. To 102 Members' Subscriptions ' Legislative Grant.	\$ cts.	\$ cts. 102 00 102 00	\$ cts-
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	71 00 30 25 11 00 5 75 5 50 9 25		204 00
Unpaid " Working Expenses	132 75 10 75	122 00 29 52	
Withing Dapenses		an U U ad	151 52
Balauce in hand			52 48
Woodhouse.			
Dr. To Balance in hand " 109 Members' Subscriptions " Admissions to Show " Legislative Grant	cts.	\$ cts. 167 30 109 00 12 00 109 00	\$ cts.
Cr. By Total Premiums " Preparing Show Grounds " Working Expenses		189 65 33 45 28 76	397 30 251 86
Balance in hand			145 44

ONTARIO, NORTH.

(The Report of the Riding Society had not come to hand when going to press.)

Brock.			
Dr. Do Balance in hand So Balance in hand So Members' Subscriptions Admissions to Show, and Ploughing Match Legislative Grant Donations for Ploughing Match	\$ cts.	\$ cts. 16 09 82 00 18 55 67 40 44 00	\$ cts.
" Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	82 00 2 50 5 00 3 00 5 50 21 00 56 00	175 00	
" Working Expenses		27 10	202 10
Balance in hand			25 94 .
Mara and Rama.			
Dr. Fo Balance in hand Members' Subscriptions Legislative Grant Miscellaneous Receipts.	\$ cts.	\$ ets. 5 97 25 74 80 1 05	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " Prize of previous year " Preparing Show Grounds " Purchase of Live Stock " Working Expenses	56 25 23 00 2 75 1 25	83 25 1 75 9 00 27 50 29 75	
Balance in hand			$\frac{151 \ 25}{21 \ 90}$
Reach and Scugog. Dr. To Balance in hand "125 Members' Subscriptions "Admissions to Show "Legislative Grant "Proceeds from Booths	\$ ets.	\$ cts. 32 68 125 00 57 40 103 55 9 50	\$ cts.

CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures.	178 75 13 75 6 25 3 25 32 00 20 75		
Unpaid	$254 75 \\ 53 75$		
" Preparing Show Grounds" Working Expenses	-	201 00 3 60 42 12	246 72
Balance in hand			81 41
Scott.			
Dr. To Balance in hand. " 82 Members' Subscriptions. " Admissions to Show " Legislative Grant. " Miscellaneous Receipts.	\$ cts.	\$ ets. 64 27 82 00 17 10 67 40 7 00	\$ ets.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	99 25 28 50 13 50 14 00 1 00 13 50	169 75	237 77
" Working Expenses		33 00	202 75
Balance in hand			35 02
Thorah.			
DR. To Balance due in hand " 67 Members' Subscriptions Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 61 88 67 00 9 50 54 25	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements, &c " " Arts and Manufactures	44 50 14 25 5 00 10 50 8 00 20 75		
Unpaid	45 75	57 25	

	-		
CR. By Prizes of previous years " Working Expenses		\$ ets. 25 25 18 60	\$ cts.
Walnung Emperatura		10 00	101 10
Balance in hand.			91 53
Uxbridge.			
Dr. To Balance in hand	\$ cts.	\$ ets. 5 65	\$ cts.
" 64 Members' Subscriptions " Legislative Grant		$64 00 \\ 52 60$	
Cr.			122 25
By Paid Treasurer County Society, for Union Show		$122 65 \\ 5 00$	
Totaling Dapenses			127 68
Balance due Treasurer			5 40

Note.—This Society United with the County Society for a Fall Exhibition.

ONTARIO, SOUTH.

UNIARIO, SOUTH.				
Dr. To Balance in hand		\$ ets. 759 81 441 00 703 80 700 00 78 11		cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Sheep-shearing and Turnip-hoeing Matches	97 00 51 00 156 50 119 00			
Unpaid		1315 50 280 00 42 78 10 00 326 79	1975	07
Balance in hand			707	65

REPORT.

The Directors beg leave to report that during the past year the Society has numbered 418 members, paying \$441, being an increase of 19 members, and a decrease of \$72.50 on members' subscriptions on the previous year. That the Society held a sheep-shearing

match at the Town of Whitby, in the drill shed, on Saturday, the 5th day of June, 1869, when seven entries were made, and \$17 were awarded in prizes. The first turnip hoeing match, under the auspices of the Society, was held on Mr. James Thompson's farm, 6th concession, lot 28, of Whitby, on Saturday, the 10th day of July, 1869, when forty-four entries were made, and prizes amounting to \$20 were awarded, which were well contested, and in which the farming community took a great interest.

The exhibition fully sustained the character of South Ontario for progress and improvements; although there is a falling cff in members' subscriptions, which is accounted for by the increase in price of the Canada Farmer. In previous years, the Society furnished the Canada Farmer to members at fifty cents each, and there were 216 copies taken last year. This year there were not any furnished by the Society. The number of entries exceeded that of any previous year by 203.

It is with pleasure that the officers and directors of the Society have to report the receipt of the following donations during the year, viz.: \$5 from John Shier, Esq., President; \$5 from Wm. Paston, Esq., Treasurer; and \$10 from Geo. Robson, Esq., Secretary.

Pickering.			
Dr. To Balance in hand " Members' Subscriptions " Admissions to Show " Legislative Grant " Borrowed on Mortgage " Subscriptions for Ploughing Match " Miscellaneous Receipts	\$ ets.	\$ cts. 119 10 275 00 328 00 140 00 500 00 70 50 57 50	\$ cts-
CR. By Prizes for Live Stock "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures "Ploughing Match	312 75 69 50 9 25 49 75 22 25 108 00 97 50 669 00		
Unpaid " Preparing Show Grounds " Purchase of " Interest " Working Expenses Balance in hand	174 75	494 25 14 45 550 73 55 07 112 40	1226 90 263 20
Whit by.			
Dr. To Balance in hand 249 Members' Subscriptions Admissions to Show Legislative Grant. Miscellaneous Receipts	\$ ets.	\$ cts. 21 73 298 00 187 65 140 00 30 00	\$ cts.

						. 6
CR. By Prizes for Live Stock. "Field Products. "Dairy " "Hortigaltural Products.	290 55 22	$\begin{array}{c} 00 \\ 50 \end{array}$	\$	cts.	\$	cts
" Horticultural Products " Agricultural Implements " Arts and Manufactures " Growing Crops, &c.	32 81	50 50 50 00	547	. 95		
" Preparing Show Grounds " Working Expenses.			23	57 93	640	75
Balance in hand						63
OTTAWA.						
Dr. To Balance in hand "Members' Subscriptions. "Admissions to Show "Legislative Grant. "Municipal Grants. "Proceeds of Booths, Licenses, Stalls, &c. "Prizes Returned. "Donation, Hon. J. Skead Cr.		cts.	1390 1110 350 1100 305 59 40	65 66 00 00 00 00 00	4576	ets. 31
By Prizes for Live Stock						
" " Dairy Products	118					
HORLICHBURAL FROMUCIS	243					
" " Agricultural Implements " " Arts and Manufactures	105					
" Vehicles						
Refunded		00	1024	50		
" Paid on Exhibition Buildings, Fencing, &c" " Working Expenses			1832 2199 574	76	4606	80
Balance in hand					69	51

The President and Directors, in reporting to the Subscribers the progress made during the past year, desire in the first place to acknowledge the liberal response that followed their appeal for aid to carry on the work of preparation for holding the Exhibition, and offering a liberal prize list for competitors.

The City Council, at the request of a deputation, voted, without a dissenting voice,

the sum of \$500, and the Council a like handsome amount.

The County of Ottawa Agricultural Society also contributed liberally, voting from its funds \$100; and many of our leading citizens gave sums varying from \$5 to \$50.

The Directors cannot but acknowledge the liberal manner in which the collectors were met by the citizens generally, a strong desire being expressed to aid in laying the

foundation of an institution, that, vigorously carried out, must be of lasting benefit to Central Canada.

Last year your Directors had the pleasure of reporting that a suitable ground for Exhibition purposes had been secured, and they are now in a position to state that the land selected and purchased has been well laid out, fenced, and excellent stables and sheds erected for the accommodation of exhibitors.

Believing that it was of the utmost importance to the future stability and success of the Society that the improvements made should be of a permanent nature, the work done has been of the most substantial kind, so that whatever additional building accommodation may be required, the present buildings and improvements will be permanent.

The whole cost of the materials and labour thus far, amount to the considerable sum of \$3,648.97, but the Directors feel satisfied that the work has been cheaply and well done, and the Society is now possessed of grounds and enclosures worthy of the products of the Ottawa Valley.

The Exhibition, under the auspices of the Society, took place on the 5th, 6th, and 7th

October, and was successful beyond anticipation.

Exhibitors came from the distance of Montreal, Lachine, Plantagenet, Morrisburgh, St. Lawrence County, N.Y., and many other distant places, and from them we had the assurance of satisfaction at coming, and their intention to visit us again.

The total number of tickets sold at the wicket was 5,420, but this does not represent the whole attendance, as exhibitors and attendants were furnished with free passes, ena-

bling them to move about during the progress of the show.

The total number of competitors was 200, representing 1,217 entries for competition, in addition to which a number of entries were made by parties who were exhibitors only.

With regard to the comparative display made in the different departments, without going into details, we may be permitted to refer briefly to the very superior display made in the stock side of the Show ground; every horse-box and cattle-pen was occupied, and several exhibitors had to show in the open sheds.

The display of horses was very good, and in horned cattle a large number of pure-

bred animals, as well as first-class grades, were on the ground.

Your Directors cannot conclude without expressing the obligations they are under to the *Hon. J. Skead* and *Mr. McKellar*, under whose directions the improvements upon the Show ground were conducted.

OXFORD, NORTH.

DR. To 313 Members' Subscriptions "Admissions to Show "Legislative Grant "Proceeds of Live Stock "Proceeds of two Notes discounted "Miscellaneous Receipts CR.	er er	ets.	360 00 194 60 700 00 39 00 195 30 17 00))))
By Balince due Treasurer. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements and carriages " " Arts and Manufactures.	378 74	75 50 00 25 50	626 75	

Cr.	\$ cts. \$ cts.
" L. G. to Township Societies	418 10
" Preparing Show Grounds	7 93
" Cheque to retire two Notes	200 00
"Working Expenses	177 62
	1579 27
Balance due Treasurer	73 37
D	

The show of horses and bulls in the spring was an improvement both in numbers and quality, and the establishment of a seed grain fair at the same time, awarding valuable prizes for the best samples, was an acknowledged success. We hope that this effort will be followed by even greater success the ensuing spring, and that farmers will see that it is not only their interest, but their duty to sustain it thoroughly.

Seeing the good results of periodical fairs for the sale of stock and other farm products in the various Towns and Villages in adjoining Counties, we regret that no successful effort has been made to establish a market in Woodstock. We cannot doubt that the facilities for holding such fairs are as good here as elsewhere, and can see no reason why it should not be as serviceable and as popular, if similar efforts were made to sustain it.

The Fall Exhibition was admitted by competent judges to have exceeded any previously held in Woodstock in almost every department. It was remarkable for excellence in quality, and the number of entries was equal to any former exhibition. It was also remarkable for the absence of confusion or disturbance of any kind, and notwithstanding the inconvenience of overcrowding in the hall, there was a general manifestation of patience and good feeling. The show of cattle, especially in the Durham class, was considered the largest and best ever seen in the county. Grades were well represented in nearly every section. There was a good show of horses, especially colts; but we think that a heavy draught class should be added to facilitate the labours of the judges, and give general satisfaction. The show of sheep was not inferior to any former exhibition, and the swine was a decided advance in quality, as well as in numbers. Though the mechanical classes fell short of what might have been expected in a county like Oxford, there was an evident improvement; and if our successors find themselves in a position to offer greater inducements by extending the prize list and increasing the amount of premiums in this department, we are confident that there will be no lack of competition next year. This is also true of many other departments.

Blandford.			
Dr. To Balance in hand " 278 Members' Subscription " Admissions to Show " Legislative Grant Cr.	\$ cts.	\$ cts. 54 03 287 00 65 50 119 25	\$ cts. 525 78
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " Working Expenses	225 00 44 75 17 25 19 75 35 50 36 50 45 00	423 75 89 74 ———	513 49
Balance in hand			12 29

Blenheim.			
Dr. To Balance in hand " 232 Members' Subscriptions " Admissions to Show " Legislative Grant " Subscriptions for Ploughing Match and Special Prizes " Miscellaneous Receipts	\$ cts.	\$ cts. 97 95 232 00 195 80 120 00 111 00 39 50	\$ cts.
CR. By Prizes for Live Stock "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures "Preparing Show Grounds "Agricultural Publications	51 00 15 00 19 00 45 75 30 00 54 00	437 75 11 25	
" Agricultural Publications " Working Expenses. Balance in hand		5 00 100 19	554 19 242 06

In reviewing the prize list it is very satisfactory. For instance, if we take the class of horses, competition was all that could be desired, although we have not time to particularize; if we had, competition was so keen we could not do all justice, we, therefore,

Report.

leave this class with the honors conferred on the exhibitors by the Judges.

As regards thorough-bred cattle we beg to congratulate Messrs. Moffat, Tew, Hunt, Wakefield, McKay, Barker and others for the perfection attained in this very important class. Mr. Moffat succeeded in carrying off a prize at the Provincial Fair with that beautiful animal "Blenheim Star," which was acknowledged by competent Judges to be the best thorough-bred animal on the ground. Mr. Barker also succeeded in carrying off a prize with a splendid animal. Had Mr. Yew and others competed they would also have been successful.

In the class of grade cattle like that of horses, competition was all that could be desired. Should the same improvement go on for a few years this class will compare favorably with the thorough-breds; this, too, is very important, in as much as this class will

form the ordinary farm stock for years to come.

In the class of sheep we have not words to convey to the exhibitors, the marked improvement in this branch of agriculture industry. We can unhesitatingly say that those shown by Messrs. Rodgers, Mason, Nichols, Reynoldson. Davidson, Anderson, Guthrie,

and others, would compare favorably with anything in the Dominion.

Swine and poultry were not as well represented as we would like to have seen, yet some good animals were exhibited. The earnestness put forth by the Poultry Association

at Toronto, it is hoped, will ere long improve the latter.

Grain, roots, fruit, &c., were unusually well represented, which was, no doubt, owing to a better rotation of crops; also large portions of ground having been thoroughly drained in the last few years. Such a procedure has, and will, prove very beneficial. The Drainage Act will be the means of doing much good, if properly carried out.

The mechanical department was better represented than at any show since the Society was organized, yet it is painful to see nearly all the prizes go to Brantford, Woodstock, Paris, &c. Our artizans must pluck up, and another year we hope to see our own mechanics figure more conspicuously in the prize list.

On entering the Hall a magnificent sight presented itself—the handiwork of the fair sex was here discernable. It is to be hoped that more encouragement will be given

that class another year.

In the Fine Arts Messrs. Alex. Fisher and J. Winterbourn were the principal exhibitors. Comparatively speaking, few persons are aware of the marked progress made in this County during the past decade, in the art of pencil drawing. Foremost amongst those who have signally promoted this advancement are the gentlemen above named, whose productions our people are familiar with, which for beauty of design and skilful execution may be ranked among the gems of Canadian art.

Nissouri, East.			
Dr. To Balance in hand. " 100 Members' Subscriptions. " Legislative Grant.	5 cts.	\$ cts. 14 87 101 50 50 50	\$ cts.
CR. By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures	83 50 16 00 3 25 3 00 2 75 6 00	114 50	
" Working Expenses		23 48	137 98
Balance in hand			28 89
Zorra, East.			
Dr. To Balance in hand. " 99 Members' Subscriptions. " Legislative Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 40 45 121 00 52 60 1 75	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Growing Crops " Preparing Show Grounds " Working Expenses.	95 00 20 50 10 50 4 50 6 50 17 50 31 00	185 50 5 00 29 65	
5			220 15
Balance due Treasurer			4 35

REPORT.

Your Directors, in detailing the action taken by them and its results, as seen in the proceedings of the Society and its success during their term of office, feel that anything approaching to boasting would not be warranted by facts. To whatever cause it may be attributed, there has been during this year an ebbing in the tide of prosperity, which of late years flowed in upon us as a Society. We have not, for example, so many members this year as we had last. In 1868 we had 136 members, this year only 99, showing a falling off of 37. Neither are our finances in so flourishing a state this year as they have been for years past. Last year the balance was in favour of the Society to the amount of \$40.00, this year the balance is against the Society to the amount of about \$4.00. It would have been much more in accordance with the wishes of your Directors, had the tide of prosperity continued to rise, and that they had been able to report more favourably. But although they cannot with truth give a report of a coleur de rose description, that which they can give is not all dark shadow and deep gloom. Our circumstances, comparatively adverse though they be, are not such as to justify weariness in carrying on the Society, or despair of its recovering lost ground.

During the months of January, February and March of this year the Society held another series of discussional meetings. The room was crowded on every occasion. It was gratifying to notice that the meetings were largely composed of the young men of the Township. The following is a specimen of the subjects discussed:—"The best mode of raising stock," "The most approved plan of cattle feeding," "Is it more remunerative to the farmer to be the patron of a cheese dairy than to manufacture butter?" It is no flattery to say the subjects were intelligently discussed. Theory, practice and realization were in their turn stated and illustrated, and much useful information elicited. Occasionally the palpable hit and the successful rejoinder characterized the debate, and now and then the humorous sally and flash of wit enlivened the discussion. The series of meetings were brought to a close for the season by a public entertainment held in the School House, Strathallan—it was largely attended, and gave great satisfaction. This feature in our Society's operations ought to be maintained. Such meetings are productive not only of an agreeable social evening, but are also calculated to improve the mind and

promote agricultural progress.

We now come to notice, and that briefly, the Annual Exhibition. It took place on the 1st of October. As usual there was a considerable turn out of people to view the sights of the day. And from almost every lip there fell the commending remark—"Its a good show." Although the quantity of stock and agricultural produce shown this year, was less than that exhibited in 1868, taking the number of entries as the standard of comparison, we may safely aver there was no falling off in quality. Indeed, some of the specimens of thorough bred and grade cattle, were of a high order. In the class grade cattle, the cow which took a prize at the Provincial Exhibition, was shown here and drew forth the applauding remark of all beholders. The greatest disparity between this year's show and last year's, was in class "Farm Produce," only 76 entries against 107. This may be traced in some measure, at least, to the lateness of the harvest. But the samples of grain and roots exhibited were very fine. We feel confident that had some of them been at the London Exhibition, their owner's names would have figured creditably in the Provincial Prize List. Our exhibition this year, fully maintained the character of this township for dairy produce. The entries made in this class, were also fewer on this occasion, than they were last year, but the superior quality of the cheese and butter shewn, won the highest enconiums of the Judges. We trust that seeing this township is preparing itself to go more extensively into cheese production, that quality will be aimed at and achieved by all. We, as farmers, like a good price for our produce, but to secure it, a good article must be produced. We may mention, in this connection, that the directors seeing the growing importance of dairy farming, and with the view of recognizing it and giving it their hearty sanction, thought it advisable to offer a prize for the best herd of cows giving milk. The directors hope that the funds of the Society next year, will allow of the continuance of this prize. We are glad to notice that our appeal in the last year's report to the ladies of the township, to maintain their department in the exhibition, has been responded to by a considerable increase in the number of articles exhibited. We fondly hope that they will continue to manifest an increasing interest in the Exhibition.

		Zorru, West.			
	Dr.	· · · · · · · · · · · · · · · · · · ·	\$ cts.	\$ cts.	\$ cts.
To	Balar	nce in hand	•	28 04	
		Members' Subscriptions		124 00	
		issions to Show		18 00	
		slative Grant		75 00	
66 .	Mun	icipal Grant		20 00	
	27- (111.	icipat Citation			265 04
	Cr.				200 01
Bu.		og for Tive Stock	85 75		
ъу.	1 1120	es for Live Stock	47 00		
"			14 00		
44		Dairy "	11 25		
4.		Horticultural Products	7 50		
	66	Agricultural Implements			
66	66	Arts and Manufactures	11 00		
66	6.6	Ploughing Match	12 00		
				188 50	
66	66	Working Expenses		34 43	
					222 93
		To Balance in hand			42 11

Note.—The Society appears from the Report, to be in a satisfactory state, and to have been instrumental in advancing the agriculture of the township.

grammatina di Mariana			
OXFORD SOUTH.			
Dr. To Balance in hand To 105 Members' Subscriptions "Admissions to Show "Legislative Grant "Ingersoll, N. & W. Oxford Township Societies. "Donation for Special Prizes	\$ et	8. \$ cts. 280 00 105 00 421 35 700 00 424 87 15 00	\$ cts. 1946 22
CR. By Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. "L. G. to Township Societies. "Ingersoll and N. & W. Oxford Society, cash and Expenses "Invested at Interest. "Working Expenses.	364 2 72 56 55 76 31 2 68 2 96 2	0 5 5 5 5 - 688 25 420 00 421 35 280 00 101 81	1911 41 34 81
Dereham. 1) R. To 202 Members' Subscriptions	\$ ct	ts. \$ cts. 213 00 103 40 84 52 22 00	\$ ets. \$22 92

Cr. By Balance due Treasurer	\$ cts.	\$ ets. 10 16	\$ cts
" Prizes for Live Stock	159 00	1.7 10	
" " Field Products " Dairy "	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
" " Horticultural Products	22 25		
" " Agricultural Implements" " " Arts and Manufactures	$ \begin{array}{rr} 29 & 50 \\ 26 & 25 \end{array} $		
" Preparing Show Grounds		290 50 13 28	
" Agricultural Publications		. 5 00	
" Working Expenses		101 70	420 64
Balance in hand			$\frac{12}{2}$ 28
Norwich.			
Dr.	\$ cts.	S ets.	\$ cts.
To Balance in hand "Members' Subscriptions		$\begin{array}{rrr} 37 & 05 \\ 265 & 00 \end{array}$	
" Admissions to Show		246 44	
" Legislative Grant" " Miscellaneous Receipts		98 47 16 00	
Cr.			662 96
By Prizes for Live Stock	202 00		
" " Field Products " " Dairy "	34 00 17 00		
" " Horticultural Products	17 75		
" " Agricultural Implements	50 25 32 15		
		353 15	
" Preparing Show Grounds " Working Expenses.		$\frac{44}{142} \frac{26}{29}$	
			539 70
Balance in hand			123 26
Norwich, South.			
Dr. To Balance in hand	\$ cts.	\$ ets. 40 26	\$ cts.
" 259 Members' Subscriptions		278 50	
" Admissions to Show" Legislative Grant		188 53 98 89	
" Rent of Tents, Booths, &c		64 00	0 W 0 7 D
Cr.			670 18
By Prizes for Live Stock	224 50		
" " Field Products	38 75 9 75		
" " Horticultural Products	17 00		
" " Agricultural Implements. " " Arts and Manufactures	23 25 38 25		
" Preparing Show Grounds		351 50 103 20	
"Working Expenses		96 18	K K C
			550 88
" Balance in hand			119 30
136			

Note.—The Directors report the Society to be in an improving condition; and after paying off a considerable amount of indebtedness, a balance remains in the Treasurer's hands.

hands.			
• Oxford, East.		.00	Ct. I
Dr.	S ets.	\$ cts.	S ets.
To Balance in hand		20 58	
" 74 Members' Subscriptions		103 10	
" Legislative Grant		40 06	
" Miscellaneous Receipts		0 75	101 10
			164 40
Cr.			
By Prizes for Live Stock	87 00		
" " Field Products	$12 \ 75$		
" " Dairy "	6 00		
" " Horticultural Products	5 - 25		
" " Arts and Manufactures	11 25		
-		122 - 25	
" Agricultural Publications		29 - 50	
" Working Expenses		37 - 36	
0 1			189 11
Balance due Treasurer			24 62
North and West Oxford and Ingersoll.			
Dr.	S ets.	\$ cts.	\$ cts.
To Balance in hand		1 39	
" 350 Members' Subscriptions		350 00	
" Admissions to Spring Show		13 62	
" Legislative Grant		98 04	
" Proceeds of Union Exhibition		421 75	
" Proceeds Sale of Land		100 00	
"Borrowed		350 00	
" Subscriptions for Agricultural Grounds, &c		221 29	
" Miscellaneous		51 50	
1410C(11(11CO16)			1607 59
Cr.			200, 30
By Prizes at Spring Show		65 00	
For Exhibition Buildings, Fencing, &c		519 87	
By Share of Premiums, Union Show		419 87	
		350 00	
" Paid Borrowed Money" " Working Expenses		246 73.	
WOLKING Expenses			1601 47
e			1001 11
Balance in hand			6 12
	1.11	13.11.13.1.	
NOTE —This Society united with that of the County in ho	iding a	rall Exhi	DRIOH.

Note.—This Society united with that of the County in holding a Fall Exhibition.

PEEL.	
Dr.	\$ cts. \$ cts.
To Balance in hand	437 48
" 327 Members' Subscriptions	425 00
" Admissions to Show	695 60
" Legislative Grant	700 00
" Municipal Grant	189 00
" Miscellaneous Receipts	191 75
1	2008 83

Cr.	e	cts.	& cts.	\$ cts.
By Prizes for Live Stock	499		Q 000.	\$ 005.
" " Field Products	108	50		
" " Dairy "	45.	00		
" " Horticultural Products	65	00		
" " Agricultural Implements	175	00		
" ' Arts and Manufactures	212	25		
	7701			
TT :1	1104			
Unpaid	80	00	1001 75	
" " Previous years			1024 75 111 00	
" L. G. to Township Societies			304 76	
"Preparing Show Grounds			65 24	
" Working Expenses			269 38	
				1775 13
Balance in hand				863 70
•				
Chinguacousy.				
DR.	\$	cts.	*	\$ cts.
To Balance in hand			12 06	
" 105 Members' Subscriptions			108 00	
" Legislative Grant			89 96 60 00	
" Municipal Grant			60 00	270 02
Cr.				210 02
" Prizes for Live Stock	169	00		
" " Field Products		50		
" " Dairy "		00		
" " Horticultural Products	5	00		
" " Agricultural Implements	4	0.0		
" " Arts and Manufactures	10	00		
" To " " " " " " " " " " " " " " " " " "			234 50	
" Preparing Show Grounds			7 00	
" Working Expenses			28 28	200 70
				269 78
Balance in hand				24
Databet in hand,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Note.—At the Annual Meeting it was unanimously reso	lved t	hat	the Socie	ty be dis-
continued.				
Gore of Toronto.				
Dr.	8	cts.	\$ cts.	\$ cts.
To Balance in hand			29	
" 91 Members' Subscriptions			105 00	
"Admissions to Show ,			15 75 74 80	
" Legislative Grant" " Municipal Grant			20 00	
"Borrowed			45 00	
200101101111111111111111111111111111111			10 00	260 84
Cr.				_ , , , , ,
By Prizes for Live Stock	127	75		
" " Field Products		75		
• " Dairy "		00		
" " Horticultural Products	4	50		

138

Cr. By Prizes for Agricultural Implements " " Arts and Manufactures	\$ ets. 23 50 11 75	\$ ets.	\$ cts.
Unpaid " Prizes of previous year " Paid Loan " Working Expenses	201 25 9 00	192 25 7 50 31 00 26 96	257 71
Balance in hand			3 13
Toronto.			
Dr. To Balance in hand	\$ ets.	\$ cts. 172 28 295 50 95 00 140 00 100 00 4 00	\$ cts. 806 78
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures	235 50 80 00 25 00 26 00 55 00 91 50		
Unpaid By Working Expenses	513 00 12 00	501 00 111 75	612 75
Balance in hand			194 03
PERTH, NORTH. Dr. To Balance in hand	\$ cts.	852 74 357 70 261 95 700 00 130 00 147 00 40 00 30 00	\$ ets.
CR. By Prizes for Live Stock "Field Products "Dairy " "Horticultural Products	$\begin{array}{c} 344 & 00 \\ 219 & 00 \\ 21 & 00 \\ 64 & 50 \end{array}$		

139

Cr. By Prizes for Agricultural Implements. "Arts and Manufactures. "Ploughing Match. "Growing Crops.	\$ ets. 57 00 74 00 72 00 7 50	\$ cts.	\$ cts.
Unpaid	859 00 26 00	833 00 151 75 605 35 239 05 320 94	2150 09
Balance in hand			369 30
Dr. To 151 Members' Subscriptions "Admissious to Show "Legislative Grant "Municipal Grant Cr.	\$ cts.	\$ cts. 176 00 18 25 160 00 50 00	\$ cts.
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " Preparing Show Grounds " Working Expenses.	127 25 23 10 7 90 8 00 21 50 49 75 9 00	246 50 18 50 73 75	338 75
Balance in hand			65 50

Note.—The Directors state that their first Exhibition was quite successful, the number of entries and the quality of the several articles in all the departments exceeded expectation; and the interest evinced by a large number of visitors, in the cause of agricultural improvements, was of the most encouraging character.

	Logan,			
Dr.	v	\$ cts.	S cts.	\$ cts.
To 104 Mem	bers' Subscriptions.		104 00	
" Admissio	ns to Show		12 10	
" Legislativ	ve Grant		96 00	
" Municipa	l Grant		20.00	
" J. Redfor	ed, Esq., M.P., Donation		20.00	
" A. Monte	eith, Esq., M.P.P., "		10 00	
	, 22, 4, 22, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			272 10
Cr.				414 10
Q 244	r Live Stock	46 75	ζ	
" " Fi	eld Products	6 25		
16 16 D	airy "	6 00		
и и п	orticultural Products	16 25		
11		10 2:)	
	140			

CR. By Prizes for Agricultural Implements " Arts and Manufactures " Working Expenses	$\begin{array}{ccc} 4 & 00 \\ 22 & 25 \\ \hline \end{array}$	\$ cts. 101 50 58 26	
Balance in hand			112 34

* * * * * * *

The year 1869 has been, so far as this Township is concerned, singularly unfavourable for the development of our agricultural resources. The almost incessant rains of the summer and fall, combined with an unusually low temperature of the atmosphere, having gone nigh to destroying the grain crop in very many cases, and greatly injuring it in all, yet will it have answered one good purpose if it leads to the adoption of a more efficient system of drainage. The general levelness of surface making it absolutely necessary, in order to farm successfully, to clear all the natural water courses from all that obstructs the free course of the water, and to make in addition as many artificial channels and drains as our time and means will allow. Logan does not (nor can it be expected that it should, at least for some years to come) hold a foremost place as an agricultural township, yet much may be done to improve its agricultural capabilities. And although we cannot take high rank as a grain growing township, yet is much of our land singularly adapted for pasture and dairy purposes, and it might be well if a larger share of attention were given to the raising of cattle and sheep, and the production of butter, cheese and wool.

The holding of the show gave a scope to the ladies, of which (and very much to their credit) they availed themselves, by making such a display of their industry and taste as we would fain hope will shame the sterner sex into taking a more active and decided part in our future shows, and induce them seriously to try to improve the breeds of live stock by obtaining as fast as possible, animals of a superior kind, and also by taking better care of them than is frequently done; remembering always, that good feeding and warm shelter are essential to the health and comfort of all animals, and that it pays to feed well.

It would show but little gratitude on our part for help freely given, did we not thankfully acknowledge the very liberal treatment that we have received from the Council of the Township, who not only gave us \$20 to aid our prize list, but also placed at our disposal the new Town Hall and ground for the purposes of the show, having gone to some extra expense to have them ready in time to accommodate us. Our sincere thanks are also given to James Redford, Esq., M. P., for his generous donation of \$20 to our funds, and also to Andrew Monteith, Esq., M. P. P., for his donation of \$10.

Mornington

	man in the state of the state o				
To	Dr. Balance in hand	\$	cts.	\$ cts. 35 95	\$ ets.
	Members' Subscriptions			61 00	
6.0	Admissions to Show			2 50	
26	Legislative Grant			73 10	
66	J. Redford, Esq., M.P., Donation			20 00 18 00	
	and the state of t				210 55
	Cr.				
By	Prizes for Live Stock	90	25		
66	" Field Products	26	75		
66	" Dairy "	5	00		
64	" Horticultural Products	1	50		

Cr. By Prizes for Agricultural Implements	\$ ets. 8 75 21 50	\$ ctt.	\$ cts.
Unpaid	153 75 19 00	134 75	
" Working Expenses Ba ance in hand		51 00	185 75
- Wallace and Elma.			
Dr. To Balance in hand " 123 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " J. Redford, Esq., M.P Donation " Miscellaneous Receipts	\$ cts.	\$ cts. 20 20 134 97 33 40 114 00 16 25 20 00 65 75	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " Prizes for previous year. " Preparing Show Grounds " Working Expenses	119 50 29 00 6 50 13 50 17 25 15 75 34 00	235 50 4 37 6 50 56 47	404 57
Balance in hand			$\frac{302\ 84}{101\ 73}$

The Fall Show of this Society was held at Listowel on the 5th day of October. The weather was favorable, and the exhibition was a complete success in every particular. There were 632 entries, being nearly a hundred more than the previous year. In stock, horses showed an increase, and the general superiority of the stock exhibited was universally remarked. Horned cattle did not show much improvement, but from evidences of better breeding discernable, we trust at no distant day to have a more favorable report to make under this head. In sheep we cannot say there was much change, still we are happy to state that good stock is becoming more general. In swine there were but few entries, but those shown were fine animals; and the prevailing high price of pork for the past two years will undoubtedly have the effect of arousing farmers to the advantages of the improved breeds of hogs. The display of agricultural implements was very meagre, and we trust to see an improvement in this class another year. The display of roots and vegetables was very fine; in fact, the best ever made in Listowel; and fully equal to the show at many County Exhibitions. We were pleased to see several new varieties of potatoes, which were last spring imported from the United States by Messrs. Silt Bros., and which bid fair to be a great acquisition to this part of the country. In fruit the show was not

large, but the quality would be hard to excel. In dairy produce and domestic manufactures, the display was fully equal to former years.

	ANNUAL COLUMN			
	PERTH, SOUTH.	0 .4.	0 -4-	d> -4-
***	DR.	S cts.	\$ cts. 84 75	\$ cts.
То	Balance in hand		251 00	
	244 Members' Subscriptions		268 36	
	Admissions to Show		700 00	
	Legislative Grant		185 00	
	Municipal Grant		270 00	
	Received from old County Society		13 33	
	Miscellaneous Receipts			772 44
				114 31
D	Cr. Prizes for Live Stock	228 75		
by	" Field Products	44 75		
66	" Dairy "	18 50		
66	" Horticultural Products	30 45		
66	" Agricultural Implements	59 50		
66	" Arts and Manufactures	88 75		
44	" Ploughing Match	40 00		
	1 loughing mach	-		
		510 70		
	Unpaid	10 70		
	C Aparation		500 00	
66	" of previous year		26 - 25	
66	Preparing Show Grounds		327 56	
66	Purchase of Show Grounds		187 00	
66	L. G. to Township Societies		280 00	
66	Portion of Municipal Grant		40 00	
56	Working Expenses		181 39	
				1542 20
	Balance in hand			230 24
	Fullarton.			
	Dr.	\$ cts.	\$ cts.	\$ cts.
To	Balance in hand		37 05	
66	113 Members' Subscriptions		113 00	
46	Legislative Grant		140 00	
66	Municipal Grant		20 00	910 05
				310 05
	Cr.	100 05		
66	I TIZES TOT LITTE DOOCK	109 25		
6.6	for field floudets	19 75		
6.0	Daily	3 50 7 75		
66	1101 Houselat Library	9 00		
61	Agricultural implements	19 55		
	Titts and bronderactios	20 00		
£ (Ploughing Match	20 00	188 80	
4	Premium of last year		1 00	
4	Working Expenses		47 96	
	Horking Dybenses	۵		237 76
	Balance in hand			72 29
	tyalance in halid			
	143			12 20

Note.—Notwithstanding the unfavorable weather at the Fall Show, the number and quality of the articles entered, and the attendance of members and the public were satisfactory.

factory.			
Hibbert.	es.		
DR.	\$ cts.	\$ cts.	\$ ets.
To Balance in hand		$\frac{37}{124} \frac{17}{70}$	
" Legislative Grant		160 00	
" Municipal Grant		15 00	
" Miscellaneous Receipts		2 66	
·			339 53
Cr.			
By Prizes for Live Stock	111 25		
" " Field Products	26 50		
" " Dairy "	7 00 12 00		
" " Agricultural Implements	4 75		
" " Arts and Manufactures	30 00		
		191 50	
· · · of previous year		6 20	
"Union Ploughing Match		20 00	
" Agricultural Publications		7 05	
" Working Expenses		48 88	079 69
			273 63
Balance in hand			65 90
PETERBOROUGH EAST.			
Dr.	e ets.	C.	E
To Balance in hand	er ets.	\$ cts. 96 73	\$ cts.
" 65 Members' Subscriptions		65 00	
" Admissions to Show		153 40	
" Legislative Grant		700 00	
" Funds merged by Otonabee Society		100 00	
" Subscriptions for Ploughing Match		76 00	
(In			1191 13
CR. By Prizes for Live Stock	215 25		
" " Field Products	37 75		
" " Dairy "	17 00		
" " Horticultural Products	16 50		
" " Agricultural Implements	20 - 25		
" " Arts and Manufactures	46 25		
" " Ploughing Match	144 00		
	497 00		
Unpaid	16 00		
о прави политичний пол	10 00	481 00	
" L. G. to Township Societies		380 40	
" Preparing Show Grounds		33 44	
" Working Expenses		143 50	
4			1038 34
Balance in hand			152 79
APECAGE OF THE SECRETARY			104 19

	Asphodel, Belmont, and Dummer.			
	Dr.	\$ cts.	\$ cts.	\$ ets.
To	Balance in hand	φ cus.	72 95	Q Cus.
"	260 Members' Subscriptions		260 00	
	Admissions to Show		53 38	
	Legislative Grant		140 00	
"	Proceeds Sale of Seeds		387 67	
				914 00
	Cr.			
Bv	Prizes for Live Stock	50 00		
"	" Field Products	16 50		
"	" Dairy "	10 50		
66	" Horticultural Products	9 87		
"	" Agricultural Implements	7 00		
46	" Arts and Manufactures	18 75		
			112 6 2	
"	Preparing Show Grounds		16 85	
"	Purchase of Seed		576 42	
66	Agricultural Publications		43 95	
"	Working Expenses		106 30	
				856 14
	Balance in hand			57 86
	7. 7. 7.			
	Dummer and Douro.			
	Dr.	\$ cts.	\$ cts.	. \$ cts.
	Balance in hand		43 64	
66	107 Members' Subscriptions		107 00	
66	Admissions to Chayr			
	Admissions to Show		17 92	
"	Legislative Grant		73 92	
"	Legislative Grant			
"	Legislative Grant		73 92	362 68
	Legislative Grant Proceeds Sale of Seeds Cr.		73 92	362 68
	Legislative Grant	42 75	73 92	362 68
	Legislative Grant Proceeds Sale of Seeds Cr.	18 00	73 92	362 68
	CR. Prizes for Live Stock. "Field Products. "Dairy "	$ \begin{array}{r} 18 & 00 \\ 6 & 37 \end{array} $	73 92	362 68
By	CR. Prizes for Live Stock. "Field Products. "Dairy "Horticultural Products.	18 00 6 37 6 13	73 92	362 68
By "	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements.	18 00 6 37 6 13 4 00	73 92	362 68
By "	CR. Prizes for Live Stock. "Field Products. "Dairy "Horticultural Products.	18 00 6 37 6 13	73 92 120 20	362 68
By	Legislative Grant Proceeds Sale of Seeds CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures.	18 00 6 37 6 13 4 00	73 92 120 20 ——————————————————————————————————	362 68
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures. Preparing Show Ground.	18 00 6 37 6 13 4 00	73 92 120 20 ——————————————————————————————————	362 68
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed.	18 00 6 37 6 13 4 00	73 92 120 20 	362 68
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures. Preparing Show Ground.	18 00 6 37 6 13 4 00	73 92 120 20 ——————————————————————————————————	
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed.	18 00 6 37 6 13 4 00	73 92 120 20 	362 68 291 13
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses.	18 00 6 37 6 13 4 00	73 92 120 20 	291 13
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed.	18 00 6 37 6 13 4 00	73 92 120 20 	
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses.	18 00 6 37 6 13 4 00	73 92 120 20 	291 13
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses.	18 00 6 37 6 13 4 00	73 92 120 20 	291 13
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses. Balance in hand. Dysart.	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses. Balance in hand. Dysart. DR.	18 00 6 37 6 13 4 00	73 92 120 20 94 25 3 40 176 00 17 48 \$ cts.	291 13
By	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed Working Expenses Balance in hand Dysart. DR. Balance in hand	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55
By " " " " " " " " " " " " " " " " " " "	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses. Balance in hand. Dysart. DR. Balance in hand. Members' Subscriptions.	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55
By " " " " " " " " " " " " " " " " " " "	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed Working Expenses Balance in hand Dr. Balance in hand Members' Subscriptions. Legislative Grant	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55
By " " " " " " " " " " " " " " " " " " "	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures. Preparing Show Ground. Purchase of Seed. Working Expenses. Balance in hand. Dysart. DR. Balance in hand. Members' Subscriptions.	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55 \$ cts.
By " " " " " " " " " " " " " " " " " " "	Legislative Grant Proceeds Sale of Seeds. CR. Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products "Agricultural Implements "Arts and Manufactures. Preparing Show Ground. Purchase of Seed Working Expenses Balance in hand Dr. Balance in hand Members' Subscriptions. Legislative Grant	18 00 6 37 6 13 4 00 17 00	73 92 120 20 	291 13 71 55

Cr. By Prizes for Live Stock " " Field Products " " Dairy "	\$ cts. 59 00 28 25	\$ ets.	\$ cts.
" " Dairy "	$ \begin{array}{r} 3 & 25 \\ 4 & 30 \\ 14 & 75 \end{array} $,
" Preparing Show Grounds " Purchase of Live Stock " Working Expenses		109 55 0 60 42 00 21 78	
Working Expenses			173 93
Balance due Treasurer			1 83
Otonabee.			
Dr. To Balance in hand	\$ cts.	\$ cts. 164 83	\$ ets.
" 163 Members' Subscriptions		163 00	
" Legislative Grant		112 60 $200 00$	
" Municipal Grant. " Proceeds Sale of Seeds		602 84	
" Borrowed		90 00	1000 0
CR. By Prizes paid to County Society		73 37	1333 27
" for previous year		20 12	
" " paid on Exhibition Buildings		474 60 710 00	
" Purchase of Seed " Working Expenses		107 24	
Trouble and the second			1385 33
Balance due Treasurer.			52 00
Note.—This Society united with that of this County, for	or holding	a fall Ex	
	J		
PETERBOROUGH WEST.			
Dr.	\$ cts	\$ cts.	\$ cts
To Balance in hand		30 00	
" 88 Members' Subscriptions " Admissions to Show		96 50 176 44	
" Legislative Grant		700 00	
CR.	000 00		1002 9
By Prizes for Live Stock	$ \begin{array}{ccccccccccccccccccccccccccccccccccc$		
" " Dairy "	16 50		
" " Horticultural Products	$\begin{array}{cccc} 7 & 75 \\ 22 & 50 \end{array}$,
" " Agricultural Implements	42 00		
Unpaid	386 50 14 50	372 00	
" L. G. to Township Societies		420 00	
" Accounts of Previous year		40 30	
" Working Expenses		161 13	993 4
Balance in hand			9 5

146

Your Directors in presenting their annual Report, regret their inability to chronicle

an increased interest in the proceedings of the Society by the public.

Notwithstanding the liberal assistance extended to these Societies by the Government, it seems next to impossible to awaken in the minds of the public any lively interest in their proceedings or management. So long as such a state of things continues to exist, it is useless to hope for any commensurate return for the large amount of money annually distributed throughout the Province, by the Government, for the encouragement of agriculture and kindred pursuits.

In a county like our own (where agriculture is the chief occupation of the people), it is truly astonishing to see how little interest is manifested in these Societies by even the agriculturists for whose especial benefit they are designed. Doubtless it may, and will, be avowed that this lack of interest is attributable to the mismanagement of those directing their affairs. Now, however true this may be, the fault after all lies with the people themselves, inasmuch as any one, no matter how humble his position or circumstances, may become a member, and thus have a voice in its management, by simply contributing annually the trifling sum of one dollar.

Should there be the same want of interest in the working of our agricultural Societies throughout the Province as exists in our own Riding, and continues to exist, it requires no prophet to see that the day is not far distant when the question of withdrawing Govern-

ment aid from these Societies altogether will be seriously considered.

Your Directors have to report that the usual Spring and Fall Exhibitions have been

held with about the usual success.

In connection with this subject, your Directors would recommend as worthy of the consideration of their successors, whether a grand union Exhibition of the two Riding Societies in this County might not occasionally be held. It is quite evident that under our present system of agricultural Societies, we have quite too many small Exhibitions—thus frittering away large amounts of money.

Monaghan, South.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		62 80	
" 84 Members' Subscriptions		84 00	
" Admissions to Show		5 00	
" Legislative Grant		140 00	
" Miscellaneous Receipts		5 00	
•			296 80
Cr.			
By Prizes for Live Stock	106 75		
" " Field Products	25 00		
" " Dairy "			
" " Horticultural Products	41 25		
" " Agricultural Implements	5 75		
" Arts and Manufactures	14 00		
" " Ploughing Match	30 00		
		230 25	
" Working Expenses		14 05	
,	r		244 30
Balance in hand			52 50

REPORT.

We have pleasure in reporting that we have been favoured with a bountiful harvest. Almost all kinds of spring grain are above an average crop, especially oats. We have to report a very considerable injury to late spring wheat by frost in the latter part of August;

late oats were also injured, to some extent, from the same cause. The potato crop, although a good one, has suffered very much from rot. On damp, heavy clay soils three-fourths are reported injured. In a number of instances the cup variety has suffered most. On dry, loamy soils very little injury reported. The fruit crop was a plentiful one, but on account of the lateness of the season and the early frosts, large quantities of apples were never harvested at all. Roots and vegetables were also a plentiful crop, but suffered very materially from the same cause as fruit.

The Society held its Annual Show at Centreville, on the 15th October; it was quite a success. A larger number of entries was made than at any previous show. There was a marked improvement in almost all kinds of live stock. The display of grain was large and of good quality. Apples and pears were well represented, and of a fair quality.

Roots and vegetables were well represented, and of an average quality.

Feeling the importance that dairy farming has now acquired in this Province, and from late information, we would strongly recommend starting a cheese factory, fully satisfied if well conducted, it would be a paying investment.

Smith, Ennismore and N. Monaghan.			
Dr. To Balance in hand " 83 Members' Subscriptions " Legislative Grant " Proceeds of Sale of Seeds " Miscellaneous Receipts.	\$ cts.	\$ cts. 91 53 87 00 140 00 209 27 3 50	\$ cts. 531 30
Cr. By Prizes for Live Stock " " Field Products. " " Dairy. " " Horticultural Products " " Arts and Manufactures " Purchase of Seeds. " Working Expenses Balance due Treasurer	90 50 21 25 9 00 9 25 10 50	140 50 432 17 42 78	$\frac{615 \ 45}{84 \ 15}$
Peterborough Horticultural Society. DR. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant "Amount from the Treasurer of Smith "Amount from the Treasurer of Monaghan "Miscellaneous Receipts CR. By Purchase of Prizes for Fruit, Flower and Vegetables "Working Expenses, including rent and fitting up of	\$ cts.	\$ cts, 68 85 71 00 31 42 86 00 25 00 26 00 4 11	\$ cts.
Hall, Printing, &c		117 40	183 15
Balance in hand			129 23

148

At the close of their term of office, the Directors of the Peterboro' Horticultural Society have much satisfaction in reporting to this annual meeting the general prosperity and success of its affairs. When it is borne in mind that the uses and advantages of the institution consist, not simply in fostering a healthful competition in the culture of flowers and other produce of the garden, but also in promoting one of the finest tastes of which the human mind is susceptible. It will be, no doubt, very gratifying to the members of the Society to learn that very marked growth is perceptible in its affairs.

As in the previous year, the Directors have to report only one Exhibition during their term of office, which was held on Wednesday, the First day of September last. It was not forgotten by them that the last year's report recommended two Exhibitions, but in consequence of the backward character of the summer, it was judged best to make only one.

PRESCOTT.

PRESCUII.			
Dr. To Balance in hand " 90 Members' Subscriptions " Admissions to Show " Legislative Grant " From E. and W. Hawksbury Society " Miscellaneous Receipts Cr.	\$ cts.	\$ cts. 8 57 90 00 23 87 700 00 106 00 36 50	\$ cts.
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " L. G. to Township Societies " Preparing Show Grounds " Paid to E. and W. Hawksbury Society " Working Expenses Balance in hand	193 00 38 25 45 00 1 50 10 00 62 25 15 00	365 00 420 00 10 83 106 00 41 83	943 66
Dr. To 26 Members' Subscriptions. "Legislative Grant. Cr.	\$ cts.	\$ cts. 52 00 70 00	\$ cts.
By Prizes for Growing Crops		110 00 12 00	122 00
Dr. To Balance in hand	\$ cts.	\$ cts. 7 00 135 00 210 00	\$ cts.
			002

CR. To Growing Crops	\$ cts.	\$ tts. 283 00	\$ cts.
" Working Expenses		58 00	341 00
Balance in hand			11 00
Plantagenet, North.			
Dr.	\$ cts.	8 cts.	\$ cts.
To Balance in hand		12 53 52 00 70 00	134 53
Cr.			154 95
By Prizes for Live Stock		39 75	
" " Dairy "	5 50	4 50	
" " Horticultural Products	2 25		
" " Arts and Manufactures " " Growing Crops	9 75 45 00		
		106 75	
" Working Expenses		24 87	131 62
Balance in hand			2 91
Plantagenet, South.			
DR. To Balance in hand	\$ ets.	\$ cts. 1 38 50 00 70 00	\$ ets.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Agricultural Implements	49 30 9 60 7 20 1 45		121 00
" " Arts and Manufactures	8 90		
" " Growing crops	16 25	00 80	
" Working Expenses		$92 70 \\ 26 08$	
0			118 78
Balance in hand			2 60
PRINCE EDWARD.			
Dr.	\$ ets.	\$ cts.	\$ cts.
To 210 Members' Subscriptions " Admissions to Show " Legislative Grant. " Miscellaneous Receipts.		215 00 773 74 700 00 2 18	
Cr.			1690 92
By Balance due Treasurer	015 ==	$141 \ 34$	
" Prizes for Live Stock " " Field Products " " Dairy "	315 75 29 2 5 20 75		
150			

By Prizes for Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures	\$ ets. 20 75 19 50 114 41	\$ cts-	\$ cts.
Unpaid " Prizes for previous year " L. G. to Township Societies " Preparing Show Grounds " Purchase of Exhibition Grounds " Working Expenses	520 41 82 91	437 50 69 02 420 00 377 07 120 00 84 60	1649 53
Balance in hand			41 39
Dr. To Balance in hand " 90 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 51 00 90 00 27 32 94 00	\$ ets.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " Agricultural Implements " Arts and Manufactures " Preparing Show Grounds " Working Expenses	101 75 34 80 6 00 7 05 12 50 25 30	187 40 12 00 19 00	218 40
Balance in hand			43 92
HALLOWELL AND HILLIER DR. To 144 Members' Subscriptions "Admissions to Show "Legislative Grant.	\$ cts.	\$ cts. 145 00 14 45 146 26	\$ cts.
CR. By Prizes for Live Stock	119 80 16 15 18 20 7 95 16 40 23 95	202 45 57 08	259 53
D. 181			46 18
Balance on hand			40 10

151

Senhinoloma			-
DR. To Balance in hand	\$ cts.	\$ cts. 3 60 54 00	\$ cts.
" Legislative Grant	46 25	54 32	111 92
" " Field Products " " Dairy " " " Horticultural Products	15 55 5 30 7 60		
" " Arts and Manufactures	14 25	88 95	
" Working Expenses		16 15	105 10
Balance in hand			6 82
DR. To Members' Subscriptious. "Admissions to Show	\$ cts.	$\begin{array}{ccc} 124 & 00 \\ 245 & 79 \end{array}$	\$ cts.
" Legislative Grant Cr.		125 37	495 16
By Prizes for Poultry. " " Fruit. " " Flowers and Plants. " " Vegetables.	15 75 21 00 76 25 17 00		
" " Fine Arts, Ladies' Work, Domestic Manufactures,	71 50	007 50	
" Working Expenses		201 50 159 66	361 16
Balance in hand			134 00

FIRST ANNUAL REPORT.

The first Exhibition of the Society was held on Dominion Day, 1st July, and the second on 15th September; both Exhibitions were held in the Market Hall, which, through the kindness of the Town Council, was placed at the disposal of the Society free of charge. Your Directors feel highly gratified with the enthusiasm displayed by the members of the Society, in contributing to the interest of the Exhibition. In each

class the strife for superiority seemed equally prevalent.

Plants and Flowers.—A great variety of Green-house plants were shown, among which were some beautiful specimens in Geraniums, Foliage Plants, Fuschias, Cactuses, &c., &c. The exhibition of Annuals was much larger, and of greater variety than was expected from so young and so small a society. 23 Var Phlox Drummondii were shown by one exhibitor; 40 var. Pansies by another; 40 var. Pinks, by another; 45 var. Annuals, by another, &c. Single and Double Petunias, Verbenas; some fine Seedlings were exhibited; Balsams, Stocks, Asters, Gladiolii, Dahlias, &c., &c., all showing taste and skill in our amateurs.

Fruits.—Prince Edward has the reputation of being one of the finest fruit growing counties in Ontario, and from specimens shown at our Exhibitions the past year, she is

fully entitled to the honour.

Strawberries.—In former years we had to get our supply of this fruit from the United States, the last season large quantities were exported from our County to Belleville, Kingston, and other places, of very fine varieties. The past season was a little late

for exhibiting this fruit at our July Exhibition, a few varieties were shown, Wilson's Albany, Triomphe de Gand, &c. Currants and Gooseberries were shown in a green state.

Apples.—Perhaps in no county in Ontario, or even in the State of New York, do they excel Prince Edward in the culture and quality of this fruit. Every year the demand for our apples is increasing; the exportation has been very large for the past few years, and is steadily increasing, and is now forming an important source of the wealth of the County—and if our farmers and fruit growers will only take more pains in putting up their selected fruit for the market, and which dealers can depend on, Prince Edward has the prospect of supplying all the eastern demand. One thing operating against us is the system, among some of our fruit growers, of putting up this fruit in barrels with the top and bottom layers of choice fruit, while in the centre is a mixture of the most inferior; many complaints have been made of this. In Pears the same complaint has been made. Our exports the past year have been to Montreal, Ottawa, City of New York and to England. The exportation from the Port of Picton alone for the last season was 4,677 barrels of apples, besides about 600 bus. of dried apples, which, reduced to green fruit, will make about 1,500 barrels more, making total shipped from Picton alone, of 6,177 barrels, which, at an average price of \$2.25 per barrel, yielded a revenue of nearly \$14,000, with a considerable quantity still in the hands of farmers for Spring shipment, besides what has been shipped from other points in the County. Your Directors regret they cannot give a list of the varieties shown at our Exhibitions, not having been furnished with names of varieties by the exhibitors.

Plums, Pears and Peaches.—These fruits were shown in large variety, also some specimens of Native Peaches, grown by Mr. Peter C. Dempsey, of Ameliasburgh, and

Mr. W. H. Carr, of Picton.

Grapes.—Some fine varieties of this fruit were also shown, but, as the same with the apples, pears and plums, no list was given of the names. Your Directors cannot give

particulars of the varieties shown.

Vegetables.—The Vegetables constituted an important department in our Exhibitions. The variety and quality of Potatoes shown exceeded anything we have ever seen in our County, from the Early Rose, exhibited by Mr. Reck, of Ameliasburgh, to the Early Shaws, exhibited by Mr. Fraser, of Picton. The following varieties were exhibited by the President of the Society, W. Ross, Esq., M.P., viz.:—"Goodrich," "Harrison," "Tebee," 'Early Williams'," "Flukes," "Lady Mary," "Early Strawberry," "Long Keep," "Thomson's Bermuda Pink Eye," &c., &c.

RENFREW, NORTH.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		185 03	
" 125 Members' Subscriptions		210 00	
" Admissions to Show		3 00	
" Legislative Grant		700 00	
CR.			1098 03
By Prizes for Live Stock	75 30		
" " Growing Crops	38 50		
" " Dairy Products	3 50		
" " Horticultural Products	4 50		
" " Agricultural Implements	18 00		
" " Arts and Manufactures	20 00		
" " Ploughing Match	$23 \ 00$		
	•	182 80	
" L. G. to Township Societies		140 00	
" Prizes for Previous Year		4 00	
" Purchase of Live Stock		450 00	
" Working Expenses		109 85	
			886 65
Balance in hand			211 38

The Society is steadily growing in favour with the public generally—this is manifested by an increase of membership over previous years, and by increased liberality on the part of the subscribers. The subscription of forty dollars by Alex. Moffatt, Esq., Miller, Pembroke, is deserving of special notice. Your Directors feeling the necessity of improving the class of cattle in this section of country, have at considerable trouble and expense, succeeded in procuring four thorough bred bulls, (three Durhams and one Ayrshire). One of them, "Baron Peel," (No. 43 in Canadian Herd Book), bred by John Snell, Esq., Edmonton, Ontario, three years old, weight 2,100 lbs., is a very superior animal. The others are of equally pure breed, but rather young to be of much service during the past season.

It is to be hoped that the stock breeders of this County will now avail themselves of the opportunity placed within their reach of improving their stock, and thus show that

the efforts of your Directors for the public good are appreciated.

On account of purchasing stock, (as above referred to), the prize list for the past year was reduced over fifty per cent.—this could not be avoided, and though a few grumbled, yet by far the greater majority of members approved of the course pursued. Your Directors are of the opinion that the object for which the Legislative Grant is given, has been better carried out, than it would otherwise have been by giving it away in prizes upon that which is undeserving, and would advise the laying out of yet greater sums in the importation of breeding animals, such as bulls, rams and boars, by this Society.

With regard to the Show Fair held by the Society in the month of October last, while it is but fair to say that it exceeded any previously held as regards number of entries, and quality of articles and things shown, yet it must be evident to all that there

is great room for improvement.

DR. To Balance in hand "Members' Subscriptions. "Legislative Grant CR.	\$ cts.	\$ cts. 88 80 61 00 140 00	\$ cts.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures " " Ploughing Match	45 25 19 90 5 75 4 80 12 25 17 25 11 00		
Unpaid " Prizes previous year " Working Expenses Balance in hand	116 20 7 55	108 65 1 40 29 40	139 45

REPORT.

There has been no increase in the number of members of the Society during the past year. In the stock department there has been no improvement, nor can we look for much until we get some thorough-bred stock. Our County Society has brought some good stock into the County, which our members would do will to secure the use of. In the grain and vegetable departments the number of entries is about the same as the pre-

A. 1870-71

ceding year, but there has been a decided improvement in the quality of the articles exhibited, much to the satisfaction of all parties interested in the Society. In the home manufactures and ladies' department there has been a marked improvement, both in the quantity and quality exhibited.

The Directors have to report with regard to the ploughing match, that it was nearly a failure, there being six prizes offered, and only three ploughs to compete. There is

quite a wide margin for improvement in this department, as well as in others.

RENFREW, SOUTH.			
Dr. To Balance in hand "Members' Subscriptions "Legislative Grant "Miscellaneous Receipts	\$ cts.	\$ cts. 105 78 122 00 700 00 55 00	\$ cts 982 78
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Hortigultural Products	132 60 26 65 20 00 2 55		
" " Agricultural Implements" " " Arts and Manufactures" " " Ploughing Match (exclusive of Hon. J. Skead's	31 50 25 80		
Iron Plough)	$ \begin{array}{r} 39 & 00 \\ 81 & 75 \\ \hline 359 & 85 \end{array} $		
Unpaid " L. G. to Township Societies " Preparing Show Grounds " Working Expenses	29 55	330 30 338 00 3 60 165 75	
Balance in hand			837 65

REPORT.

In submitting a statement of the affairs of the Society for the past year, your Directors beg leave to report that finding many of the members anxious that crop viewing should be resumed, and that the financial condition of the Society warranted such a step, offered premiums for standing crops and fencing. Thirty-eight members competed, making an aggregate of 120 entries, for which there were prizes awarded to the amount of \$81.75.

The entries at the Exhibition were, in live stock, 183; implements, &c., 44; grain, roots, fruit, and vegetables, 123; dairy products and maple sugar, 36; cloths, 54; ladies'

work, 55. Total 495.

Of the \$30 given by J. L. McDougall, Esq., M.P., as prizes for thorough-bred stock, there were only \$8 appropriated as such, Mr. Cardiff's Devon bull being the only thorough bred animal exhibited. But there is reason to believe that there will be more entries of thorough-bred stock at the next Exhibition, as several animals have since been purchased by members of the Society.

The Hon. James Skead sent his annual gift of an iron plough, which was awarded as a first prize at the Ploughing Match, held on the farm of Mr. John McGregor, Horton, on the 15th October. The plough is a beautiful implement, and is finished in a very

superior style.

But your Directors have to regret that notwithstanding the liberal prizes offered at the Ploughing Matches, so few of the young men of the county enter for competition, as good ploughing is of very great importance to the agriculturists of the country; the work done by the 10 ploughmen who competed, was good, and the competition between some of them very close.

Edward McGillivray, Esq., of Ottawa, with his usual liberality sent a donation of \$10

to the Society, which was added to the general fund.

There are three Branches in connection with this Society, viz., McNab, Admaston, and Grattan, all in a more or less state of efficiency. The Grattan Society, at its annual meeting, formed an union with Wilberforce, and will hereafter be known as the Grattan and Wilberforce Agricultural Society.

Admaston.			
Dr. To Balance in hand " 44 Members' Subscriptions " Legislative Grant. " Miscellaneous Receipts.	\$ cts.	\$ cts. 52 03 51 00 98 00 8 80	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " " Growing Crops.	52 35 18 55 3 65 7 75 7 25 17 77 15 65		209 83
Unpaid	122 97 7 08	115 89 40 95 39 59	
			196 43
Balance in hand			13 40
DR. To 58 Members' Subscriptions " Legislative Grant " Balance paid by Executors of late Treasurer	\$ ets.	\$ cts. 58 50 100 00 51 00	\$ cts.
Cr.	,		209 50
By Prizes for Live Stock "Field Products "Dairy "Agricultural Implements "Arts and Manufactures	28 95 11 20 2 00 5 50 10 80	50 45	
" Prize previous year " Working Expenses		58 45 4 00 23 95	86 40
Balance in hand			123 10

Note.—This Society for the more effectual promotion of Agriculture, unanimously resolved at the Annual Meeting to form an union with the Township of Wilberforce.

...

McNab.			•
Dr. To Balance in hand " 63 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 29 44 110 75 140 00	\$ cts.
Cr. By Prižes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	45 50 22 75 17 00 5 50 8 00 23 60		
" Preparing Show Grounds		122 35 8 00 43 00 66 00	239 35
Balance in hand			40 84

The Directors, in accordance with law, beg leave to submit to you their Annual Re

port of Management, during the past year.

In doing so, they take pleasure in congratulating you on the abundant harvest with which our country has been blessed during the past season. Nearly all crops have been above an average yield, notwithstanding that the summer had been more than usually cold and wet. Potatoes and some other crops suffered from this cause, but, we are glad to say, not to the extent that was at one time feared.

The past season has forcibly reminded us that sufficient attention has not yet been paid by our farmers to a thorough system of drainage. This is a matter that requires our serious attention, as experience has proved good drainage to be beneficial to the soil

in wet or dry seasons.

The number of entries at the last Exhibition of the Society, was not quite as great last Fall as at the Exhibition of the previous year, the most noticeable deficiency being in the department of stock. It is hoped that members of this Society, keeping in view the object for which it was formed, will endeavour, not only to improve their modes of husbandry, the quality of their live stock, and the comfort and appearance of their buildings and surroundings, but that they will also stir up their lagging neighbours to do likewise, and nothing is more conducive to emulation in this respect, than a creditable display in all departments of our Annual Exhibitions.

We would call attention to the capabilities of our Township for fruit growing. Some of the samples on exhibition at the last fall show were most excellent, clearly proving that it only requires painstaking intelligence to convert our hill sides from barren wastes to blooming fruitfulness. The demand for good fruit is ever on the increase, and no more

profitable branch of farming could be entered upon.

The Secretary has received several printed circulars from the Bureau of Agriculture asking information about the different breeds of Poultry kept in this Township, but as no place has hitherto been allotted to domestic fowls in our list of premiums, we are not in

a position to supply the information asked for by the Department.

The Directors would suggest to members as a means of self-improvement, as well as an agreeable pastime during the long winter evenings, that a Committee be at once appointed to make arrangements to hold weekly or fortnightly meetings, where extracts from Agricultural works might be read and commented upon by those present, and the mutual interchange of opinions founded on practical experience might thus be obtained,

which would be highly beneficial to all who might attend. For the sake of convenience, those meetings might be held in rotation at Burnstown, White Lake and Balmer Island. We are of the opinion that if the matter is properly gone about, great good as well as pleasure would result from it.

RUSSELL.

DR. " 82 Members' Subscriptions " Admissions to Show " Legislative Grant. " From private sources.	\$ cts.	\$ cts. 82 00 15 40 700 00 157 00	\$ cts.
Cr.			
By Balance due to Treasurer		5 13	
" Prizes for Live Stock	124 50		
" " Field Products	40 60		
" " Dairy "	26 75		
" " Horticultural Products	14 55		
" " Growing Crops	$22 \ 40$		
" " Agricultural Implements	6 25		
" " Arts and Manufactures	37 20		
" " Ploughing Match	109 00		
	381 25		
Hanaid	1 50		
Unpaid	1 50	379 75	
" Proparing Show Grounds		16 00	
" Preparing Show Grounds " L. G. to Township Societies		420 00	
"Working Evnences		128 52	
" Working Expenses		120 04	949 40
			040 40
Balance in hand			5 00

REPORT.

Your Directors, in submitting their annual report, beg leave to make the following statement in reference to the crops, &c., as gathered from personal observation and other-

Fall wheat, good in general, injured by rust in some localities. Spring wheat, upon the whole, an average crop; change of seed much needed. Oats an excellent crop. Peas good. Barley also good. Rye, very little sown. Potatoes an abundant crop; but rotted badly before digging time. Hay, far above the average of the last few years. Man-

golds, carrots and beets, very good.

The Society's exhibition, held in Metcalf last September, was, in every particular, a complete success, excepting the stock department, which, we thought, might have shown more evident signs of improvement. Upon the whole, we have to congratulate the Society upon the marked success of its efforts during the past year, and the farming community generally upon the remunerative prices now prevailing (and likely to continue through the winter) for nearly every commodity raised or grown on the farm. In conclusion, we can merely say, that in the midst of this seeming prosperity, we should not forget to show our gratitude to Him from whom all good proceeds, and without whose aid our own efforts will be of no avail.

Clarence,			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		15 76	
" 21 Members' Subscriptions		$\begin{array}{ccc} 45 & 00 \\ 29 & 16 \end{array}$	
" Legislative Grant		29 10	89 92
By Prizes for Live Stock	36 54		00 02
" " Dairy "	2 88		
" " Horticultural Products	4 77		
Arts and manufactures	6 84		
" " Growing Crops	25 71	76 74	
" Working Expenses		13 11	
			89 85
Balance in hand			07
Cumberland.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand	φ ουσ.	5 20	Ψ 003.
" 50 Members' Subscriptions		200 00	
" Legislative Grant		119 00	
CR. Der Deisen fon Time Charle'	100 50		324 20
By Prizes for Live Stock " " Dairy Products	100 50 48 00		
" " Growing Crops	147 80		
Growing Grops		296 30	
"Working Expenses		23 00	
			319 30
Balance in hand			4 90
Note.—But little winter wheat is raised in this Townsh			
Spring Wheat, is generally cultivated. Crop of last season prels per acre. Spring grain generally good, and hay very heav	etty good zv. Turn	; average	ot much
cultivated.	y. Ium	195 210 11	ou muon
Gloucester.			
DR.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		8 21	
" Members' Subscribtions		108 00	
" Legislative Grant " Miscellaneous Receipts.		$73 \ 40$ $20 \ 00$	
Cr.			209 61
By Prizes for Live Stock	81 45		
" " Field Products	2 00		
	0 00		
" " Dairy "	9 00		
" " Dairy "	1 00		
" " Dairy "			
" " Dairy "	1 00 1 50		
" " Dairy "	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $		
" " Dairy "	1 00 1 50 46 35	107.70	
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $	135 50	
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law " Prizes of previous year	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $	3 90	
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $		205 20
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law " Prizes of previous year	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $	3 90	205 20
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law " Prizes of previous year " Working Expenses Balance in hand	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $	3 90	205 20
" " Dairy " " " Horticultural Products " " Agricultural Implements " " Growing Crops Retained as per By-law " Prizes of previous year " Working Expenses	$ \begin{array}{r} 1 & 00 \\ 1 & 50 \\ 46 & 35 \\ \hline \hline 141 & 30 \end{array} $	3 90	

Osgoode,		
Dr.	\$ cts.	\$ cts.
To Balance in hand	21 48	
" Members' Subcriptions	156 00	
" Legislative Grant	102 90	
Cr.		280 38
By Paid for the keep of Bulls	95 00	
· ·		95 00
Balance in hand		185 38

Note.—The Directors state that by devoting their whole means to the purchase of good bulls, the cattle of the Township are being much improved, an object they propose to keep steadily in view.

SIMCOE, NORTH.

DR. To Balance in hand	\$ cts	s. \$ cts. 132 11 216 00 67 64 700 00 160 00 28 57	\$ 1304	ets.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	217 55 116 50 14 00 28 25 11 00 33 50			
Unpaid " Prizes of previous year " L. G. to Township Societies " Preparing Show Grounds " Working Expenses.	420 80 25 00	395 80 44 00 416 91 233 62 121 19	1211	52
Balance in hand			92	80

REPORT.

Your Directors have much pleasure in stating that the operations of the Society during the past year have been successful.

The annual Fall Show was decidedly the greatest success of any ever held in Barrie, but your Directors still have to complain of the indifference manifested by the greater part of the manufacturers and mechanics in bringing forward their productions at our Exhibitions.

The state of agriculture in this County is progressive, large tracts of the forest are annually giving way before the axe, and are converted into productive fields—the cultivation of such land is necessarily limited; but on older clearings farmers evince a desire for

better cultivation, a good deal of draining is done, of various constructions, in wet lands,

but no thorough system of tile draining has as yet been practised.

A greater breadth of roots is grown, and mangolds and carrots much more common than formerly, and farmers generally are anxious to get their land in such a state of cultivation, that labour-saving machinery may be profitably employed.

	Medonte & Flos.				
66	Dr. Balance in hand	\$	cts.	\$ cts. 112 05 97 00 54 32	\$ cts.
	UR.				263 37
By	Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Arts and Manufactures.	3 6 1	50 50 50 87 25		
66	Unpaid	84 32	62 37	52 25 49 00 20 75	122 00
	Balance in hand				141 37

Note.—Winter wheat, owing to early frost and rust, was generally a failure, and spring wheat was below an average from the same cause. Oats, barley, &c., with roots, were, with few exceptions, good crops.

Nottawasaga.				
Dr. To Balance in hand "178 Members' Subscriptions. "Admissions to Show "Legislative Grant. "Municipal Grant Cr.	\$	ets.	\$ cts. 56 52 214 50 35 00 114 80 40 00	\$ cts.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures. " " Ploughing Match.	164 44 7 14 36 25 21	50 50 50 00 50		
			313 00 36 00 58 64	407 64
Balance in hand				53 18

The Directors being desirous of upholding the Society's position as far as possible, 11

REPORT.

by judicious means, have continued to require that each successful competitor shall leave one dollar towards his subscription for the following year, the result of which may, with safety, be conceded to be advantageous to the Society. The Directors, however, cannot too earnestly impress upon the members of this Society, the necessity which exists for their individual exertions in its behalf, by calling the attention of their friends to the advantages that will arise from so doing. The Society held a show for stallions at Nottawa village, on the 30th of April last, when five entries were made for general purpose horses, and three entries for heavy draught horses, which was decidedly the best exhibition of the kind ever held in the township. The Annual Exhibition was held at the village of Creemore, on the 5th of October last. The number of entries (365), was 62 less than the previous year, nevertheless, otherwise it proved to be most successful. There was a good show of horses, mares and yearlings. In cattle there were some fine cows, oxen and calves shown. The sheep were superior to any before exhibited. The pigs made a small show—they were, however, good. The waggons, buggies, and farm implements were beautifully got up.

The Ladies' Department was meagre, and contained very few specimens of their

handiwork.

In grain, roots, dairy produce and vegetables, there was a magnificent display, both in regard to quantity and quality. The arrangements made by W. H. Thornbury, Esq., and others entrusted with the management, were very complete and reflected great credit. In regard to the crops, generally, throughout the township, we cannot speak so favorably on account of so much wet weather prevailing in the summer, and the frost and snow coming so early upon us. Some of the Fall wheat got damaged with the rust and did not yield so well. The Spring wheat also suffered more or less, plenty of straw, but a diminished proportion of plump grain. The root crops were abundant, although in some places the potatoes were slightly diseased. The hay crop was plentiful and tolerably well saved, considering the unfavorable weather. The ploughing match in the Fall, was a failure, which may be attributed to farm work being so far behind, and the anxiety of the farmers to have the grain thrashed out early for market, thereby preventing the ploughmen from procuring teams for that purpose. We have reason to be thankful so far as this township is concerned, in having a fair average crop.

Orillia.			
DR. To Balauce in hand	\$ cts.	\$ cts. 00 82 123 50 69 15	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " Keep of Live Stock. " Agricultural Publications. " Working Expenses	46 25 20 25 4 50 2 25	73 25 18 20 39 00 52 50 39 11	222 06
Balance due Treasurer			28 59

Note.—The Fall Show, on the whole, was satisfactory. Farm working horses were particularly good, which was the case, with some few exceptions, with the young stock generally. The same may be said of grain and roots, with the exception of Fall wheat. Dairy products were excellent. "The state of agriculture is progressing very favorably in this locality, as are also the mechanical and manufacturing arts in the Village of Orillia."

Oro.			
DR. To Balance in hand " 76 Members' Subscriptions " Legislative Grant.	\$ cts.	\$ cts. 1 06 84 50 42 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Arts and Manufactures.	66 25 23 50 6 50 8 80 2 85		
Unpaid " Preparing Show Grounds " Agricultural Publications " Working Expenses	107 90 29 50	78 40 2 00 12 00 34 76	
Balance in hand			$\frac{127 \ 16}{40}$
DR. To 60 Members' Subscriptions. " Legislative Grant. " Municipal Grant. " Miscellaneous Receipts	\$ cts.	\$ cts. 72 75 37 00 20 00 3 75	\$ cts.
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures " " Ploughing Match	44 75 15 45 5 25 2 80 14 20 18 00		133 50
**	100 45		
Unpaid " Preparing Show Grounds " Working Expenses.	5 10	95 35 2 50 19 65	117 50
Balance in hand		٥	16 00
DR. To Balance in hand 57 Members' Subscriptions " Legislative Grant " Proceeds Sale of Seeds	\$ cts.	\$ cts. 10 68 72 00 38 64 136 03	\$ cts.
CR. By Prizes for Live Stock. " " Dairy " " " Horticultural Products 163	50 75 1 62 5 50	100 00	257 35

	Co ata	Ch ota	(h oto
By Prizes for Arts and Manufactures		\$ cts.	\$ cts.
		65 12	
" Purchase of Seed		145 40	
" Working Expenses		23 75	004 07
			234 27
Balance in hand			23 08

Your Directors are sorry to report that this Society has not been in such a flourishing state the past year, as heretofore, the number of members being only 57, with a subscription of seventy-two dollars. This is, no doubt, in part owing to the great failure in the crops of 1868, in consequence of which many did not feel themselves able to pay their annual subscription. But apart from this, there has not been the energy shown, which was now apparent by the absence of anything like the usual display at our Annual Show. Your Directors trust that the year 1870 will bring about a better state of things, and that the farmers of Tiny and Tay will put their shoulders to the wheel, and, by a liberal support, make this Society one of the most flourishing in the County. The past season has been one of extreme moisture, in consequence of which Fall wheat was almost a total failure. Peas and oats, and also barley, have been a heavy crop; turnips have also yielded well, but the rot has done considerable damage to the potatoes. Spring wheat has turned out well, [the midge doing little damage. Altogether, the farmer has much to be thankful for, and this should lead us to renewed exertions.

Vespra.

v espra.			
DR. To Balance in hand	\$ cts.	\$ cts. 9 87 111 50 61 00	\$ cts.
CR. By Prizes for Live Stock. "Field Products "Dairy " "Horticultural Products "Arts and Manufactures "Agricultural Publications "Working Expenses]	82 50 25 50 2 75 3 00 6 00	119 75 48 75 24 19	. 192 69
Balance due Treasurer			10 32

Note.—Agriculture is represented as steadily progressing in this Township, and labour-saving machines are generally employed, and better methods of farming adopted. Horticulture is commanding more attention. It has been satisfactorily proved that Vespra is capable of raising the best varieties of fruit. Apples, plums, pears, and grapes of choice kinds, grace our exhibitions. Some very large orchards have been planted during the last three years, and are thriving well. There is no doubt, but in a few years this Township will have a large surplus of fruit to dispose of.

	SIMCOE, SOUTH.	0 -4-	ф .t	@ .4-
To	B. I ace in hand	φ cts.	\$ cts.	\$ cts.
66	Members' Subscriptions		349 85	
66	Admissions to Show		257 30	
	Legislative Grant		700 00	
"	Proceeds Sale of Booths and Pasture		37 25	7211 70
	Cr.			1544 12
Bv	Prizes for Live Stock	271 50		
"	" Field Products	109 00		
"	" Dairy "	16 00		
66	" Horticultural Products	42 00		
"	" Agricultural Implements	54 00		
"	" Arts and Manufactures	74 00		
66	" Extras	9 00		,
"	I C to Tomorbia Coniction		575 50	
"	L. G. to Township Societies		387 25 174 82	
	Working Expenses			1137 57
				1101 01
	Balance in hand			406 55

The Annual Show was held on our grounds October 5th and 6th, 1869, and in every sense was a grand success. The horses and cattle shown surpassed those of any previous year, and we are glad to see that the farmer is becoming alive to the fact that the best class of stock is the cheapest and most profitable; and that if the farmer turned his attention more generally to stock raising, it would prove more remunerative to him, and the land would not become impoverished as it is by continual cropping. The entries in all the other classes of the stock department, and the improved appearance, very much exceeded any previous year. Grain was of a fair quality, although the yield was not what it was expected it would be from the appearance at harvest time, the average not being more than 20 bushels to the acre. Spring wheat would average about 20 bushels. In barley there was a large yield, say about 35 bushels to the acre, but owing to the wet season it was not so bright a sample as in former years. Oats would yield 40 or 45 bushels to the acre. Peas 25 bushels. The root crop of all descriptions was of an excellent quality, but owing to the early winter, and heavy snow coming in the early part of the month of November, a great many of the root crops are still in the ground, especially turnips.

In the Implements and Manufactures we are glad to see a decided improvement, several articles being exhibited this year that have never been shown before. In all the other departments the entries much exceeded any preceding year. The total number of entries last year was 1020, and when compared with the entries some 3 years ago, when 500 was considered a large number, the Society has cause for rejoicing. It is to be hoped that the incoming board will make it a personal matter with themselves, each to add as many names to the members' list as possible, that the prize list may next year very much exceed the one just past. They feel confident now that the Township of West Gwillimbury has amalgamated their funds with those of the County, which is a matter for congratulation, that the two interests being centred on the one object, viz., the building up of the County Society, that we may reasonably expect still greater success in the future

than we have had in the past.

	$\it Essa.$			
	Dr.	\$ cts.	\$ cts.	\$ cts.
86	To Balance in hand		7 64	
"	119 Members' Subscriptions	•	119 00	
	165			

To Admissions to Show		\$ 0	ets.	\$ cts. 17 20 67 23	\$ c1	ts.
					211	07
Cr.						
By Prizes for Live Stock		66	00			
		28	00			
" " Dairy "		3	00			
	cts	12	00			
	ients	29	00			
	res	20	00			
Mi vs and mandiaes	100			158 00		
" Proposing Show Grounds				7 00		
reparing show Glounds.				23 78		
" Working Expenses				20 10	188	79
					100	10
						20
Balance in hand					22	29

Note.—The Society has seen its fifteenth anniversary, and is reported in "very good working order." The fall show was well sustained, and indicated progress. The contemplated ploughing match did not take place, in consequence of a most unusually intense and early frost.

Dr. To Members' Subscriptions	\$ cts.	\$ cts. 44 10	\$ cts.
Cr. By Treasurer of County Society on Amalgamation " Printing		35 85 8 25	44 10

Note.—It has been deemed expedient to unite this Society with that of the South Riding, when exhibitions are held in the Town of Bradford, and it is considered that the change will be mutually beneficial.

Innisfil.			
Dr. To Balauce in hand " 119 Members' Subscriptions " Admissions to Show " Legislative Grant	\$ ets.	\$ cts. 18 56 119 50 29 84 67 23	\$ cts.
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures.	93 50 33 50 6 00 1 50 21 00 19 00	174 50	
" Working Expenses		22 00	196 50
Balance in hand			38 63

Note.—The Exhibition was superior both in quantity and quality to any of its predecessors, comprising 383 entries against 193 last year. The live stock exhibited indicated decided improvement, as was also the case with the more important implements. The display of cereals was also good.

166

Mulmur.	0	6 .4.	Φ.4
DR. To 94 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 106 00 24 75 59 88 10 00 7 50	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match " Preparing Show Grounds " Working Expenses	57 00 21 25 9 00 16 25 10 00 23 50 6 00	143 00 35 00 21 13	199 13
Balance due Treasurer			3 00
DR. To Balance in hand "Members' Subscriptions " " Extra " Legislative Grant " Municipal Grant	\$ cts.	\$ cts. 16 17 162 00 10 00 90 62 10 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Working Expenses	124 00 34 00 4 50 8 50 11 00 16 75	198 75 43 57	242 3 2
Balance in hand			46 47

The Directors of the Tecumseth Branch Agricultural Society feel much pleasure in submitting this, the Twenty-fifth Annual Report, to the County Board. Your Directors congratulate themselves on the present position of this Society, both as regards financial matters, and also the improvements made in the mechanical and domestic manufactures. The Society held its Spring Show in the village of Bond Head on the 28th of April last, and may be considered in every respect successful, especially in the way of getting subscribers. The competition in entire horses was very good, and among the number were some imported animals. The farmers in this section are beginning to appreciate the breeding of good stock, as they find it pays best. Our Fall Show was held in the village of Clarksville, on the 8th of October, and may also be considered successful; the day was all that could be desired, and the consequence was a very large crowd of spectators. The various classes were all pretty keenly contested, with the exception of the mechanical

department, as may be seen by the amount awarded in that class, we attribute the reason to not holding out sufficient inducement in our prize list. The grain crops in this section for the past year, may be considered fully an average, compared with former years. The root crops are altogether ahead of what they have been for some years past.

Tossorontio.				
Dr. To Balance in hand "172 Members' Subscriptions "Admissions to Show "Legislative Grant "Miscellaneous Receipts		cts.	\$ cts. 63 12 182 00 94 65 102 24 18 60	\$ cts.
CR. By Prizes for Live Stock "" Field Products. "" Dairy " "" Horticultural Products "" Agricultural Implements "" Arts and Manufactures "" Ploughing Match.	27 14		223 25	
" Preparing Show Grounds" Working Expenses			66 43 41 44	331 12
Balance in hand				129 49

Note.—The Directors report that neither the Autumn Show nor the Ploughing Match realized the expectations entertained, and attribute the result mainly to the absence of liberal premiums, an error they hope the Society will be able to correct in future.

STORMONT.			
Dr. To Balance in hand " 114 Members' Subscriptions " Legislative Grant " Miscellaneous Receipts Cr.	\$ cts.	\$ cts. 188 28 119 00 700 00 7 12	\$ cts.
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " ,, Agricultural Implements " " Arts and Manufactures	175 00 66 75 21 50 25 75 73 50 59 25		
" L. G. to Township Societies " Preparing Show Grounds " Working Expenses		421 75 280 00 53 05 47 50	802 30
Balance in hand			212 10

168

Finch.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions. " Legislative Grant. " Miscellaneous Receipts.		109 00 140 00 1 50	•
Cr.		1 50	250 50
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Plenching Metals	77 00 20 75 12 50 13 00 15 00 16 75		
" " Sheep Shearing	24 00 13 50 18 50	211 00	
" Working Expenses		37 63	248 63
Balance in hand			1 87
Osnabruck. DR. To Balance in hand " 53 Members' Subscriptions " Legislative Grant	\$ cts.	\$ cts. 60 71 00 140 00	\$ cts.
CR. By Prizes for Live Stock	131 50		211 60
" " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures	18 00 7 50 12 25 20 50	189 75	
" Preparing Show Grounds" " Working Expenses		4 00 20 85	214 60
Balance due Treasurer			3 00
TORONTO.			
Dr. To Balance in hand	\$ cts.	\$ cts. 115 65 367 25 136 50 550 00 120 39	\$ ets.
CR. By Prizes for Fruits " " Flowers and Plants " " Vegetables	29 75 154 50 41 75		1289 79
" Subscription to Union Exhibition		226 00 579 61	

 $60 ext{ } 19\frac{1}{2}$ $60 ext{ } 19\frac{1}{2}$

240 78

To Preparing Show Grounds	\$ (ts.	\$ cts. 93 75 80 00 10 50 313 19)	cts.
Balance due Treasurer				1	3 2
Union Exhibition of West York, Toronto, and York Townshi	p Agr	riculi	tural Soc	ieties.	
DR. To Toronto E. D. Society "West York E. D. Society "York Township Society "Toronto Horticultural Society "Admissions to Show "Miscellaneous Receipts	\$	cts.	700 00 350 00 350 00 25 00 264 36 66 88)	6 2
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures. " Preparing Show Grounds	380 112 65 392 62 79	50 00 50 00	1091 50 145 28		6
" Amount for Printing, &c. " Assistants and Labour. " Working Expenses.			$97 25 \\ 54 75 \\ 126 68 \\$	5	5 43
Surplus to be divided Toronto E. D. Society			120 39		0 78

REPORT.

West York E. D. Society.....

York Township Society.....

At the close of their term of office, your Directors beg to submit a brief report of their proceedings for the past year.

The first of the Society's exhibitions for the year was held in the Music Hall, on the

30th of May.

The display of flowers was the finest submitted for many years. The show of Fnschias was very good, and included all the newest varieties. The Pelargoniums were a great improvement on those exhibited in former years, being full of bloom, well grown, and including amongst them many new kinds of the previous year's importations. The Zonale varieties of Geranium are now attracting a good deal of attention amongst florists. Those shown at this exhibition were all of the newest sorts, and, being in full bloom, were very much admired. The newest feature in this class was the introduction of several varieties of the double-flowering scarlet. There was also a very good display of Calceolarias, and double and single Petunias. In foliage, and other hot-house plants, the varieties far exceeded those of previous years.

The cut flowers were very tastefully arranged in bouquets, ornamental wreaths, and

basket-work, and formed a very attractive part of the exhibition.

The display of fruits and vegetables was very limited, although, in both classes, some

good specimens were shown. It is to be regretted that more interest is not taken in ex-

hibiting early vegetables, by both professionals and amateurs.

The summer's exhibition was held in the Horticultural Gardens, and, owing to the favourable season, was much better than those of some former years. The show of Roses, especially, was very fine, including many of the newest varieties of the Tea, Bourbon and China; and greenhouse plants were not so numerous as at the May exhibition, but those shown were of the very best kinds, and well grown. The prizes offered for new and rare plants brought out over 40 varieties not before shown in Toronto.

The herbaceous plants, Phloxes, Hollyhocks, Delphinians, double-flowering Sweet Williams, and new Dianthus, were very good. The arrivals embraced over 100 varieties, including all the novelties of the season. Bouquets of native flowers, tastefully arranged, had a very pleasing effect. The table and hand bouquets were highly commended, and

so numerous that the judges had a difficult task in awarding the prizes.

The show of Fruits at this exhibition was unusually small, owing, doubtless, to the very late and backward season. Of Strawberries, some very fine specimens were shown; the Triumph de Gand bearing off first prize. The following varieties were also shown: Wilson's Albany, Agriculturist, Jucunda, Trollopps' Victoria, Fleming's Seedling, Early Scarlet, and Downer's Prolific. Of these, the specimens of Jucunda were much admired. Few Raspberries were shown—Franconia (red) and Brinckle's (orange) being the best. In Cherries, a plate labelled Tradescont's Blackheart, but was really Black Tartarian, a very fine sample, took first prize; Napoleon Biggareau ranking next. Many parties were unable to compete at this exhibition, in the fruit department, owing to their fruit being not yet ripe, as it was only in the warmest and most favourable situations where cherries, raspberries and currants were sufficiently advanced to be placed on exhibition.

The number of entries in the Vegetable department was not so large as on some former occasions, and far below what it might have been, had a proper interest been taken in the Society's proceedings. In several articles, however, there was a fair competition.

This Society united with the Agricultural Societies for the West Riding, and the Township of York, for the holding of an autumn exhibition in the Queen's Park, on the 29th and 30th of September. This Society subscribing \$700, and the other Societies \$350 each, towards the prize list and expenses. The Toronto Horticultural Society also

contributed the sum of \$25 for special prizes.

The Exhibition was in almost every respect, a success. In addition to the competitors, and the members of the three uniting Societies, the number of visitors that entered the grounds was 2,643, at a fee of ten cents each. The number of entries of horses and cattle, and other live stock, was not large. The animals shown, however, were very creditable to the locality. The competition in agricultural implements and domestic manufactures generally, was very limited. Some good specimens of ladies' work were exhibited.

The show of greenhouse plants and cut flowers was far in advance of previous years. Amongst them, your Directors would particularly notice some beautiful specimens of Palm, Croters, Masanti, Caladiums, Begonias, &c. A few very fine Orchids were shown, and from their beauty and variety, attracted deserved attention. The Dahlias embraced over one hundred varieties, and were certainly the finest bloom ever exhibited in Toronto. The annuals exceeded those shown in July, on exhibition, having over one hundred varieties. In cut flowers, there was the usual dazzling display of Double Stocks, Zinias, and Asters; and that gorgeous autumn flowering bulb, the Gladiolus, was shown in great perfection.

The display of Fruit was very fine, more particularly in Apples, Pears, and hothouse Grapes. Splendid specimens of the following varieties of pear were shown, viz. —Bartlett, Duchesse d'Angouleme, Flemish Beauty, Belle Lucratien, Louise Bonne de Jersey, Howell, Burere Hardy, Burere Dell, Swan's Orange, Glout Morceau, White Doyenne, Shelder's Burere d'Anjou, Seckel, and several other fine varieties; all showing the vast improvement that has been made in the cultivation of this valuable fruit, and the adaptability of our climate to produce them in perfection. Amongst the Apples, the following varieties carried off the prizes in all their different classes, viz. —Rhode Island Greening, Northern Spy, Baldwins, Swurzes, Pomme Gris Fameuse, Duchess of Oldenburg, Swaar,

Gravestins, Blenheim Orange, Keswicks' Codling, Holland Pippin, Alexander, American Golden Russett, Red Astracan, Ribston Pippin, Esopas Spitzenburg, and King of Tomkin's County. Plums were not shown very extensively, it being too late in the season for many kinds, but amongst those shown, the following were the most noticeable:—Duane's Purple, Prince of Wales, Washington, Yellow Egg, Coe's Golden Drop, Lombard, Jefferson, and Huling's Superb. Of Peaches, only a few samples were exhibited, which had been grown under glass. The same may be said of Apricots and Nectarines, and it may be remarked, that the climate in the neighborhood of Toronto is quite unsuited to the culture of these fruits in the open air. Some quinces were shown, but the season was not favourable to their ripening.

The Hot-house Grapes were magnificent, and said by many to be far superior to any

shown at the Provincial Exhibition. The bunches were large and well grown.

Amongst the varieties we noticed the Black Hamburg, Muscat Hamburg, Lady Downe's Mill Hill Hamburg, Trentham Black, Black Prince, Borwood Muscat, Muscat Woverine, Muscat of Alexandria, White Frontignan, Rose Chassels, Grisly Frontignan, Royal Muscadin, Buckland's Sweet Water, Chasselas Vibert, and one large bunch of Syrian, weighing upwards of five pounds. The open air Grapes, in consequence of the unfavourable season, may be considered a failure. There were no specimens exhibited worth noticing. The average heat of the fruit growing season was lower than ever noticed before, and the excessive moisture was most unfavorable to the ripening of the fruit.

The season being unfavourable to the production of cereals, the competition in grain was not keen. The samples of wheat were good, and presented in a much purer form than upon other occasions, resulting from the care induced by competition at these Exhi-

bitions.

Other kinds of grain showed the effects of unfavourable weather—yet a decided

improvement in this department was observable.

The Root department was well represented, showing that the cultivation of root crops is largely on the increase. This was the finest display ever seen in Toronto. The potatoes were very superior and deserving of special notice. Several new varieties were shown—among them the Early Rose and the Goderich, both highly commended.

The display of vegetables was good, both in quantity, quality and variety; evincing great care in cultivation. A marked progress has taken place in this department, within

the past few years.

The competition in dairy products, honey, preserves, domestic wines, bread and pickles, was very spirited.

VICTORIA, NORTH.

Dr. To Balance in hand		\$ ets. 94 87 73 00 15 35 700 00	\$ ets. 883 22
By Prizes for Live Stock.	82 50		
" " Field Products	21 50		
" " Dairy "	10 25		
" " Horticultural Products	13 50		
" " Agricultural Implements			
" " Arts and Manufactures	25 75		
" " Ploughing Match			
3		196 25	
" L. G. to Township Societies		420 00	

By Preparing Show Grounds	\$ ets.	\$ cts. 20 35 133 35	ų
			769 95
Balance in hand			113 27
Datance in Partu			110 21

The Directors feel called upon to express their gratitude to the "Giver of all good" for the bounteous harvest, which has blessed the labours of the husbandman last season, and filled the land with plenty; the returns of grain crops being very nearly double those of 1868, for the section of the County over which your Society extends. The exceptions to this state of things being local, and involving only two crops, viz.: Fall wheat and potatoes. The former being almost a complete failure in all that part of the riding adjoining to, and north of the Portage Road, attributable, we believe, to a few cold nights—closely approached to frost in June, and the latter in that part of the riding south of the Portage Road, and particularly in clay soils, being much affected by rot.

Your Directors have again to report that they have not got up any meetings for lectures, or for discussions on agricultural subjects, and they are of opinion that in a county of the extent of, and having such few facilities for travel, as this North Riding of Victoria, such meetings could not be made to yield any adequate return for the cost and labour of conducting them, and besides the columns of the general agricultural periodicals published in the Province, afford a means of correspondence infinitely preferable to local meetings for merely verbal discussions.

The Directors regret to have to report a decrease in the number of the members of the Society, which, although small, is an indication of a movement in a direction decidedly wrong. They hope that each and every member will make it a matter of personal business to try to remedy this evil, by inducing as many of his neighbours as he

possibly can, to join the Society, and take an interest in its operations.

It is with deep concern that your Directors have to report a falling off in the applications from members for agricultural periodicals at the merely nominal prices for which they can be obtained through the Society. And they express their hope that some steps will be taken to greatly increase the circulation, in the Riding, of the various agricultural periodicals published in the Province of Ontario, and which are conducted with such eminent ability; and they strongly recommend this matter to the consideration of their successors in office.

After much correspondence, your Directors obtained from the Commissioner of Agriculture his decision upon the mode of dividing among the various Township societies in the Riding, the funds allocated by Government. The ruling is that in a case such as ours, the three-fifths are to be laid out for division, and the Township societies are each to receive their pro rata shares of that amount, unless in any case more than one-fifth of the whole grant would fall to one society, in which event such society will obtain only the one-fifth of the whole, and the portion of the three-fifths over that amount which would have fallen to that society, will revert to the County society.

Arrangements were made by your Directors, to supply the members at cost and charges, such qualities as they might apply for, of *Black Sea*, *Rio Grande* and *Platts*, midge-

proof spring wheats, but there was not even one application made.

As anticipated, the Show was a great way in advance of that of the previous year, the number of entries being 408 against 182 in 1868; and the quality of the animals and articles exhibited was generally superior. Your Directors adopted a rule that all entries should be made before the day of Show, and they now revert to the matter because a strict observance of this regulation is absolutely necessary to the proper and orderly management of the Show. Other Societies have been forced into spreading

the Show over two days—a result which we think very undesirable, and, we do not doubt, can be avoided by making the entries in good time before the day of the Show, and leaving the Secretary one clear night to arrange the entries in their proper classes.

It is to be regretted that not a single specimen of the improved breeds of cattle was on the ground at the Show, and that the exhibition of pigs and poultry was almost

a blank.

There is much room for improvement in all the different kinds of live stock in the Riding, and your Directors sincerely hope that at the next Show there will be exhibited some specimens of those improved breeds of cattle which are so much esteemed, not only for their own qualities, but also for the valuable qualities which they add to our common stock; and they recommend that a few handsome prizes be offered next season for thorough-bred cattle of various kinds. In this connection they would call the attention of the Society to the Ontario Poultry Association, which had been formed in the City of Toronto, for the purpose of importing and distributing improved breeds of poultry, and generally promoting the science and art of raising and feeding fowls.

The attention of your Directors was directed by the Judges at the late show to what

The attention of your Directors was directed by the Judges at the late show to what constitutes excellence in roots and vegetables. It seemed to them that a great many of the exhibitors had the idea that enormous size was a chief criterion of merit, and they desire to check that erroneous idea. The first point looked to is the variety or quality of the article shown, next its perfectness of form and maturity, and size comes after these—but enormous size is rather a defect than otherwise. No one can question the soundness of these remarks, and it will be well for intending exhibitors to keep them in remembrance.

The Ploughing Match was held at Woodville, on the 2nd of November, and was very successful, both in regard to the number of competitors, and the excellence of the work done.

The cultivation of orchard fruit, especially in the northerly sections of the country, is engaging the attention, not only of the Bureau of Agriculture, but of every well-wisher of our country. And it is desirable that the Commissioner of Agriculture be made acquainted with any facts ascertained by parties experimenting in raising fruit trees in our Riding, as to soil, exposure, varieties best suited to the section of country, mode and time of planting, plants whence obtained, and any other note-worthy circumstance; and for the same end, it will be well to insist that all fruit exhibited at future shows be correctly named, and that a record be kept of any varieties which show a reasonable degree of perfectness, and such further information regarding soil and situation, and nursery whence obtained, as can be procured.

Bexley, Saxton, and Digby.

Dr. To Balance in hand	\$ cts.	44 20 67 70 8 00 103 68	\$ cts.
" Miscellaneous Receipts		4 00	227 58
CR. By Prizes for Live Stock "Field Products "Arts and Manufactures	62 25 35 00 20 25		
" Preparing Show Grounds " Agricultural Publications " Working Expenses		117 50 40 00 18 60 42 99	219 09
· Balance in hand			8 49

Eldon.			
DR. To Balance in hand " 93 Members' Subscriptions " Admissions to Show " Legislative Grant. " Proceeds Sale of Seed.	\$ cts.	\$ cts. 104 13 93 00 27 64 140 00 9 20	\$ cts.
CR. By Amount of Premiums "Prizes for Ploughing Match "Preparing Show Grounds "Purchase of Live Stock "Working Expenses.		94 80 15 00 7 00 125 00 49 70	291 50
Balance in harid			82 47
Fenelon.			
Dr. To Balance in hand " 56 Members' Subscriptions " Admissions to Show " Legislative Graut. " Miscellaneous Receipts.	\$ cts.	\$ cts. 70 81 56 00 8 00 87 26 10 85	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	75 00 12 90 4 45 8 85 3 75 13 85 16 00		202 02
" Preparing Show Grounds " Working Expenses	1000	134 80 12 85 25 62	173 27
Balance in hand			59 65

Note.—Owing to the lateness of the season, the show of grain and roots was not quite as large as in some previous years; but the quality of live stock was decidedly superior, and the exhibition, as a whole, quite successful. Crops good.

Muskoka.			
Dr. To Balance in hand " 52 Members' Subscriptions " Legislative Grant " Proceeds Sale of Seeds " Miscellaneous Receipts	\$ cts.	\$ cts. 109 00 57 00 87 26 99 75 8 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products	34 25 11 00 1 00 3 00	49 25	

By Preparing Show Grounds	\$ cts	s cts.	\$ cts.
"Purchase of Seed		99 75	
"Working Expenses		26 91	
(or or or or or or or or or or or or or			184 91
Balance in hand			176 10
VICTORIA, SOUTH.			
Dr.	\$ ct	s. \$ cts.	\$ cts.
To Balance in hand		211 56	
" 85 Members' Subscriptions		103 00	
" Admissions to Show		98 50	
" Legislative Grant		700 00	
" Proceeds Sale of two Ploughs as prizes		64 00	
" Miscellaneous Receipts		3 00	
		-	1180 06
Cr. By Prizes for Live Stock	183 5	0	
	48 7		
" " Field Products " Dairy "	16 7		
" " Horticultural Products	43 0		
" " Agricultural Implements	1 7		
" " Arts and Manufactures	49 2		
" " Ploughing Match	34 0		
Troughing materials		_	
	377 0	0	
Unpaid	11 7		
		- 365 25	
" Prizes of previous year		3 00	
" Prizes of previous year " Preparing Show Grounds		35 58	
" L. G. to Township Societies		368 49	
" Purchase of two Ploughs		64 09	
" " Herd Book		4 00	
"Working Expenses		129 50	
			969 91
D 1 1 1			010.75
Balance in hand			210 15

In drawing a comparison between the exhibitions of 1868 and 1869, and their results, we felt it cause for satisfaction on finding that the animals and articles entered for competition at the latter show were in the aggregate convincing proofs that farming operations are steadily progressing amongst us; there was at the last fall show a marked improvement in the exhibition of horses, sheep, and field roots, and also a fine display of fruit and garden productions, far exceeding any previous show, as well as in that of the ladies' department.

In the show of horned cattle and pigs, we cannot, we are sorry to say, record any very marked improvement over former years, and we are constrained to express our surprise at this, as we consider it of the highest importance that more attention should be paid towards procuring and propagating the best breeds of these species of animals, and above all in increasing their number on almost every farm in the Riding; we feel thoroughly convinced, that for the last three or four years sufficient attention has not been devoted by our brother farmers to the raising and improving the breed of this description

176

of stock. We cannot entertain a doubt but that this department of farming can be made remunerative, and more so than in continuing the prevailing practice of aiming principally at the growth of wheat, and other cereals, and we are led to think that in adopting means for entering upon a change in favor of increased stock breeding, that from the present state of the Society's funds, some steps might be taken for introducing amongst us one or two first rate animals of imported stock, having regard to the adaptability of particular breeds to the purposes for which they are designed. We are glad to learn that there is a prospect of a first-rate imported bull being brought into the Riding. It occurs to us that we shall not be considered out of order in our desire to impress upon the minds of all those who may be at present engaged in or about to enter upon stock raising more extensively, the necessity of providing for their animals, warm, clean, comfortable, well ventilated and not over crowded stables for their winter protection; and also another important point, that of planting clumps of trees in various parts of their farms where their stock may find shade in the hot summer months; the subject of planting trees on the farm not only for the benefit of stock, but more especially as wind-brakes for the protection of grain crops, is now engaging the attention of agriculturists throughout the Province, and we trust our farmers will not lose sight of a matter of so much importance.

In recommending as we do an extension of stock raising, we hardly deem it necessary to offer advice with reference to the necessity of providing suitable pasturage for summer feed or the most desirable provender for winter, as we imagine there are few farmers but who are as well posted as ourselves on this point, yet we venture to recommend that when seeding down (for we are convinced it would be found profitable) a more liberal cast of grass seeds be given to the acre than is generally done; we would not only advise a larger quantity but a greater variety mixed together than what has hitherto been customary. We think some new grasses which would be adapted to our climate might be intro-

duced to advantage.

We find the Alsike clover is being successfully cultivated in many parts of the Province and is worthy of a fair trial in our section as well as some other varieties of pasture and meadow grasses, such as orchard grass, Kentucky blue grass, &c. It is, we believe, generally conceded that timothy and white clover with some other grasses are best adapted for yielding butter, but for cheese and muscle, red clover is decidedly preferable.

While we are touching upon the subject of stock raising, we beg to say that it is considered a fact well established in nearly all countries that the grazier and feeder of cattle and other animals for market, make the most successful agriculturists; by this branch of farming a good stock of manure is secured; high feeding of animals will tend to keeping

the soil of the farm in a high state of fertility. * *

We find that the yield of most kinds of grain has not proved equal to what had been looked for in the early part of the summer, for long before the season for maturity had arrived the rainfalls became too frequent for the healthy production of the most important and valuable portion of the standing crops of cereals, and the result was a large bulk of the inferior portion of straw. Thro' out the early part of the season you will all remember, that all the field crops seemed to promise a more abundant return than had ever been known in the Riding; but a wise Providence ordered that the gathering in of the harvest should be different from what the husbandman had looked for, as also the prices which he would be able to obtain for the crops he had secured. * * *

We deem it necessary to briefly state for general information that new sources of industry are opening up to view within our county, of which we may name the "Maine Tannin Company," who have established an extensive factory for the manufacture of Extract of Hemlock Bark; also have erected machinery for the manufacture of paper or the pulp to be converted into paper from rice straw and other materials; both these will shortly be in operation in Lindsay, and are calculated to give employment for a large number of workmen. We find also that a cheese factory is about to be commenced in Verulam. Then we have the Locks at Lindsay in the course of construction, and the Navigation Company just organized for facilitating the transportation of the extensive products of lumber, &c., which the forests in the rear of us furnish so abundantly. But what is of more importance still to the farmers of the Riding is the scheme about to be

inaugurated soon for making gravel roads on several of the leading thoroughfares from Lindsay in different directions into the country: to this scheme we are convinced it becomes the interest of every landholder in particular to lend his influence and help towards its consummation.

We would also refer to the Drainage Act of the Legislature and the public grant for draining some of the swamps of the Province, as it is likely to be attended eventually with most favorable results; and it appears that our own county is to participate in the

grant.

We have been pleased to witness during the past season that improved systems of farming are being rapidly adopted throughout every section of the Province, and we earnestly entreat those in our locality to keep pace with those who are thus (to their

praise) advancing.

We now beg to call attention to the subject of agricultural seeds, some descriptions of which we are strongly inclined to believe might be grown to advantage by a portion of our farmers who may have suitable soils for the purpose, such as turnip seed, mangold, and carrot, and which at present are nearly all imported from abroad, and which often prove deteriorated from age, &c.

If a few farmers would combine this branch of industry with their other farming operations, they might supply some of those seeds to our retail seed Establishments as cheaply as they can import them, besides, those engaged in the trade would have the

advantage of getting them fresh and sound.

In planting out roots of the above description for raising seed, the finest shaped, smoothest roots should be selected, always rejecting those that are forked or otherwise mal-formed.

*	*	*	*	*	7	-
" 70 Member " Admissions	s' Subscriptions to Show	š	ily.		\$ cts. 24 94 70 00 15 30 96 00	\$ cts.
" " Fiel " " Dain " " Hor " " Agr " " Arts " Preparing S " Working E	d Products ry " ticultural Prod icultural Imple s and Manufact Show Grounds expenses	ucts ments tures		19 75 2 75 6 00 13 00 21 50	130 50 11 15 29 93	$\frac{171\ 58}{34\ 66}$
" Members' S " Admissions	Subscriptions to Show		aposa.	,	\$ ets. 16 11 84 00 21 06 115 00	\$ ets.

	Cr.		\$ cts.	\$ cts.	\$ cts.
By	Prizes	for Live Stock	96 50	4 0000	φοισε
66	"	Field Products	15 00		
66	"	Dairy	6 00		
66	"	Horticultural Products	8 40		
66	"	Agricultural Implements.	4 04		
66	44	Arts and Manufactures	29 95		
66	"	Discretionary Prizes	3 75		
		·		163 64	
66	Worki	ng Expenses		32 39	
					196 03
]	Balance in hand			40 14

Note.—The report states that the Exhibition was below the wealth and agriculture of the township. Sheep were good, and also a few excellent specimens of swine, but horses and cattle were inferior to what they ought to be. In grain and roots, the show was superior, and the operations of the Society have been carried on with harmony.

_ Ops.			
Dr. To Balance in hand	\$ cts.	\$ cts. 18 16 60 00 79 00	\$ cts.
" Miscellaneous Receipts	0F 0F	8 50	165 66
By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures.	35 25 17 63 2 75 13 50 4 25 8 50		
Unpaid	81 88 6 63	75 25	
" Preparing Show Grounds " Agricultural Publications " Working Expenses		1 80 34 80 40 75	150.00
Balance in hand			152 60
Verulum.			
Dr. To Balance in hand	\$ cts.	\$ cts. 35 36 37 00 126 10 7 00	\$ cts.
CR. By Purchase of Seeds and Plaster "Agricultural Publications "Working Expenses		160 80 15 00 1 54	205 46
			177 34
Balance in hand	C / I	. 1	28 12

NOTE.—The Society held no Exhibition, nor received any portion of the Legislative Grant.

A. 1870-71

Lindsay Horticultural Society.			
DR. To Balance in hand	\$ cts.	\$ cts. 73 98 57 00 43 20 78 49	\$ ets.
——————————————————————————————————————			252 67
CR. By Amount of Prizes "Preparing Show Grounds "Horticultural Publications "Working Expenses.		95 45 11 24 13 07 22 70	142 46
Balance in hand			110 21

REPORT.

In presenting the third annual report of the Lindsay Horticultural Society, your Directors are encouraged by the steady progress the Society is making, to congratulate you

upon so gratifying a result.

It affords us great pleasure to be enabled to inform you, that not only the exhibitions of the products of the garden and orchard, show each succeeding year a marked improvement, but that a greater number of amateurs are manifesting an increased interest in the culture of those productions, as well as otherwise forwarding the objects of the Association; and in addition to these encouraging facts, the funds of the Society show each succeeding year a regular increase.

	Vegetables.	Fruit.	Flowers.
The number of entries the first autumn exhibition was	- 120	46	22
The do second autumn show, was	- 144	95	81
And the third or last year's autumn show, was -	183	56	109

Thus showing that the entries for fruit was the only item in which there was a falling off, and that we account for from the fact of fruit maturing later than usual the past season, a great many varieties not being ripe at the date of our Exhibition. And although the last season with its cold, late spring, was very unfavourable for gardening operations, yet the display of flowers, and some varieties of fruit exceeded any of the previous shows.

In the floral department, we notice that Messrs. Ellis, Goodliffe, Spier and Tyrrell, still take the lead, yet we were pleased to see some attractive contributions by many other members of the Society who seem to aim at a successful rivalry over their more experienced florists; and this feature alone we think must be gratifying to the Society at large, as one great object of our Association is to promote a generous emulation and rivalry. The Salvia Splendens, shown by S. C. Woods, Esq., was much admired, as also the first prize Apples, shown by H. Woodman, Esq. The Gladiolus exhibited by Mr. Goodliffe, and the Japanese Maize by Mr. Ellis, attracted attention; and the Table Bouquets and Hanging Baskets showed superior skill and care in their arrangement and choice of material. Mr. Curley contributed well towards the vegetable department.

We would now beg to suggest for the consideration of our successors, that having as we think, procured a fair supply of books for the use of the Society, treating on the science of Horticulture, and that our financial position being favourable, whether it would not be advisable to enlarge the premium list for the current year, convinced as we are that many objects of nature as well as of art, might be exhibited in connection with those on our present Autumn premium list, and which would tend to make the show still more attractive and instructive. Among other additions we venture to express an opinion with reference to seedling apples, of which we have reason to believe there are many valuable varieties throughout the country, the merits of which are not known beyond the bounds

of the respective orchards in which they are grown. We would, therefore, respectfully recommend that a liberal prize be offered for the best seedling apples, to be open to all competitors (whether members of the Society or not), residing within the limits of the county of Victoria, with a view to ascertain where valuable seedlings are to be found or obtained, and for the further purpose of encouraging and extending their propagation.

WATERLOO, NORTH.

Dr. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative-Grant "Municipal Grant	\$ cts.	\$ ets. 65 90 221 75 293 67 693 00 195 00	\$ cts.
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures	468 50 104 25 30 00 38 50 56 00 92 50	٠	
Unpaid " L. G. to Township Societies " Working Expenses Balance in hand	789 75 6 00	783 75 280 00 337 97	$\frac{1401}{67} \frac{72}{60}$
Wellesley.			
Dr. To Balance in haud "Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grant	\$ cts.	\$ cts. 2 88 178 75 12 50 140 00 40 00	\$ cts. 374 13
CR. By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " Working Expenses.	161 75 42 25 12 50 15 25 28 50 26 50	286 75 38 87	325 62
Balance in hand			929 02
			48 51

Dr. To Balance in hand " 105 Members' Subscriptions. " Legislative Grant " Municipal Grant	\$ cts.	\$ cts. \$ cts. 33 40 148 00 140 00 20 00
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Working Expenses.	103 00 61 50 17 00 10 50 10 50 26 50	229 00 47 50
Balance in hand		$\frac{276\ 50}{64\ 90}$
WATERLOO SOUTH. Dr. To Balance in hand " 299 Members' Subscriptions. " Admissions to Show " Legislative Grant. " Municipal Grants.	\$ cts.	\$ cts. \$ cts. 312 27 304 50 320 72 698 25 275 00 1910 74
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manafactures " " Growing Crops	619 00 65 50 32 00 63 50 82 00 103 75 30 00	
" Working Expenses		995 75 150 24 293 81 ————————————————————————————————————
To Balance in hand		470 94
WELLAND.		
		*
Dr. To Balance in hand. "Members' Subscriptions "Admissions to Show "Legislative Grant. "Subscriptions "Miscellaneous		\$ cts. \$ cts. 77 13 121 00 237 40 700 00 70 30 37 00 1242 83
100		1242 83

	Cr.			
By	Prizes for Live Stock	$403 74 \\ 50 72$		
66	" Dairy "	7 00		
66	" Horticultural Products	13 69		
46	" Agricultural Implements" Arts and Manufactures	$\frac{48}{102} \frac{00}{60}$		
	Arts and Franciactures			
	TT 1	625 75 40 00		
	Unpaid		585 75	
44	L. G. to Township Societies		420 00 76 19	
26	Preparing Show Grounds		137 75	
	Working Dapenses			1219 69
	Balance in hand			23 14
	Bertie.			
		\$ cts.	S ets.	\$ cts.
То	Dr. Balance in hand	φ σευ.	25 25	4 0000
66	71 Members' Subscriptions		71 25 61 25	
66	Legislative Grant		01 20	157 75
	Cr.			
By	Prizes for Live Stock	87 00 11 35		
66	" Dairy "	1 90		
66	" Horticultural Products	8 50		
46	" Agricultural Implements	$\frac{1}{13} \frac{00}{10}$		
			122 85	
46	Preparing Show Grounds		$\frac{1}{16} \frac{00}{86}$	
	Working Expenses			140 71
				17 04
26	Balance in hand			11 04
	Crowland.			
	Dr.	\$ cts.	\$ cts. 3 42	\$ cts.
To	Balance in hand		56 00	
٤ 6	Legislative Grant		45 10	704 50
				104 52
By	Cr. Amount of Premiums		82 04	
""	Working Expenses.		12 75	94 79
	Balance in hand			$\frac{3\pm 13}{9.73}$
	Dalance in hand			•
	Humberstone.			
	Dr.	\$ cts.	\$ cts. 4 63	**
To	Balance in hand		60 00	
46	Legislative Grant		52 05	116 60
	100			116 68

CR. "Prizes for Live Stock " " for Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Working Expenses Balance in hand	46 12 9 23 1 12 5 53 3 37 6 81	72 18 21 38	$\frac{93\ 56}{23\ 12}$
Stamford.			
sumgora.			
Dr. To Members' Subscriptions " Legislative Grant " Miscellaneous Receipts	Ş cts.	\$ cts. 138 00 117 98 9 79	\$ cts.
Cr.			
By Balance due Treasurer By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Working Expenses.	178 50 20 00 4 00 7 25 3 00 12 60	13 34 225 35 17 35	
			256 04
Balance in hand			9 73
Tho rold.			
Dr. To Balance in hand "Members' Subscriptions "Legislative Grant "Miscellaneous Receipts	\$ cts.	\$ cts. 27 92 121 00 98 89 2 97	\$ cts.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " Preparing Show Grounds	147 11 19 56 2 37 4 28 10 13 12 51	195 96 1 62	
" Working Expenses		22 68	220 26
Balance in hand			30 52

To Balance in hand	\$ cts.	\$ cts. 13 64 51 00 45 57	\$ cts.
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Arts and Manufactures'. " " Agricultural Implements. " " Growing Crops.	53 74 16 25 75 4 09 6 23 1 00 37	82 43 19 03	110 21
Balance in hand			8 75
WELLINGTON, NORTH. Dr. To Balance in hand To 204 Members' Subscriptions "Legislative Grant "Municipal Grant. "Cash from Peel Society "G. A. Drew, Esq., M.P., Donaticn "Messrs. Sharpe, Donation for Turnip Match "Entrance Money for ditto.	\$ cts.	\$ cts. 125 52 211 00 700 00 100 00 84 00 30 00 20 00 5 00	\$ cts.
Cr. By Prizes for Live Stock. "Field Products. "Dairy " "Agricultural Implements. "Arts and Manufactures.	153 50 141 00 29 50 47 00 52 00		
Unpaid " Prizes for previous years " L. G. to Township Societies " Repaid Township of Peel Society " Agricultural Publications " Working Expenses	423 00 11 00	412 00 12 00 420 00 84 00 12 00 326 20	1266 20
Balance in hand			9 32

This being the second year of the Society's existence, we have much pleasure in stating that there has been a marked increase in the influence and extent of the Society's operations. Within the year, there has not only been an increase in the number of mem-

bers, which has more than doubled, being, for the year 1869, 204 against 97 for the year 1868. There has also been a corresponding increase in the number of entries at the fall show. The entries have increased from 329, in 1868, to 813, in 1869, not including 15 entries for extras at last show, to which no prizes were allotted, thus making

the increase on entries, for 1869, 484, or 147 per cent. over that of 1868.

The fall show for the bygone year was held at Rothsay, on the 19th day of October. The day was stormy, rough and disagreeable; nevertheless there was a strong turn out. Every class of the exhibition was well sustained. The place where the horses, cattle and other stock were shown, was ample and sufficient, but the place where the roots, grain, dairy produce and ladies' work were exhibited was rather confined, so that those articles were not well displayed, it not being thought there would be such a number of the various

articles exhibited, otherwise larger premises would have been secured.

The show, in the main, was very good, and greatly exceeded that of 1868, especially in cattle, sheep, pigs and roots. Grain was good, of its kind, but some samples showed the effects of the wet and backward season. Roots and garden products were very superior, especially turnips, mangold wurtzel, and carrots. There was a good show of fruit, and a very large show of butter and cheese; and if some of the good wives were disappointed in not getting premiums, they can hardly blame the judges, for it was almost impossible, amongst such a large quantity shown, to discriminate very closely. The ladies' department was well represented. There were some very nice quilts and other needlework displayed, which did great credit to the handiwork of the wives and lasses of the Riding. Taking all in all, there was a marked contrast for the better in almost every department, from the exhibition of 1868.

[The Society held a seed fair at Harriston, March 3rd, which was well attended; but in consequence of the badness of the roads, the number of entries was small. The quality of the grain was generally superior, and much interest was felt in this first attempt of improving agriculture by publicly exhibiting seed grain of the best quality and varieties. A turnip match was also got up by the Society; the yield (Swedes) ranging, on different farms, from 690 to 886 bushels per acre.]

Amaranth.		•	
Dr. To Balance in hand " 54 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant.	\$ cts.	\$ cts. 37 10 54 00 10 95 63 00 20 00	\$ ets. 185 05
By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Arts and Manufactures " Preparing Show Grounds " Working Expenses	69 00 20 00 4 00 7 00 24 75	124 75 2 35 23 22	150 32
Balance in hand			34 73
Arthur.			
Dr. To Members' Subscriptions " Admissions to Show " Legislative Grant	\$ cts.	\$ cts. 103 00 1 50 119 00	\$ ets.
			223 50

54 Victoria. Sessional Papers (No. 5).		A. 1	010-11
Cr. By Prizes for Live Stock. "Field Products. "Dairy " Agricultural Implements, &c. "Arts and Manufactures. "Preparing Show Grounds.	\$ cts. 73 50 47 75 16 00 15 50 12 25	\$ cts.	\$ cts,
" Working Expenses		26 76	197 76
Balance in hand			25 74
Note.—The report states that "the Exhibition was Society." The number of entries in all the classes was 419,	the best and of pr	ever held izes 141.	by the
Minto.			
Dr. To Balance in hand "127 Members' Subscriptions "Admissions to Show "Legislative Grant "Subscriptions for Show Grounds "Miscellaneous Receipts	\$ ets.	\$ cts. 44 03 127 00 16 60 140 00 128 00 16 75	\$ cts.
Cr. By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures " Turnip prize	111 75 42 00 15 00 13 75 13 00 36 62 4 00		
" Purchase of Show Grounds " Working Expenses		236 12 120 00 43 16	399 28
Balance in hand			73 10
Dr. To Balance in hand "Members' Subscriptions "Legislative Grant	\$ cts.	\$ cts. 37 37 103 00 182 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match.	111 00 16 25 6 00 1 00 7 75 8 50 24 00		<u> </u>
Unpaid	174 50 22 50	152 00	

By Preparing Show Grounds "Remitted to County Treasurer "Working Expenses To Balance in hand	\$ cts.	\$ cts. 14 00 84 00 40 44	\$ cts. 290 44 31 93
WELLINGTON, CENTRE.			
Dr. To Balance in hand "132 Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grant "Township of Pilkington Society. Cr.	\$ cts.	\$ cts. 238 16 141 00 15 29 700 00 100 00 160 00	\$ ots.
By Prizes for Live Stock "" Field Products "" Dairy " "" Horticultural Products "" Agricultural Implements "" Arts and Manufactures "" Ploughing Match "" Miscellaneous	293 25 91 00 36 00 9 00 36 00 47 50 26 00 37 00		
Unpaid " Prizes of previous year " L. G. to Township Societies " Preparing Show Grounds " Working Expenses	575 75 50 00 ———	525 75 71 75 419 99 5 00 138 36	1160 85
Balance in hand			193 60

Report.
* * * * * * * *

The Exhibition, as a whole, was, perhaps, the best ever held by the Society, but the Ploughing Match was undoubtedly a failure, only six ploughs having entered to compete for fifteen premiums offered. This falling off may have been caused, however, as much by the late season and consequent backwardness of every description of farm work, as by

apathy on the part of competitors.

The Bureau of Agriculture and Arts furnished this Society, as well as the Township Societies in connection, with a series of questions relative to the number of acres under various crops and the yield per acre, in this Electoral Division, and requested a return thereof to be made by the 1st September. Only one Township Society made a return to this Society, and no return has been sent to the Department. They would respectfully call the attention of the Commissioner of Agriculture to the difficulty, in fact, the absolute impracticability of procuring reliable returns in this manner. The officers of societies have no means of procuring correct information as to the number of acres under cultivation and the time specified is too early in the season to make even an approximate estimate of

the yield per acre in this county. In fact, returns based upon information within the reach of Directors at such an early period in the season are only calculated to mislead.

		Eramosa.					
"	121 M	te in hand Tembers' Subscriptions ative Grant.	\$	cts.	\$ cts. 3 08 136 10 50 62	\$	cts.
	Cr.		- 1			189	80
	Prizes	for Live Stock.		50			
"	66	Field Products		00			
.66	"	Horticultural Products	_	50			
66	"	Agricultural Implements		50			
.44	66	Arts and Manufactures		00			
46	Worki	ing Expenses			$ \begin{array}{r} 146 & 50 \\ 21 & 37 \end{array} $		
						167	87
		Ba'ance in hand				21	93

REPORT.

The Directors in laying before you a Report of their management and the transactions of your Society for the past year, regret that the facts in connection therewith, are such as to prevent them from presenting matters in as progressive and prosperous a light as they could have wished, from causes not necessary to be named. The canvass for subscriptions was not as thorough nor attended to as early as it ought to have been. In consequence of this, the subscription list is a little less than that of last year; nearly half of it being paid in too late to receive the government percentage—also tended to diminish the amount of money at the disposal of your Directors.

The Annual Show held on the 30th of September, was in some of the departments

The Annual Show held on the 30th of September, was in some of the departments superior to that of last year, yet the number of entries was less, thus showing that it requires money enough to enable your Directors to make a good prize list, both as regards number and amount of premiums in order to make a successful and prosperous show.

A ploughing match was held on the farm of William Tolton, on the 22nd of October. The number of competitors was smaller than usual on such occasions, but may, we think, be accounted for in part by the long protracted and late harvest, causing farm work to be so much behind, that many could not spare time to attend.

		Erin.				
"	Memb Admis	ce in handers' Subscriptionsssions to Showative Grant	\$	cts.	\$ cts. 152 86 184 50 249 15 127 88	\$ cts.
	O					714 39
	Cr.					
By	Prizes	for Live Stock	209	50		
ű		Field Products	69	00		
	66	Dairy "	19	00		
66		Horticultural Products	8	50		
66	64	Agricultural Implements	17	50		
26	. 6	Arts and Manufactures	59	25		
46	4:	Ploughing Match	30	00		
					412 75	

By Preparing Show Grounds	\$ cts.	\$ cts. 55 78 105 96	
Balance in hand			139 90

* * * * * *

The Directors feel much pleasure in presenting this their Annual Report, to the members of the Society, considering as they do, that the Society is in such a prosperous and progressive state. We have also great reason to be grateful to a benificent and all wise Providence, for the bountiful harvest of the past season, for although it has not been the most prosperous for the farming community, on account of the very low price of grain, still we have much cause to be thankful that there is an abundance in the country for both man and beast. On account of the new postal arrangements at the commencement of the year, your Directors were unable to procure the Canada Farmer at the same rate as heretofore, and therefore, could not furnish each member with a copy for the year, at the small sum of twenty-five cents; accordingly it was considered best to drop it altogether for the then current year, and on that account, quite a number of the members withdrew their names. Still the Society has felt very little inconvenience from that cause. In order to conduce to the comfort and accommodation of visitors and exhibitors, your Directors had to expend a considerable sum to enlarge and make alterations in the Agricultural Hall, so that visitors might have free access to the building at any time during the Exhibition, and the plan was found to work very well, and amply repaid all the trouble and expense. The Annual Show was held in the Society's grounds, in the Village of Erin, on Tuesday, the 19th of October, and was considered to be one of the best shows ever held in the Township.

Garafraxa, East.				
DR. To Members' Subscriptions "Admissions to Show "Legislative Grant "Miscellaneous Receipts	Ş	cts.	\$ ctt. 109 00 4 50 77 02 21 00	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures. " " Ploughing Match.	5 5 11 19	00 75 00 50		
Unpaid.* " Working Expenses	220 59		161 25 40 64	201 89
Balance in hand				9 63

Note.—The Society is reported to be in a flourishing condition. The entries at the Fall Exhibition amounted to near 500, and the quality of the articles generally, with some exceptions of live stock, was highly satisfactory. The ploughing match, owing to the state of the weather, was not successful. The Directors urge the importance of improving live stock, and of greater accommodation at the exhibitions.

			7_
Garafraza, West. Dr. To Balance in hand "Members' Subscriptions "Legislative Grant	\$ cts.	\$ ets. 11 25 74 87 42 14	\$ cts.
Cr. By Prizes for Live Stock. " " Field Products. " " Dairy Products. " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures.	44 00 12 75 7 50 4 75 4 00 16 50		
" Working Expenses		89 50 21 49	110 99
Balance in hand			17 27
Nichol.			
Dr. To Balance in hand " 100 Members' Subscriptions " Legislative Grant	\$ cts.	\$ ets. 14 58 102 50 52 32	\$ cts.
Cr. By Prizes for Live Stock. "Field Products. "Dairy " Horticultural Products. "Agricultural Implements. "Arts and Manufactures.	72 00 19 50 7 50 2 50 9 00 17 00		100 40
Unpaid	127 50 3 50	124 00	
" Preparing Show Grounds " Working Expenses		8 15 33 75	165 90
Balance in hand			3 50
Dr. To Balance in hand	\$ cts.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	\$ cts.
" Legislative Grant		69 76	102 20
Cr. By Paid Treasurer of County Society " Working Expenses		160 00 18 11	193 38
Balance in hand			15 27

WELLINGTON, SOUTH.			
Dr. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grants. "Subscriptions of Guelph Township Society. "Miscellaneous Receipts	\$ cts.	\$ cts. 169 21 130 50 142 00 700 00 100 00 182 00 42 00	-
Cr. By Prizes for Live Stock. " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " " Ploughing Match " " Growing Crops " L. G. to Township Societies " Working Expenses	436 00 78 00 24 00 41 75 58 00 53 00 31 00 35 00	756 75 267 50 215 05	1239 30
Balance in hand			226 41

· REPORT.

The Directors of the South Riding of Wellington and Guelph Township Agricultural Societies, beg leave to make their annual report, and in doing so, are sorry they cannot congratulate the members on any marked increase, either in amount subscribed or the number of entries, they being on a par with last year, but we can safely say the articles exhibited, showed no signs of deterioration in quality.

The Annual Easter Fat Cattle Show was held on the 17th of March, and in point of

numbers and quality of stock exhibited, showed no signs of falling off.

At a meeting held on the 26th of February, 1869, a resolution was passed that no show of stallions be held this year, consequently it was carried out, and no show held. While at this part of the report, the Directors desire to state that Mr. Buckland has imported within the last month two stallions from England, one a pure bred Yorkshire Coach Horse, the other a Suffolk Punch, both fine handsome horses, and we have no doubt that, if our farmers will avail themselves of the opportunity thus offered, we shall see a marked improvement in our young horses in a short time. We feel sure all will agree with us when we say it is much needed, for in that department we are sadly behind many other localities that have not had the advantages that this County has enjoyed, There are two things that have tended to bring about this falling off in our horses, one is, that a few years ago, during the American war, our neighbours came over, and by offering large sums, induced our farmers to part with their more valuable horses, and what was worse, they sold their best young mares; another cause is, that our farmers do not (as a rule) pay that attention to the breeding of horses that they should do. Were they to exercise the same skill and perseverance that they do in breeding cattle and sheep, instead of being behind, we should be enabled to say (as we can of our cattle) that we have as good stock as any county in the Dominion. Before leaving this part of our report, we leg leave to congratulate Mr. Buckland on his success in importing two such fine animals,

and wish him every success in his undertaking.

The annual Exhibition took place on the 6th and 7th days of October, when the number of entries were about as numerous, on the whole, as the previous year. As usual, we shall begin our analysis of the Exhibition by first introducing the horses, and we are sorry we cannot congratulate our farmers on the result, as we must say there is no

improvement in this branch of the Exhibition. All classes, from the brood marcs to the hackneys, were fewer in number, and decidedly inferior to what we have seen, but we

hope in future to see, not only a larger display, but better animals.

In cattle the show was about as large as last year, and certainly, as regards quality, showed no signs of falling off, there being many fine animals in all classes. In sheep we cannot say as much, at least, as to numbers, for there was a decided falling off; in point of excellence, perhaps, there might be an improvement, but of no marked character. Hogs were better represented, there being nearly double the entries of last year, and all really fine specimens of the hog tribe. Poultry, likewise, showed an increase, and the quality of the different breeds was never surpassed here.

Grain and seeds in number about the same as last year, the quality of most samples better, especially wheat, both fall and spring; some samples of the former, known as Deihl, were very good, and reminded us of the time when the Soules variety used to be grown here with such success. Barley was not so good in colour, as for the last two

years, owing to the very wet harvest, but in weight was far above the standard.

In roots and fruits the Exhibition was the largest and best we have had, the entries were nearly double those of last year, and the samples of both excellent. The fruit especially made a great display, and shows that our farmers have given a good deal of

attention to this branch of industry.

The quantity of dairy produce was not quite as large as usual, but in point of quality, all that could be desired, and shows that our farmers' wives and daughters have not lost the art of making good butter and cheese. In factory-made cheese there was only one exhibitor, E. A. Harland, but the six cheeses he showed were of first rate quality, and would command the highest price in any market.

The ladies made a great display in their department, both as to the number of

specimens, and excellency of the work.

Implements were few in number, and showed no improvement, either in the manufacture or design.

The annual Ploughing Match was held on the farm of Wm. Whitelan, Esq., but owing to the very inclement weather, was not well attended. The work was well done,

especially in the young men's class.

The Christmas Fat Cattle Show was held on the 9th day of December, and, as usual at this season of the year, a large number of animals were on exhibition, including some that had previously gained first-class honours at the Provincial Exhibition. A sweepstake of a silver cup was offered for the best fatted beast on the ground, and added not a little to the interest manifested on the occasion. The successful breeder and feeder being Mr. J. S. Armstrong, of Eramosa.

Puslinch.			
DR. To 163 Members' Subscriptions " Legislative Grant " Municipal Grant for fencing Show Grounds " Miscellaneous Receipts	\$ cts.	\$ cts. 169 00 132 50 336 00 4 37	\$cts.
CR. Byriz es for Live Stock " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures	130 00 28 00 11 50 15 50 14 00 19 00	218 00	
" Paid James Sturton's note" " Working Expenses		247 19 60 33	525 5 2
Balance in hand,			116 35

193

REPORT.

The Directors, in presenting their Report for the past year, have much pleasure in directing the attention of members to the very favorable position held at present by the Society—a position, according to the auditor's report, not attained since its formation. We have although the prices for cereals have ruled very low, great reason to be grateful for the bountiful harvest of the past season. The wheat crop throughout the Township, both as regards the sample and yield, was excellent: considerably above an average. Oats and peas have also been above an average. Barley, although discolored by the extremely wet season, has done remarkably well. Hay, owing to the extraordinary dry summer of the preceding year, has not done so well, especially on newly seeded meadows. Potatoes have suffered somewhat from rot in some localities throughout the Township, while in others there has been an abundant crop. Turnips have been very good—the largest crop that has been raised in the Township for a number of years. Mangolds and carrots are more extensively cultivated than formerly, and have been an extra crop. Those shown at the general show would be no discredit to any Provincial exhibition. The general exhibition of the Society held on the 5th October last, was highly successful. Although we regret the falling off in the show of horses, the entries in cattle, sheep, and especially dairy produce, roots and vegetables, were far more numerous than at any former show.

	•		
Guelph Horticultural Society.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		10 71	
" Members' Subscriptions		151 00	
" Admissions to Show		95 42	
		135 00	
" Legislative Grant			
" Miscellaneous Receipts		10 00	
· · · · · · · · · · · · · · · · · · ·			$402 \ 13$
Cr.			
By Prizes for Fruits	67 00		
" " Flowers and Plants	134 50		
	70 00		
" Vegetables		071 50	
		271 50	
" Working Expenses		84 80	
8 1			3 56 30
D.1 ' 1			45 83
Balance in hand			10 00

REPORT.

In making their Annual Report, the Directors beg leave to congratulate the members on the continued success and prosperity of the Society, as shown by the large increase in

receipts and the number of entries, as compared with any previous year.

The Spring Show was held on the 6th of July, having been postponed on account of the backwardness of the season, and the Directors feel they have no cause to regret having done so, for by that means exhibitors were enabled to bring forward such a display of horticultural products as was never seen before (at that time of year) in this county. The fact will speak for itself when we state that the number of entries amounted to 385, being nearly 100 in excess of any previous Spring Show.

The Directors think it desirable that the report of the gentlemen who acted as judges on the occasion should be entered here, so that members may see what practical men think of their efforts to keep up the character of the Society. The following are the re-

marks made by those gentlemen:

"The Judges, in completing their duties, have great pleasure in noting the marked improvement in every department of the Exhibition. In pot plants, very conspicuous were the Fuschias, both double and single, Petunias were also very fine, and two pots of

Stocks were splendid. Cut flowers—Roses, Sweet Williams, and Bouquets were very good; Pansies were a good show for the season. Fruit and Vegetables were excellent. On the whole there is a marked improvement in every department, and we congratulate the

Directors on the progress they have attained."

The Fall Show was held on the 14th September, and if we had cause to congratulate ourselves on the display made in the Spring, we certainly could do so again on this occasion. The number of entries at this Exhibition far exceeded those of any previous one, they reached the large number of 725, being an increase of 268, which, we think, is good evidence of marked success.

In Flowers, the display was excellent, and, as usual among pot plants, the Fuschias

were most conspicuous, being full of bloom and of good form.

The collections of cut flowers were splendid, such as Asters, Stocks, Marigolds, Petunias, Antichinnus, Perennial and Drummond Phlox, Dahlias, &c., &c. Bouquets, as usual, were a very attractive feature of the Show, there being no less than 33 entries in this class, and all really good, showing taste in putting them together and judgment in select-

ing the flowers.

The Fruit also made a good display. Apples, Pears, and Plums being all that could be desired, indicating that although we, so far north, can, with perseverance and skill, grow as good specimens of the above fruits as most other parts of Canada. There was quite an increase in the samples of Grapes shown, especially in open air grapes; but, owing to the early frost, many did not ripen, in fact, none but the most hardy kinds can be grown here with any certainty of success. The Delaware seems to be best adapted for this locality, and is a very fair fruit.

Vegetables of all descriptions were in abundance, and showed signs of good cultivation, both as to quality and size, the roots, especially, were very fine. Some of our amateurs sent samples to the Provincial Exhibition, and succeeded in carrying off a number of prizes. The display of Cauliflower was not only large, but of superior quality. In fact, taken as a whole, it was the best and largest show of vegetables ever held here.

WENTWORTH, NORTH.

Dr. To Balance in hand " 92 Members' Subscriptions " Legislative Grant " Cash from Wentworth and Hamilton Societies	\$ cts.	\$ cts. 202 93 132 25 700 00	\$ cts.
Cr. By L. G. to Township Societies		90 25	1125 43
" Paid Wentworth and Hamilton Societies " Agricultural Publications " Working Expenses		550 00 58 50 36 40	1040.07
Balance in hand			84 56

Note.—This Society united with the South Wentworth and Hamilton Agricultural Societies, for the purpose of holding a fall exhibition.

Bevertey.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		7 12	_
" 158 Members' Subscriptions		162 00	
" Legislative Grant		120 77	
" Municipal Grant		12 25	
*			302 14

Cr. By Prizes for Live Stock " " Field Products " " Dairy "	\$ ets. 135 00 26 25 9 75	\$ cts.	\$ cts.
" Horticultural Products " Agricultural Implements " Arts and Manufactures " Ploughing Match	10 50 8 00 20 00 19 50	229 00	
" Preparing Show Grounds " Working Expenses		1 55 48 20	278 75
Balance in hand			23 39
To Members' Subscriptious " Admissions to Show " Legislative Grant. " Municipal Grant. " Miscellaneous Receipts	\$ cts.	\$ cts. 150 00 16 20 135 20 50 00 9 00	\$ cts.
CR. By Balance due Treasurer "Prizes for Live Stock "Field Products. "Dairy. "Horticultural Products Agricultural Implements and Manufactures.	189 50 67 50 16 00 7 50 38 00	5 04	
" Working Expenses Balance due Treasurer		318 50 38 21	361 75
			1 00
I)R. To Balance in hand " Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant	\$ cts.	\$ ets. 75 02 196 00 61 30 140 00 30 00	\$ cts.
CR. By Prizes for Live Stock "Field Products "Dairy "Horticultural Products "Agricultural Implements "Arts and Manufactures	187 25 71 50 12 00 26 50 21 00 33 50	351 75	002 02
" Preparing Show Grounds " Working Expenses		18 00 77 56	447 31
Balance in hand			55 01

WENTWORTH, SOUTH. & cts. Dr. \$ cts. S cts. To Balance in hand..... 180 25 " 100 Members' Subscriptions..... 139 75 " Legislative Grant 700 00 " Proportion of balance from Treasurer of United 90 25 Societies..... ----1,110 25 Cr. By L. G. to Township Societies 398 42 "Treasurer of United Societies..... 550 00 " Agricultural Publications..... 57 00 " Working Expenses 65 93 1071 35 38 90 Balance in hand.....

Note.—This Society united with the North Wentworth and Hamilton Agricultural Societies, for holding a Fall Exhibition.

TREASURER'S BALANCE SHEET OF UNION SHOW.

DR. To Grants from Wentworth and Hamilton Societies "Admissions to Show "Proceeds of Rents for Fruit Stands, &c	\$ cts.	\$ ets. 1700 00 415 40 53 00	\$ cts.
Cr.		1 0 50	
By Balance due Treasurer	055 00	3 50	
" Prizes for Live Stock	855 00		
rieid floddets	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Dairy	134 00		
" " Horticultural Products	47 25		
" " Arts and Manufactures	153 25		
" " Growing Crops	74 00		
Growing Crops		1420 75	
"Treasurers of Wentworth and Hamilton Societies pro-			
portion of balance		278 95	
" Working Expenses		465 20	
3 1			2168 40
Ancaster.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		$74 \ 33$	
"116 Members' Subscriptious		128 50	
" Admissions to Show		26 00	
" Legislative Grant		138 15	
" Municipal Grant		50 00	
" Miscellaneous Receipts		13 50	100 10
Cr.	7-0		430 48
By Prizes for Live Stock	152 75 $58 75$		
rield roducts	25 50		
" " Dairy Products	16 50		
	21 50		
" " Agricultural Implements			
	28 75		

CR. By Preparing Show Grounds		\$ cts. 7 50	\$ cts
" Working Expenses		62 62	373 87
Balance in hand			56 61
Dr. Barton and Glanford.			
To Balance in hand " 93 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " Miscellaneous Receipts	\$ cts	\$ ets. 25 25 97 50 6 50 120 27 60 00 7 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " Working Expenses	147 00 26 50 8 25 20 00 2 00 11 25	215 00 56 13	
Balance in hand			271 13
,			45 39
DR. To Balance in hand "155 Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grant CR.	\$ cts.	\$ cts. 56 15 160 50 18 05 140 00 45 00	\$ cts.
By Prizes for Live Stock " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements " " Arts and Manufactures. " Working Expenses	177 00 57 75 12 00 18 25 11 00 34 50	310 50	
Balance in hand		45 60	356 10 63 60
Dr. To Balance in hand " Members' Subscriptions " Admissions to Show 198	\$ cts.	\$ cts. 210 34 391 00 500 00	\$ cts.

Dr. By Legislative Grant " Municipal Grant " Miscellaneous Receipts Cr.	\$ cts	\$ cts. 700 00 150 00 164 25	\$ cts.
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures. " " Ploughing Match. " L. G. to Township Societies.	392 50 108 50 23 50 36 50 87 00 104 25 153 50	905 75 367 31	,
" Preparing Show Grounds " Purchase of Exhibition Buildings " Municipal Grant to Township Societies. " Amount due Whitchurch Society from Union Exhibition. ' Working Expenses. Balance in hand		48 85 380 00 91 68 25 00 180 43	1999 02 116 57

REPORT.

It is with more than ordinary satisfaction your Officers and Directors of the past year, meet you at this Annual Meeting. The measure of prosperity and success attending the Association, the harmonious manner in which the labours of the year have been conducted, and the pleasing result they now are able to present, renders the occasion one of

pleasure and congratulation.

Although none of the Township Societies considered it to their interest to unite with the County Society, during this year, yet the hearty support accorded by the public generally, and the economy practised in the general management, not only enabled the Board to meet the ordinary expenses, and special liabilities on account of building fund, of three hundred and eighty dollars, principal and interest, but also to maintain the prize list to the same standard as when holding an union exhibition—while the proceeds from visitors entering the show grounds, were in excess of the previous year. All this is very satisfactory, and evidences the growing interest of the general public, as well as the farming community, in the efficiency and success of the Association.

At the Fall Exhibition, held on the 12th and 13th days of October, the competition was greater than at any previous show of the Society, exceeding in numbers the Union Exhibition of the year previous, both in individual competitors, and the entries in the various classes. The total entries numbering 1,844, chiefly upon the prize list. Indeed, it was a noticeable feature, compared with some former years, that the general character of the exhibition was in advance, there being decidedly less entries in the class of "extras,"

and more upon the regular list.

In horses there was a very creditable show, competition in almost every class, while in the more important the entries were numerous—altogether 177, in the various classes.

In cattle the competition was also good, and most of the animals of superior quality. The thorough-breds were better represented than in former years, evidencing progress in this direction. Total entries in cattle, 94.

In sheep there was an excellent show, there being 132 entries in the various classes, an increase of 14 over the previous year. The Leicesters, Cotswolds and Southdowns

prevail, most of the entries being in these classes.

The competition in swine over previous years was quite marked, there being a total of 60 entries, in the several classes, an increase of 14 over the previous year; while in the

poultry the competition was more numerous, proportionately, than in swine, there being

72 entries, an increase of 17 over the previous years.

The grain, seeds, roots, implements and manufactures were all well represented, and competition so great as to exceed all other exhibitions in the prizes awarded. It will be seen by the large amount paid in prizes, detailed in the Treasurer's report, that nearly the entire amount offered was drawn.

Your Board desire specially to commend the competition manifested by implement

makers, the show being, in this respect, decidedly in advance of former years.

A very successful Ploughing Match was held in the month of October last, and although the weather was unpropitious, the competition in the various classes was spirited. By the aid of the proceeds of the re-union, and donations of money and agricultural implements from the various makers, a large prize list was offered for competition.

Georgina and North Gwillimbury.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		92 27	·
" Members' Subscriptions		81 00	
" Admissions to Show		10 00	
" Legislative Grant		72 59	
" Miscellaneous Receipts		37 25	
ı	·		293 11
Cr.			
By Prizes for Live Stock	99 50		
" " Field Products	34 75		
" " Dairy "	9 75		
" " Horticultural Products	13 25		
" " Agricultural Implements	20 00		
" " Arts and Manufactures	10 25		
		187 50	
" Working Expenses		26 99	
3 227 (130)			214 49
•			
Balance in hand			78 62
'			
_			

Report.

During the past year a great falling off of members has taken place from that of the previous year, to the extent of forty-six, which no doubt is owing to the same apathy that has often been characteristic of the institution on previous occasions; still there are many connected with the Society who manifest every desire for its promotion, and act most zealously towards its future development and increased prosperity. The total number of entries this year exceeded that of the previous year, and we have good reason to believe were it not for the inclemency of the weather on the day of the show, the number of entries would have been still more in excess. However, this in a great measure, may be attributed to the fact that this year there were considerable additions made in the different articles for exhibition, likewise a reduction in the different amounts offered as prizes, with the view of giving a larger scope for competition; nevertheless, it is quite obvious that the prevailing principle, with a large proportion of people, is not for the advancement, or even any progress towards facilitating agricultural pursuits in any shape, but merely for gain, obtaining as it were dollar for dollar, and even more, if possible; a principle which ought to be avoided, and which is quite foreign to the benefits contemplated from institutions of this kind. The real benefit to society is not in seeing the superior article or animal, or even knowing that such obtained the premium. Where the advantage is to be derived is in obtaining information respecting the manner (if an article of produce) in which it was cultivated, &c.; if a superior animal, the method of obtaining something of the same kind at a reasonable rate of expense.

There is one thing of the greatest importance, and ought by all means to be taken notice of. It is clear to every one, and cannot be disputed, that the whole country is much in want of change in seed grain. Spring wheat is entirely run out as it were, and Fall is no better, and a change in the other grains would also be advantageous. The County Society, with the assistance of Township Societies, might devise some method whereby something in the way of providing new kinds of seed grain could be obtained with profitable results to the whole community; and the different agricultural societies throughout the country could not apply their attention, or even a portion of their funds, to any purpose that would have a greater tendency of doing so much good.

44	Dr. Balance in hand	\$ cts.	\$ ets. 21 80 120 00 103 24 12 74	\$ ets. 257 78
By	Prizes for Live Stock. "Field Products. "Dairy " "Horticultural Products. "Agricultural Implements. "Arts and Manufactures.	110 75 38 00 13 00 8 75 7 25 23 95	201 70	
£4	Working Expenses Balance in hand		46 06	$\frac{247\ 76}{10\ 02}$

REPORT.

The Exhibitions for the two past years have been confined to residents of the Township, and the result of the change has given general satisfaction. This fact strengthens the opinion that Township Exhibitions should be so confined, and thus prevent the wealthy and professional stock breeders from sweeping the prizes, to the great discouragement of

that mutual and general competition which it is intended to encourage.

The stock of the Township in cattle, sheep and swine is steadily improving, owing to the importation of superior breeds, and increasing interest felt by the majority of agriculturists; but in horses, although many valuable animals have been imported which have increased the size, yet the opinion strongly prevails that the powers of endurance are unequal to those of past years. In making the return of crops to Government, if the time was extended to the middle of September, a more correct report could be given, as there would then be some data to base upon, instead, as in the past two years, a mere matter of speculation.

9	Kinq.				
	DR.	\$	cts.	\$ cts.	\$ cts.
To	Balance in hand			82 27	
"	226 Members' Subscriptions			226 00	
4.6	Admissions to Show			18 00	
	Legislative Grant			176 16	
	0				502 43
	Cr.				
By		193	50		
10	" Field Products	38	50		
66		15	25		
ec	" Horticultural Products	15	00		
	201				

CR. By Prizes for Agricultural Implements " " Arts and Manufactures	\$ cts. 37 00 33 75	\$ cts.	\$ cts.
Unpaid	333 00 14 50	910 50	
4 Working Expenses		318 59 38 00	356 50
Balance in hand			145 93

REPORT.

* * *

The stock exhibited was decidedly better than any shown at previous exhibitions. As regards horses, the competition was not so great as on some former exhibitions, but the animals were generally superior.

The cattle exhibited were, upon the whole, a better class or selection than any

heretofore shown. Sheep were also very good, both in numbers and quality.

The show of pigs was also very good, there being a decided improvement in this class of stock.

The show of poultry was also good, a greater variety being exhibited than on any former occasion.

Seeds were not good, the entries being also fewer than usual; but the roots were excellent, and probably the best, on the whole, ever exhibited in this Township.

There was, as usual, a good show of butter. Cheese was very good, but not in large

quantities, the make and quality being improved very much.

Ladies' work and domestic manufactures were very good, and manifested considerable skill in the design and manufacture of the various articles exhibited. In this department there was strong competition, which added much to the interest of the exhibition.

Fruit was decidedly good, the various sorts of which being greater, and the quality

superior to any ever exhibited in this Township.

The Society has not had any Ploughing match during the year. We find that unless liberal prizes are offered, there is not sufficient competition to make the matter of much interest.

Implements were more numerous, and in greater variety than at any previous exhibition.

Whitchurch.

46	Dr. Balance in hand 150 Members' Subscriptions Admissions to Show Legislative Grant Municipal Grant			\$ cts. 160 02 150 00 165 29 109 C0 24 00	\$	cts.
	Miscellaneous Receipts			27 37	635	68
By	Prizes for Live Stock.					
46		0	00			

CR. By Prizes for Agricultural Implements	\$ cts. 21 00 48 75	\$ cts.	\$ cts
Unpaid By Working Expenses	389 50 13 50	376 00 106 60	
			482 60
Balance in hand	•		153 08

Note.—The Directors state that the Society is in a prosperous condition; the Fall Exhibition equal to any of its predecessors, and a marked improvement in the quality of the stock and articles brought forward.

YORK, EAST.

DR. To Balance in hand "Members' Subscriptions "Admissions to Show "Legislative Grant "Municipal Grant "Markham Society for Union Show "Donations, &c CR.	\$	cts.	\$ cts. 318 81 284 00 780 00 700 00 125 00 391 00 228 75	\$ 2827	ets ⁻
By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products. " " Agricultural Implements. " " Arts and Manufactures " " Ploughing Match	$ \begin{array}{r} 42 \\ 104 \\ 236 \\ 170 \\ \hline \end{array} $	00 50 50 50 00 00			
Unpaid " L. G. to Township Societies " Preparing Show Grounds " Prizes for previous year " Markham Society " Working Expenses Balance in hand		50	1577 00 412 50 71 90 48 00 125 62 254 22	2489 	
DR. To Balance in hand. " Members' Subscriptions " Legislative Grant. " Municipal Grant. " Proceeds of Profits.	€.	cts.	\$ cts. 410 47 226 00 140 00 25 00 125 62	\$ 927	ets 09
9/12					

	patron .		
Cr. Paid on account of Union Show " Working Expenses		\$ cts. 391 00 16 50	\$ cts.
			407 50
Balance on hand			519 59
Note.—The Society united with that of the East Ridin	g for exhi	bition pa	rposes.
Scarborough.			
DR. To Balance in hand " 130 Members' Subscriptions " Admissions to Show " Legislative Grant " Municipal Grant " Miscellaneous Receipts.	\$ cts.	\$ ets. 36 22 148 00 72 00 140 00 25 00 40 06	\$ cts.
CR. By Prizes for Live Stock. " " Field Products. " " Dairy " " " Horticultural Products " " Agricultural Implements. " " Arts and Manufactures " Preparing Show Grounds " Working Expenses.	190 50 39 00 7 00 22 00 11 00 42 50	312 00 62 02 41 75	415 77
D 1 1 1			
Balance in hand			45 51
YORK, WEST.			
Dr. To Balance in hand " 30 Members' Subscriptions. " Admissions to Show " Legislative Grant " Municipal Grant " Miscellaneous Receipts	\$ cts.	\$ cts. 192 97 35 00 30 00 700 00 125 00 50 00	\$ cts.
CR. By Prizes for Live Stock at Spring Show. " " Union Exhibition " " For last year. " L. G. to Township Societies. " Portion of Municipal Grant to Township Societies. " Amount repaid by Etobicoke Society. " Working Expenses.	150 00 350 00 65 00	565 00 306 73 62 50 50 00 33 70	1132 97 1017 93
Balance in hand			115 04

NOTE.—This Society united with the City of Toronto and the Township of York for a Fall Exhibition. (See Report of Toronto Society.)

Etobicoke.			
Dr. To Balance in hand " 152 Members' Subscriptions " Admissions to Show " Legislative Grant. " Municipal Grant	\$ cts.	\$ cts. 3 08 185 25 21 10 131 20 60 00	\$ cts.
CR. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures.	146 00 50 25 11 25 13 50 39 50 32 25		
Unpaid	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	269 75	
" Working Expenses		70 56	340 31
Balance in hand			60 32
Vaughan.			
Dr. To Balance in hand	\$ cts.	\$ cts. 550 40 412 50 299 88 140 00 25 00 77 00	\$ cts.
Cr. By Prizes for Live Stock " " Field Products " " Dairy " " " Horticultural Products " " Agricultural Implements " " Arts and Manufactures " " Ploughing Match	329 00 37 50 39 00 22 50 79 00 82 00 201 00		
Unpaid	790 00 178 50	611 50	
" Preparing Show Grounds " Agricultural Publications." " Working Expenses.		45 00 27 00 165 87	84 9 37
Balance in hand			655 41

REPORT.

The past season has, on the whole, been exceedingly favourable for agricultural productions, notwithstanding the heavy rains and cold temperature during the greater portion of it. Roots, particularly, of all descriptions, were an extraordinarily abundant 205

crop, though there was a great deal of difficulty in the housing and pitting of them from the sudden and early time at which winter appeared. From that fact also, the crop of apples, which was very good, was materially injured, many of those left late on the trees being only fit for cider. The grain crops have been very considerably above par, peas and oats yielding especially well. Barley also was above the average in quantity, but generally of an inferior colour, large quantities of it being housed in a damp state. Fall wheat was a superior crop, particularly in the cases of various midge-proof varieties, which have lately been introduced. There was not a large breadth of land sown in spring wheat, what there was, however, yielded about an average crop. The hay crop was very good, the season being very favourable for its growth, though there was very considerable difficulty in the saving of it; and in many cases, there were very fair second crops. Pasture was very plentiful, and, in consequence, stock of all descriptions were in good condition.

York.	,		
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand		$112 \ 42$	
" 135 Members' Subscriptions		179 50	
" Legislative Grant		209 00	
" Municipal Grant		25 00	
" Refunded by Etobicoke Society		24 00	
			549 92
Cr.			
By Prizes for previous years		42 00	
" W. R. S. for Spring Show		30 00	
" Union Exhibition		350 00	
" Working Expenses		8 12	
			430 12
Balance in hand			119 80

Note.—The Society is reported to be in a prosperous condition. It united with the Riding Society for holding a Spring Show at Weston; also with the Riding and City of Toronto Societies, for a Fall Exhibition; both of which were decidedly successful.—See report of Toronto Society.

REPORT OF THE COUNCIL

OF THE

AGRICULTURAL AND ARTS ASSOCIATION

OF ONTARIO, FOR THE YEAR 1869.

TO HON. JOHN CARLING,

Commissioner of Agriculture, &c., for the Province of Ontario:

SIR,—The Council of the Agricultural and Arts Association of Ontario, beg leave to

present the following brief Report of their proceedings during the past year:

The late Board of Agriculture, constituted under the Act 22 Vic., chap. 32, held two meetings since the commencement of the year 1869, viz.: on January 6th and January 27th. These meetings were principally occupied in consideration of the state of the accounts of the late Treasurer, Mr. Denison, and in interviews and negotiations with him in reference to the balance due by him, which appeared from his accounts, as subsequently passed by the Auditors, to be \$13,283.87. Against this sum, Mr. Denison charged \$5,138 for commission on the amount of the Government Grants received and paid out to the County Agricultural Societies, but which charge the Board did not allow. The Board obtained satisfactory mortgage security for the sum of \$8,000, leaving the balance to be settled by litigation.

The existing Council, organized under the Act 31 Vic., chap. 23, of the Ontario Legislature, met for the first time at Toronto, on the 24th February last, consisting of the following members, viz.: Geo. McDonell, Cornwall; Hon. J. Skead, Ottawa; Andrew Wilson, Maitland; Edwin Mallory, Napanee; John Walton, Peterboro'; Geo. Graham, Brampton; James Cowan, Waterloo; J. C. Rykert, St. Catherine's: Hon. David Christie, Paris; Robert Gibbons, Goderich; Lionel E. Shipley, Falkirk; Stephen White, Charing Cross. Ex-officio members: Hon. John Carling, Commissioner of Agriculture; Dr. Beatty, President Mechanics' Institute Association; W. H. Mills, President Fruit Growers' Association; George Buckland, Professor of Agriculture, Toronto University.

Rev. Dr. Ryerson, Chief Superintendent of Education.

At this first meeting the Council was duly organized. Mr. Mallory was appointed President; Mr. Shipley, Vice-President; Mr. Graham, Treasurer. A resolution was passed requiring satisfactory security to be given by the Treasurer. A By-law was passed appointing an Executive Committee, and another By-law to regulate the duties of the

Treasurer.

The Council held five subsequent meetings during the year 1869, and the commencement of the present year, viz.: at London, on March 31st; at Toronto, on June 30th; at London, September 18th to 25th; at Toronto, on December 1st; and again on January 11th: and the Executive Committee held three meetings, viz.: at Toronto, on March 17th and August 11th; and at London on September 8th. The following is a brief resume of some of the more important items of business transacted at the several meetings.

The Treasurer furnished ample and satisfactory security, being to the amount of \$20,000, for the due discharge of his duties, which was accepted by the Council. A correspondence has taken place with the University authorities in reference to the House on the late Experimental Farm, and Arbitrators have been appointed to determine the

value thereof, to be paid to the Council by the University.

The Prize List of the Exhibition was carefully revised, the amount of the prizes being

increased in some of the more important classes, and the rules amended, where necessary,

to make the working of the Exhibition more satisfactory.

The large Upper Hall, in the Agricultural Hall building, has been utilized by leasing it to Mr. James Fleming, for purposes of public meetings, etc., at a rent of \$200 per annum, for five years, but the lease terminable at any time at the option of the Council.

Interviews were held with the Local Committee at London in reference to the accommodation required for the Exhibition, which, although serious difficulties at one time

appeared to intervene, were at length completed satisfactorily.

A memorial was adopted, in view of the serious dangers threatened by contagious Cattle Diseases, petitioning the Dominion Government for some legislative provision to

regulate the transport of Live Stock.

Standing Committees of the Council were appointed to supervise the various departments of the Exhibition, thus ensuring the more satisfactory working of each department. A Committee was appointed to superintend the printing of the Association, and the printing was let by public tender, by which means an economical and satisfactory execution of that work has been obtained. An insurance was effected on the library and furniture in the Agricultural Hall, for the sum of \$2,000, in the London Assurance Company. A Committee was appointed to enquire into the security given for the investment of the amount known as the Prince of Wales Fund, and a mortgage on real estate has been obtained as collateral security to the bond previously given. Rules were passed regulating the duties of the Chief Superintendent and his assistants at the Exhibition.

A Committee was appointed to examine and report upon the experiments of Mr. Charles Arnold, of Paris, in hybridizing different varieties of Fall wheat, which experiments, so far, appear to promise results of a very satisfactory kind. A grant of \$150 per annum was made to Prof. Smith, V. S., Veterinary School, to assist him in providing lecture and dissecting rooms for the use of the students, and for heating and lighting the same without further expense to the Council, on that account. The Judges for the various departments of the Exhibition were appointed by the Council and communicated with. Invitations were issued to the Governor General, His Royal Highness Prince Arthur, and the Lieutenant Governors of the Provinces, to visit the Exhibition at London, which invitations were accepted by the Prince, the Governor General, and the Lieutenant Governor of Ontario. The Treasurer attended at London for the purpose of letting the

very satisfactory prices.

During the Exhibition the Council met every day, in the office on the grounds, to decide the numerous questions of detail which arose in regard to the reception of distinguished visitors, the working of the Exhibition, &c. At the annual meeting of the Directors of the Association, it was decided to hold the Exhibition of 1870 at Toronto, the Mayor and a deputation from that city offering a guarantee that all the accommodation required should be provided. After the Exhibition, a list of all the prizes awarded was published, in accordance with statute, in November, and sent to all the parties, in consequence of which they were fully apprized of the same, and all the prizes were paid before the close of the year, a result which had not been attained on any occasion heretofore.

Refreshment Booths by public auction, as on former occasions; and the booths realized

Convinced of the importance of the study of the science of Entomology, in its relation to the interests of Agriculture and Horticulture, the Council has voted a grant of \$400 for the current year, to the Entomological Society of Canada, to aid the Society in its objects, on the condition that they furnish an annual report, form a Cabinet to be placed at the

disposal of the Council, and continue to publish their Journal.

The subject of planting shade trees in the rural districts as a protection to vegetation and fruit trees, and for preventing diminution in the annual rain fall, has engaged the attention of the Council. This is undoubtedly a question of much importance. If any general system of planting shade trees along the most exposed sides of the farms in the older settled Townships could be designed and carried into effect, there is every reason to believe that very beneficial results would follow, both in the protection of farm crops and fruits, and in the distribution of the rains of summer. The Secretary has been instructed to ascertain, if possible, what system, if any, has been adopted in any of the neighbouring States for this purpose.

Besides the subjects above briefly referred to, numerous other matters connected with the working of the Association occupied the Council at the various meetings.

THE VETERINARY SCHOOL.

The Veterinary School continues in successful operation under the able superintendence of the Principal, Professor A. Smith, V. S., and is now known as the Ontario Veterinary College. Twenty-two students attended the course of Lectures of 1868-69, of whom eighteen did so with the object of studying the Veterinary Science as a profession. The session closed at the beginning of April, when five students came up for the final examination. The examiners were:

MR. VARLEY, V. S., 13th Hussars.
MR. WILSON, V. S., London.
J. ROWELL, M. D., Toronto.

JAS. THORBURN, M. D., Toronto.

JAS. BOVELL, M. D., "

—. DE LA HOOK, M. D., "

Four out of the five students passed the examinations successfully, and received the Diploma, viz.:—

MR. EVELY, St. Thomas.
MR. SWEETAPPLE, Brooklin.

MR. STUBES, Orangeville.
MR. BAKER, Galt.

At a later period of the year, the examiners being Mr. CLARK, R. A., Mr. HAGYARD, V. S. Brampton, and Doctors Thorburn, Rowell and Bovell, three other students having completed their studies, came up and passed the examinations successfully, and received the Diploma, viz. :—

Mr. W. D. McIntosh, Kingston. | Mr. Sutherland, Stayner. Mr. Hope, Ayr.

As stated above, the Council has voted Professor Smith an annual grant of \$150, to assist him in providing lecture and dissecting rooms for the use of the school. In accordance with this arrangement the Professor has erected a commodious brick building adjoining his Infirmary, where the lectures are now given, and improved facilities are afforded to young men for acquiring the profession. Twenty-eight students are at present attending the lectures, of whom the greater number design studying the art as a profession. Subjoined is the programme for the current session:

PROFESSORS:

Andrew Smith, V.S., Edin., Principal,
J. Thorburn, M.D., Edin., - - - Veterinary Materia Medica.

JAMES BOVELL, M.D., Eng., - - - Animal Physiology.
A. Smith, V.S., and Assistant, - - - Clinical Instruction.
H. H. Croft, D.C.L., University College,
Geo. Buckland, " "The History, Breeding and Management of the Domesticated Animals.

Students intending to prepare themselves for the practice of the Veterinary Art, as a *Profession*, are required to attend two sessions, at least, and pass the examinations. The DIPLOMA will be granted on passing the final examination, certifying that the holder thereof is competent to practise his profession.

Students are strictly required to devote the interval between the sessions to the prac-

tice of the profession, under some approved and duly qualified practitioner.

In addition to the above, provision is made to meet the wants of young men intended for, or already engaged in Canadian farming, by a course of familiar instruction in the science and practice of Agriculture. In this department Professor Buckland is assisted by several of his colleagues,—the Professors of Chemistry, Geology, Natural History, and Meteorology, in University College. The course is free only to strictly Agricultural Students, and will continue about six weeks.

The session for second and third years' students commenced in October. The class for first years' Veterinary Students and Agricultural Students, commenced January 5th, 1870. The session for Veterinary Students will close on the 1st of April.

Students attending two sessions of this Institution, can obtain the Diploma of the Royal College of Veterinary Surgeons, or that of Edinburgh, after attending one session and passing the examination at either of the Colleges of London or Edinburgh.

THE EXHIBITION.

The Provincial Exhibition of 1869, held at London on September 21st to 24th, was in every respect a great success; every department of the Agricultural and Manufacturing industry of the country being well represented. The actual number of animals and articles exhibited in the various classes, was probably, on the whole, greater, and the number of visitors larger than on any former occasion. This fortunate result was, no doubt, largely attributable to the productive harvest of 1869, and the very favourable weather which occurred at the time of the Exhibition as well as, to a considerable extent, to the presence of His Royal Highness Prince Arthur, His Excellency the Governor-General, and other distinguished visitors. Subjoined is a statement showing the number of Entries and the amount of Prizes awarded in each class.

PROVINCIAL EXHIBITION OF 1869.

STATEMENT shewing the amount offered in Premiums in each Class, the number of Entries, and the amount actually Awarded:

CLASSES.	AMOUNT OFFERED.	NO. OF ENTRIES.	AMOUNT AWARDED.
1. Blood Horses 2. Agricultural Horses 3. Road or Carriage Horses 4. Heavy Draught Horses 5. Durham Herds, Prince of Wales' Prize 6. Durham Cattle 7. Devous 8. Herefords 9. Ayrshires 10. Galloways	\$ cts. 298 00 341 00 449 00 340 00 60 00 491 00 467 00 467 00 467 00 467 00	20 137 312 74 3 131 76 25 50	\$ cts, 183 00 363 00 444 00 397 00 60 00 503 00 427 00 306 00 495 00 372 00
11. Grade Cattle 12. Fat and Working Cattle 13. Cotswold Sheep 14. Leicesters 15. Southdowns 16. Shropshire, Hampshire, &c. 17. Merinos 18. Fat Sheep	178 00 154 00 252 00 252 00 156 00 156 00 156 00 48 00	76 52 90 306 70 18 60 26	178 00 154 00 350 00 252 00 156 00 96 00 156 00 48 00 126 00
19. Pigs—Large Breeds 20. Suffolks 21. Improved Berkshire Pigs 22. Essex and other Small Breeds 23. Poultry 24. Grains, Seeds, &c. 25. Roots, &c. 26. Fruit, Professional List.	126 00 126 00 126 00 126 00 265 00 606 00 263 00 223 00 223 00	64 49 94 53 418 614 683 84	126 00 126 00 177 00 126 00 263 00 621 00 161 00 179 00 257 60
27. Fruit, General List. 28. Garden Vegetables. 29. Plants and Flowers. 30. Dairy Products, &c. 31. Implements, Large. 32. Implements, Hand. 33. Cattle Food, Manures, &c. 34. Cabinet Ware, &c.	191 00 249 00 985 00 302 00 208 00	501 760 261 193 271 237 3 61	155 00 187 50 247 00 595 00 252 00 152 00
35. Carriages, Sleighs, &c	232 00 95 00	144 20	251 00 56 00

STATEMENT, ETC.—Continued.

CLASSES.	AMOUNT	NO. OF	AMOUNT
	OFFERED.	ENTRIES.	AWARDED.
37. Drawings, Engravings, &c. 38. Fine Arts in Oil, &c. 39. Fine Arts in Water Colors, &c. 40. Groceries and Provisions 41. Ladies' Work 42. Ladies' Work 43. Machine Castings and Tools 44. Sewing Machines 45. Metal Work, Miscellaneous 46. Musical Instruments 47. Natural History 48. Paper, Printing, &c. 49. Saddlery, Leather, &c. 50. Shoe and Boot Work, Leather, &c. 51. Woollen, Flax, and Cotton Goods, &c.	474 00 370 00 124 00 117 50 99 50 489 00 84 00 360 00 181 00 124 00 98 00 266 00	82 124 168 76 212 151 116 27 161 28 19 30 70 91 203	\$ cts, 182 00 346 00 231 00 94 00 124 50 82 50 415 00 65 00 224 00 73 00 112 00 42 00 161 00 115 00 321 00

PROVINCIAL EXHIBITIONS, 1846 to 1849.

The following Comparative Table will also shew the advance which has taken place in the Exhibitions, from their first institution to the present time:

PLACE AND YEAR.	Total amount offered in Prizes.	Total No. of Entries.	Total amount awarded.
Toronto, 1846 Hamilton, 1847 Cobourg, 1848 Kingston, 1849 Niagara, 1850 Brockville, 1851 Toronto, 1852 Hamilton, 1853 London, 1854 Cobourg, 1855 Kingston, 1856 Brantford, 1857 Toronto, 1858 Kingston, 1859 Hamilton, 1860 London, 1861 Toronto, 1862 Kingston, 1863 Hamilton, 1864 London, 1865 Toronto, 1866 Kingston, 1866 Kingston, 1866 Kingston, 1867 Hamilton, 1866 London, 1867 Hamilton, 1868 London, 1868 London, 1869	\$ cts. 1,600 00 3,000 00 3,100 00 5,600 00 5,106 00 5,017 85 5,916 95 6,410 15 7,176 10 9,216 30 9,238 50 10,071 40 10,790 50 10,513 00 15,015 50 12,036 50 11,866 00 12,559 50 13,434 00 12,712 00 12,731 00 13,304 50 13,428 00	1,150 1,600 1,500 1,429 1,638 1,466 3,048 2,820 2,933 3,077 3,791 4,337 5,572 4,830 7,532 6,319 4,756 6,319 4,756 6,392 7,221 6,219 4,825 6,620 7,649	\$ cts. 1,100 c0 2,400 00 2,300 00 2,300 00 3,400 c0 3,223 75 4,913 00 5,293 25 5,427 50 6,941 70 6,799 50 8,186 00 9,215 00 10,722 00 9,166 00 10,304 28 11,036 75 10,288 50 9,311 50 11,120 00 11,459 50

FINANCES.

The total amount received by the Treasurer during the year was \$34,527.77, and the total amount disbursed \$32,877.80, leaving a balance in hand at the end of the year, as shewn by the Report of the Auditors, of \$1,619.97. A claim of Mr. Glackmeyer of \$1000, for expenses incurred by him in entertaining Prince Arthur during the Exhibition

at London, has been paid since the accounts were audited. All the liabilities of the Association have been discharged, except the several amounts due for premiums for the years 1862 to 1868 inclusive, which remain unclaimed. A suit has been instituted in the Court of Chancery to recover the amount due by the late Treasurer. Some evidence has been taken, and a day appointed for further hearing. No settlement has yet been concluded with the University authorities in reference to the value of the brick house on the late Experimental Farm; but arbitrators have been duly appointed to determine the value thereof, and it is confidently anticipated that their award will be made and the amount paid over to the Council at an early day.

The Treasurer's detailed accounts, together with the Auditors' Report, and an abstract

statement of the Receipts and Disbursements, are subjoined.

(Signed,) DAVID CHRISTIE,

President.

(Signed,) HUGH C. THOMSON,

TORONTO, Feb. 24, 1870.

Secretary.

ABSTRACT of the detailed Statement of Receipts and Disbursements of the Agricultural and Arts Association for the Year 1869.

RECEIPTS.		DISBURSEMENTS.		
Rents Miscellaneous Account. Ticket Account. by Secretary. S 1,497 Tickets sold at Exhibition. 15,038 Exhibition, Sale of Forage, Stalls, &c	\$15,000 00 900 00 1,\$78 97 200 00 16,535 00 313 80	Board Expenses Veterinary School Expenses Salaries Account Printing and Stationery Miscellaneous Loan Account (Mr. Denison's Note at Bank) Legal Expenses Exhibition Expenses Prize Account Balance	470 1,897 1,364 3,467 4,042 244 6,615 12,441	00 00 51 79 60 17 78 70
	\$34,527 77		\$34,527	77
1870. Jan. 5. Balance on hand	\$1,649 97			

AUDITORS' REPORT.

We, your Auditors, have examined the Accounts of the Treasurer, both in abstract and detail, and find them kept in a most satisfactory manner. We have also examined the Vouchers, and find them, on comparison with the Books, to be correct. There are some of the Vouchers not yet returned; we find, however, that the several amounts have been sent to the parties by cheques, marked good by the Bank. The balance in the Bank book to the credit of the Association is the same as compared with the Books, amounting to \$1,649.97. There is also an asset in his hands, a mortgage of \$800, given by Hugh C. Thomson, being for that amount, which was a loan to the late Colonel Thomson, being the amount given as a prize by the Prince of Wales.

E. A. MACNACHTAN, Auditors. (Signed,)

APPENDIX.

STATEMENT of Assets and Liabilities of the Agricultural and Arts Association of Ontario, on 1st January, 1870.

ASSETS.			LIABILITIE	S.	
Jan. 1. 1870.		Jan. 1.	1870.		
Balance at Credit of Treasurer in Bank Balance of amounts collected for Ar rears of Subscriptions to late Agriculturist and Journal, and for Waste Papers sold, in hands of Secretary. Prince of Wales' Fund, invested at Sper cent Amount due by late Treasurer, as per Auditors' Report of last year Agricultural Hall Building and Groune Furniture in Office, estimate Books in Library and Office, estimate House on late Experimental Farm Movable Property used at Exhibition Flax Scutching Machine Lumber, Coops, &c., at Toronto, say.	. \$1,649 97 - *735 54 5 . \$00 00 r . \$13,283 87 d 18,400 00 - \$240 00 . \$1,500 00 . \$3,200 00 . \$80 00 . \$50 00 . \$100 00 \$40,039 38	Accounts for Arthur	niums, Exhibition "" "" "" "" "Entertainment of unts for Advertisin, seets	1868 1867 1866 1865 1864 1863 1862 Prince	None. \$113 00 79 00 183 00 123 75 152 00 95 00 1,000 00 24 27 38,137 36

^{*} This account has since been audited and found correct, and the amount placed to the Treasurer's credit.
+ Of the above item \$8,000 is secured by mortgage, and the balance is in litigation.

APPENDIX TO REPORT

OF THE

Commissioner of Agriculture and Arts.

APPENDIX (B).

ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO.

Toronto, October 15th, 1870.

SIR,—I have the honour to communicate, in compliance with section 24, sub-section 1, of the Agricultural and Arts Act, the appended copy of the proceedings of this Association, and the report submitted at the annual meeting, held at the Rooms of the Mechanics' Institute, in the City of Toronto, on Wednesday, the 5th of October instant.

I have the honour to be, Sir,

Your most obedient servant,

W. EDWARDS.

Secretary-Treasurer.

The Hon. John Carling,

Commissioner of Agriculture and Public Works, Ontario.

ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO.

Toronto, 5th October, 1870.

The Annual Meeting of the Association was held this evening, in the Rooms of the Mechanics' Institute. Present:—Dr. Beatty, of Cobourg, President; D. McDougall and J. Overholtzer, of Berlin; H. Hale, of Clinton; James Young, M.P., of Galt; D. McCrae and J. McNeil, of Guelph; R. Roy, of Hamilton; Robert McKnight and D. Sinclair, of Meaford; T. Davison and J. J. Withrow, of Toronto; W. Edwards, of Woodstock; and W. Edwards, of Toronto, Secretary of the Association.

The Minutes of the previous Annual Meeting were read and approved.

The Secretary then read the Report of the Executive Committee, which, on motion

of Mr. McCrae, seconded by Mr. Withrow, was adopted.

On motion of Mr. Young, seconded by Mr. McNeil, the sum of \$100 was voted to the Secretary, for services for the past year; the sum to be charged as expenditure in the account now submitted.

On motion of Mr. McCrae, seconded by Mr. McDougall, the following notice of motion from previous Annual Meeting was considered, viz.: "That clause 3 of the Constitution be so amended, that all Institutes paying fees on their Annual Legislative Grants shall be deemed Affiliating Institutes; and that any other Institute affiliating shall pay an annual fee of one dollar." The motion was unanimously adopted.

On the question of a monthly "New Books List," it was moved by Mr. Mc. Knight:

"That the Secretary be instructed to order the 'Bookseller' and the 'American Literary Gazette,' and present a copy of each for the year to each Affiliating institute." The motion was not seconded.

It was moved by Mr. Withrow, seconded by Mr. McNeill, and unanimously resolved, "That the offer of last year, to supply to any Affiliating Institute both the above works,

for the sum of \$1.50 per annum, be renewed.

Mr. Hale moved, seconded by Mr. McDougall,—"That in the opinion of this Association it is desirable and just that Mechanics' Institutes should, as regards aid from the public funds, be placed on the same footing as Agricultural Societies, in such manner that the amount granted to each Institute shall be in proportion to the amount contributed to it by the Members and Subscribers; and that a petition to this effect, signed by the President and Secretary, in behalf of this Association, be presented to the Government of Ontario." The resolution was discussed at considerable length, and unanimously adopted.

Nominations of Office-Bearers for the ensuing year were then made, viva voce, and the ballot taken, which resulted in the election of James Young, Esq., M.P., President; R. Roy, Esq., Vice-President; W. Edwards, Secretary-Treasurer; and Dr. Beatty, D. McCrae, D. McDougall, and Thomas Davison, as the Executive Committee.

Mr. Withrow moved,—"That Dr. Beatty do leave the chair, and that Mr. Young do

take the same." Carried.

The President elect thanked the meeting for the honour done him, in electing him President of the Association: and referred at some length to the services of their late President, Dr. Beatty.

Mr. Withrow moved, seconded by Mr. Roy, and carried unanimously,-" That the thanks of the Association be cordially given to Dr. Beatty, its late President, for the zeal he has so constantly manifested in promoting the interests of the Association, and the cordial manner in which he has always treated the Representatives of the Institutes."

Dr. Beatty, in returning thanks, referred to the past thirteen years, during which he had continuously held the office of President of the late "Board of Arts and Manufactures for Upper Canada," and its successor, the "Association of Mechanics' Institutes of Ontario," and trusted the Association would be even more prosperous in the future than in the past; and that his successor in the presidential chair would be able, at the close of his term of office, to note a still further progress made in the Arts and Manufactures of the Province, which he, as a member (ex officio) of the Council of the Agricultural and Arts Association, had done his utmost to promote.

The meeting then adjourned.

W. EDWARDS, Secretary.

SECOND ANNUAL REPORT.

The Executive Committee of the Association begs to present the Second Annual Re

port of its proceedings.

Your Committee regrets that, owing to the very limited revenue at its disposal, it has been able to accomplish so little of direct benefit for the Affiliated Institutes. issue of a Circular descriptive of the Organization, Management, and Success of the Evening Classes of the Toronto Mechanics' Institute, as requested by the Association at its last meeting; the procuring, and furnishing to the Institutes, such Catalogues of Books for Sale as have been procurable; and the purchasing of Books for such Institutes as have desired it, at the reduced rates, comprise all that your Committee have been able to do.

Since the issue of the Circular respecting Evening Classes, the Toronto Institute has successfully conducted another Winter Series, containing 365 pupils, in similar useful studies. Some other Institutes have also met with partial success, in this most important department. It cannot, however, be expected, that in small towns or villages a variety of Classes can be successfully established: perhaps one or two Classes, in each of which liree or four of the most useful subjects of study might be embraced, would be most likely to succeed. The subject is worth a trial, and the persevering efforts of the Directors of Mechanics' Institutes, who desire to benefit the rising Operative Classes.

On the subject of Catalogues of New Books, your Committee regrets that so few have been available. As instructed by the Association at its last meeting, your Committee subscribed for a number of copies of the English "Bookseller," and the "American Literary Gazette," and offered, by circular notice, to supply both these works for the sum of \$1.50 per annum,—less than half their cost,—to Affiliated Institutes. Notwithstanding the low price, and the value of these works, but two Institutes sent in their subscriptions. Two Catalogues of Second-hand Books, by A. Piddington; Catalogues by Adam & Stevenson, and by Copp, Clark & Co.; and a copy of the Quarterly "Canadian Bookseller," by Messrs. Adam & Stevenson, have been sent to all the Institutes, during the year. These, however, have not fully met the requirements of the Institutes. What is desirable, is, the regular publication, in some popular Canadian Monthly Journal, or in an independent form, of a complete list of such New Works, and new editions of Old Works, as are contemplated by the Agricultural and Arts Statute, in the granting of Legislative aid to the Institutes. Your Committee recommend that arrangements be made for the publication of such a list, during the ensuing year, and the sending of free copies to all the Mechanics' Institutes in the Province.

The number of books purchased by the Institutes, through the Agency of your Committee, has not been so large as during the previous year; owing, most probably, to local booksellers having offered to supply books to the Institutes at a discount off ordinary rates, equal to what is offered through the Association. The value of books purchased

has been, for the

Mount Forest	Mechanics'	Institute		\$ 51	67
Meaford	66	66	******************	101	84
Merrickville	66	44		32	40
Smith's Falls	66	66		93	04
Mitchell	66	٤.		52	29
Milton	66	44		93	03
Thorold	66	66		58	34
				\$482	61

Other amounts are now in the hands of your Secretary, for similar purchases.

The number of Institutes taking advantage of Legislative aid, under the provisions of the Statute, is increasing. In 1868, the number was 13, receiving in the aggregate \$1,610.00; in 1869, the number was 26, receiving in the aggregate \$3,307.41; this year, the Institutes that have received aid, to date, are:

Smith's Falls	\$ 60	00
Brantford	200	00
Dundas	200	00
Paris	100	00
Toronto	200	00
Meaford	50	00
Streetsville	200	00
Hamilton	200	00
Berlin	137	14
Galt	100	00
Mount Forest	41	88
Richmond Hill	52	68
Clinton	200	00
Ayr	167	00
Merrickville	50	00
Woodstock	150	00
St. Mary's	109	00
<i>m</i> .		
Total	\$2217	70

Several others will, no doubt, be included 'ere the year closes.

The aid thus afforded, and the larger amount of good being thereby accomplished by these Institutions, show the wisdom of the Government and Legislature in making this Statutory provision for their encouragement.

At the last Annual Meeting of the Association, it was suggested that the Secretary endeavour to make arrangements for the delivery of Lectures before the Affiliated Institutes, by celebrated Lecturers. Your Committee regrets that the Secretary was not able

to make the desired arrangements.

The President of your Association, during the past year, as your representative on the Council of the Agricultural and Arts Association, has continued to devote his time and interests to the advancement of the Arts and Manufactures of the Province, as connected with the Annual Exhibitions of that Organization.

THE TREASURER'S STATEMENT SHOWS THE

Receipts for the year	3147 134	29 82
Balance in hand		
Liabilities—about	103 10	
. Available Assets	\$93	61

DETAILS OF RECEIPTS AND EXPENDITURE.

Receipts.

1869.							
Sept. 23.	Cash balanc	e in ha	nd				\$17 53
* 28.	Whitby Med	chanics	Institute—5	per cent.	on Grant f	For 1869	7 50
	Newmarket		66	- 66	66	"	1 50
Oct. 8.	Woodstock	66	44	66	"	"	10 00
	Peterboro'	66	44	66	66	66	10 00
	Thorold	66	66	66	"	"	5 00
10		"Book	seller." &c				1 50
" 3.	Berlin Med	hanies'	Institute-5	per cent.	on Grant f	for 1869	5 17
	Guelph	"	66	"	"	1868	5 00
	Dundas	66	66	"	66	1869	10 00
	Smith's Falls	s"	44	66	"	66	2 00
1870.	152222025 5 2 444						
	Milton Mec	hanics'	Institute—5	per cent.	on Grant f	For 1869	2 50
	Kingston	66	66	- "	"	"	10 00
	Ayr	66	"	"	66	"	2 10
Aug. 10.		66	66	66	"	1870	8 35
" 10.	Galt	66	"	66	"	"	5 00
	Smith's Falls	3 6 6	66	44	44	"	3 00
Sept. 4.		46	66	66	46	٠٠٠٠٠٠	10 00
	Stratford	66	66	"	46	1869	6 00
	Meaford	44	66	66	"	1870	2 50
	Brantford	"	66	"	"	"	10 00
		T'11	44	66	66	"	2 64
· · · · · · · · · · · · · · · · · · ·	Richmond E	1111	**				2 UT
	Richmond F Toronto	1111	"	"	"		10 00

Expenditure.		
1869.		
Oct. 14. Postage Stamps	00	
	60	
" 15. One three-quire Journal 0	90	
1870.		
	17	
Mar. 18. Copp Clark & Co., for "Bookseller" 4	80	
	75	
	60	
Oct. 5. Secretary-Treasurer's remuneration	00	
<u> </u>		134 82
Balance in hand		\$12 47
Other Assets	1 (\$17 41
Other Assets	14	
Liabilities	00	01.16
		81 14
Total available Assets		\$93 61

All which is respectfully submitted.

JOHN BEATTY, M.D., President.

Association of Mechanics' Institutes of Ontario.

[CIRCULAR.]

Toronto, 6th October, 1869.

DEAR SIR,—In accordance with a desire expressed by the members of the Association, at its Annual Meeting, held in the City of London, on the 23rd ultimo, I now have the honour to communicate to you a condensed account of the organization and mode of conducting the Evening Classes in connection with the Toronto Mechanics' Institute:

This Institution, during thirty years of its history, extending from 1832 to 1862, occupied rooms in which the accommodation was too limited to allow of an extensive system of Class instruction being inaugurated; although, during the whole of this period, this important object was not lost sight of, and Classes were from time to time organized, and carried out with more or less success—the principal studies being in Ornamental and Mechanical Drawing, with an occasional Class in Experimental Chemistry, Phonography, &c. &c.

In the year 1861, the Institute took possession of its new Hall, with its large accommodation; and in the fall of the ensuing year organized a regular system of Evening Class instruction, in English Grammar and Composition, French, Arithmetic and Mathematics, Figure and Landscape Drawing, Architectural and Mechanical Drawing, Bookkeeping, and Penmanship. The subject was prominently brought before the public by a free Introductory Lecture, by Mr. Richard Lewis, a warm advocate of the system, and its success was insured. Upwards of 100 pupils joined the Classes during that Session; and at its close—after a private examination by competent teachers and practical men of high standing—a public meeting was held, at which prizes in books, previously awarded by the Examiners, to the value of \$166, were presented by His Worship the Mayor, on behalf of the Committee—two prizes to each Class, of the respective values of \$10 and \$6. The interest in the meeting was increased by the introduction of light refreshments, the presence of an instrumental band, and some appropriate addresses by gentlemen who had acted as Examiners, or were otherwise interested.

During the evening, the pupils of the various classes presented an address to the Directors of the Institute, in which they manifested their appreciation of the efforts in their

behalf, in the following terms:

"The classes in connection with this Institute, which have just completed their winter term of instruction, embrace with pleasure this most fitting occasion for giving expression to their grateful appreciation of the liberality and public spirit which prompted

you to the formation of those classes.

"The deficiency has often been keenly felt and lamented by many when placed in certain positions in life, who, either from accident or from the want of a proper appreciation of the value of learning in schoolboy days, have failed to acquire that requisite knowledge which is one of the great guarantees of success. On this account we feel all the more lively sense in what you have done in providing, at terms which place it within the means of all, instruction in the more essential branches required by the mechanic, the artizan, the clerk, and the man of business. This boon has been enhanced to us by the addition of comfortable class rooms, liberal prizes to excite emulation, and more important than all, the engagement by you of teachers second to none in the city in their several departments, and who have to us proved themselves so carnest and efficient. It is exceedingly gratifying to us, to have this public opportunity of acknowledging our obligations to each and all of the teachers under whose instruction it has been our fortune to be placed."

* * "The offers put forth by this Institute, as a public Educator, have proved it to be, what its name implies, a people's Institute; and have given it a fresh hold on the public for its support."

The evening was closed by appropriate readings and recitations, and music by the

band.

During the Session of 1863-4, 115 pupils attended, and the classes were in every respect a success. The classes for 1864-5 contained about the same number of pupils; but in 1865-6 the number reached 200, and Elocution and Phonography were added to the subjects of study. At the subsequent annual meeting, the Directors were enabled to re-

port :--

"That the winter session, just closed, has been marked by decided success, alike in relation to the efficiency of the staff of teachers engaged, to the number of pupils enrolled, to the strict regularity of attendance, to the testimony of the Examiners as to the satisfactory progress made in the respective studies, and finally to the fact that these gratifying results have been attained, without recourse to any assistance from the general funds of the Institute. The classes, of which a list is subjoined, were opened on the 16th October, and closed by examination on the 2nd of April, forty lessons of two hours each having been comprised in the session."

The classes for the winter of 1866-7 were attended by 180 pupils, and in 1867-8 by 200 pupils. The Report of the directors for that year entered so much into the merits of the Evening Class system, as to justify the insertion of the following lengthy extracts:—

"Of all the useful and important departments of a Mechanics' Institute, the evening classes, in their influence upon the industrial portion of the community, have the highest claim to public sympathy. The end they have in view is not only to afford a general education and means of improvement for those engaged in the active and industrial pursuits of life, but also a technical education, such as no other educational establishments provided, but which is most necessary to the manufacturing and commercial progress of the country. They do not take the place of the ordinary schools, but when properly constituted they continue this school education, complete it as far as possible, and in a special manner direct it by appropriate studies to the special interests of the individual students. It is gratifying to the friends of these classes to find that the Legislature of Ontario has to some extent recognized the importance of the principle expressed in these views, by awarding grants to Institutes complying with certain proper conditions, and that our Institute has qualified itself for the grant of \$200 for the present year, the whole to be devoted to educational objects, either in evening class instruction, or in the purchase of books of a technical character, for its library. The example of the Government in this important direction cannot fail to give a new impulse to adult and technical education, and gives to the evening classes a powerful claim on the sympathies and liberality of all who are interested in the commercial and manufacturing prosperity of the Province.

"The reports of the Examiners were highly satisfactory, and bore testimony to the soundness and excellence of the instruction. Impressed with the importance of intro-

ducing technical instruction, the Board of Directors undertook to establish a class in Chemistry and Natural Philosophy, in addition to the subjects previously taught, and placed it under the charge of Dr. May. The results, as reported by competent examiners, have been very gratifying, and have satisfied the Directors that, with proper resources, they would be justified in making further advances in the direction of technical and scientific education, as applied to the practical purposes of life.

"The financial results of the classes are of inferior consideration; for the object should be to make them available to all, by fixing the fees at the very lowest standard; and it is this view of their purpose and value which encourage the Directors to believe that further appeals to employers and to the wealthy portion of the citizens would so increase the funds of the Institute, as to enable them to carry out, to the most liberal extent, the design of a Mechanics' Institute, by offering the best instruction in science, connected with manufacturing and industrial progress."

At the close of the session of 1868-9, the Directors reported that 265 pupils had at-

tended the classes, and suggested that—

"The work contemplated in the institution of these classes would be much promoted if our merchants and manufacturers could be induced to contribute liberally, and send to the classes their apprentices or other employees who may wish to improve their educa-tion, and thus make available to themselves the full value of their subscriptions. It is also to be hoped that the youth of the city will appreciate the necessity of seeking educacation in the higher branches of practical science, and thus sustain the Institute in this important department of its operations."

The classes for the ensuing session, 1869-70, are announced to begin on the 18th in-

stant, with every prospect of success.

Although the Directors of the Institute have not been able fully to remunerate the teachers employed, they have had no difficulty in inducing gentlemen of high attainments taking charge of their classes—these being generally from the Head Masters of our City Common Schools, Professional Teachers of Drawing and Painting, and a thoroughly com-

petent French Master.

The charge to members of the Institute, and to the sons and apprentices of members, for each class, is \$2 per Session of twenty weeks, of two lessons of two hours each per week; and to non-members \$3: the French Class \$3 and \$4. The remuneration to teachers ranges from \$40 to \$60 for the Session; the average being about \$50. The mode of proportioning the remuneration to the teachers of some of the classes, is \$40 for about twelve pupils, and for every additional pupil over that number \$1. The amount depends, however, on the subjects taught in the class, and the labour devolving on the teacher.

The Chemists and Druggists of the city have formed a Pharmaceutical Society, a number of whose members, by arrangement, attend the Institute Chemistry Class, and

thus assist in insuring its success.

The following set of Rules have been found to answer for the conduct of the classes; and, with slight modifications, will be found suitable for almost any other Institution:

1st. The Class fees for the current Session are, to members of the Institute, and the sons and apprentices of members, \$2; non-members, \$3, for each Class, payable invariably in advance.

2nd. The Classes will open during the third week of October, and continue until the third week in March. Each Class, meeting twice a week, shall receive forty lessons.

3rd. Each Class shall meet, and the studies commence, punctually at 8 o'clock, and close not later than 10.

4th. It shall be the duty of the Teachers to keep a correct roll of the pupils in their respective Ciasses, and also of the attendance of each; the roll to be called at 8 o'clock.

5th. Prompt and regular attendance is required of all; and those not so attending

will not be permitted to compete for the prizes hereinafter mentioned.

6th. Conversation and other irregular and improper conduct must meet with instant reproof from the Teacher; and if he is not obeyed, it may be reported to the Committee, who hereby hold to themselves the right of dealing with the offenders as they shall see fit.

7th. All the materials required in the respective Classes may be obtained from the Secretary, at wholesale prices.

9th. Any pupil is competent to enter the lists; but no one engaged in or studying for any of the learned professions, no student of any university or college, and no professional teacher, will be allowed to take a prize.

10th. Those who have taken first prizes in any previous year will not be eligible for

the same in any subsequent year.

I also mail herewith a copy of the Programme of Classes for the coming Session; and shall be happy to furnish any further information required.

I am, Sir, Your obedient Servant,

W. EDWARDS, Secretary.

To Secretary,

Mechanics' Institute.

MEMORANDUM.

From experience of the past two years, it is evident that a great difficulty the Managers of Institutes have to labor under, in the selection of suitable books for their libraries, is the want of proper catalogues of new and standard publications. It will be observed by the accompanying copy of the proceedings of the annual meeting of the Association, that two of the best current periodical lists of books will be furnished to affiliating Institutes, at less than half their published rates, on being ordered through the Association. On the receipt of \$1.50, from any Institute affiliating by payment of 5 per cent. on its Legislative grant, these works will be ordered.

Institutes in arrears for fees, are requested to pay the same forthwith.

W. EDWARDS, Secretary, A. M. I. of O.

A. 1870-71

ANALYSIS

OF

REPORTS OF MECHANICS' INSTITUTES.

AYR MECHANICS' INSTITUTE.

Receipts.	4	Expenditure.	
Members' Subscriptions	25 03 41 68	Balance due Treasurer Books and Periodicals Expenses of Lecture, &c. Librarian Miscellaneous Expenses Balance in hand	74 64 10 00 30 00 17 80
	${142\ 57}$		142 57

Note.—This Institution has 147 members and subscribers; the Library contains 1,030 volumes, with a Reading-room, supplied with 6 Magazines and 4 Reviews. Circulated through the year:—Works of Fiction, 995 vols.; History and Travels, 94 vols.; Scientific Works, 95; and of Periodicals, nearly 700. Clear assets of the Institute estimated at \$1,010.

BERLIN MECHANICS' INSTITUTE.

Receipts.		EXPENDITURE.		
By Balance in hand	54 00 41 00 196 97	To Books and Periodicals "Binding Books, Stationery, &c. "Expenses for Evening Classes "Entertainments "Salaries "Rent, Fuel, Light and Repairs "Miscellaneous	12 (51 7 73 (23 3	06 75 63 33
	410 59		410 5	59

Note.—This Institute comprises 69 members; Library, 690 volumes, of which, issues during eight months ending June 6, 1870, amounted to 1,101. The class for Book-keeping and Penmanship had 25 pupils; Arithmetic and Mathematics, 25; English Grammar and Composition, 2; and German, 4; total, 25. There had been 6 Re-unions and 1 Calico Ball. Estimated assets, \$765.

Extracts from Report.

In submitting a summary report of their proceedings, at the close of their term of

office, your Directors would beg to remind the members of the Institute that, as the financial and other statements and figures in the following report have reference to a year of only eight months, they will require modification before a fair comparison with the previous year can be made.

Financially, the affairs of the Institute are in a very satisfactory condition, owing, principally, to the liberal patronage extended by the citizens of Berlin and vicinity, to

every effort made by your Directors to provide amusement for the people.

It is a matter of regret that the most important department of the Institute—its membership—from some cause not well understood, is, in point of numbers, far less than it should be in a town of the size of Berlin. The number of members, at date of last report, was 96; the number during the year now ending, 69—showing a decrease of 27. Your Directors would urge upon their successors the importance of making a thorough canvass of the town during the ensuing year, and that particularly among the industrial classes, for the benefit of whom the establishment of Mechanics' Institutes was originally intended.

The Evening Classes, organized last November, and continued for four months, were tolerebly successful. This, however, was chiefly due to the energy and perseverance of the teacher, Mr. George Smith, whose services your Directors were fortunate enough to

secure.

The thanks of the Institute are due to a large number of friends who, during the season just closed, have willingly given their time and talents for the benefit of this Institution—their only recompense being the gratification they had in seeing full houses, the funds of the Institute augmented, and their efforts to contribute to the festivities of the season kindly appreciated. There were seven entertainments—six Re-unions and a Calico Ball—the gross receipts of which amounted to nearly \$200. But, notwithstanding the performers' time and trouble being given gratuitously, contrary to general opinion, the outlay connected with these entertainments is necessarily large; in fact, with all due economy, the net proceeds have on this, as well as on former occasions, fallen far short of what the promoters anticipated.

BRANTFORD MECHANICS' INSTITUTE.

NOTE.—This Institute consists of 43 members, and its clear assets are estimated at \$902, \$751 of which is cash in the hands of the Treasurer.

> MECHANICS' INSTITUTE, Brantford, 30th March, 1870.

SIR,—I have the honour to acknowledge the receipt of circular dated 31st January, 1870, calling attention to section 25, sub-section 1 of the Agriculture and Arts Statute,

and also blank schedules for the purpose of making the necessary returns.

I regret that I have to say that on the morning of the 23rd of January last the entire property of Brantford Mechanics' Institute, including treasurer's, minute, and librarian's books, was destroyed by fire, therefore I am unable to fill the schedules in any further particulars than the number of members and the present assets of the Institute. At the time of the fire, the Institute had an insurance of six hundred dollars, \$600, on the books and furniture, this amount has been paid by the insurance company, and the Committee of Management has secured other rooms, fitted up and furnished them, and ordered the purchase of a supply of books.

I have the honour to be, Sir,

Your obedient servant,

JAMES WOODYATT, Secretary.

To Hon. John Carling, Commissioner of Agriculture and Arts, Toronto.

DUNDAS MECHANICS' INSTITUTE.

Receipts.	Exp k nditure.
By Balance in hand 33 46 " Members Subscriptions 179 06 " Fees from Class Pupils 15 50 " Fees from Annual Concert 172 87	To Books and Periodicals
" Legislative Grant 200 00 " Miscellaneous 19 10	Festival 80 37 "Salaries 75 00 "Rent, Insurance, Fuel, &c 91 14 "Balance in hand 113 31
619 99	619 99

Note.—The Institute has on its rolls, 135 members and subscribers. Total number of volumes in Library, 2006; 14 Magazines supplied to the Reading-Room; 2736 volumes were circulated during the year. Pupils in evening class for arithmetic and mathematics, 15; architectural and mechanical drawing, 10; English grammar and composition, 15. Total number of pupils, 25. An annual concert and festival was also held. Clear assets \$1641.

GALT MECHANICS' INSTITUTE.

RECEIPTS.			EXPENDITURE.		
	\$	cts.		\$	cts.
By Balance in hand	94	85	To Books and Periodicals	249	18
" Members' Subscriptions			" Printing, Stationary, Postages	15	22
" Fees from Reunion	28	69	" Rent, Repairs, Fuel, &c	54	43
" Donations	59	25	" Salaries	130	00
" Legislative Grant	100	00	" Miscellaneous		
9			" Balance in hand	88	66
	555	04		555	04

Note.—The Library consists of 1199 volumes, and the Reading-Room is supplied with 35 Newspapers, Magazines and Reviews. A classified catalogue of the books has been published, and much interest is felt in obtaining books; the circulation of the year amounted to 3571 volumes, being a considerable increase over the preceding year. The number of standard works of reference, and in science, arts, history, and such like subjects, is proportionately large. A musical and literary rennion was got up, which appears to have been a success. Clear assets, \$1788. The Report speaks encouragingly of the future prospects of the Institution.

HAMILTON MECHANICS' INSTITUTE.

HAMILIO	A MECH.	ANICS INSTITUTE.		
Receipts.		Expenditure.		
	\$ cts.		\$	cts.
To Balance in hand	335 76	By amount of Salaries	600	00
" Hall Rents	1978 50	" Paid on Mortgage	1000	00
"Subscriptions	1126 00	" Repairs and Improvements; Gas,		
" Rents of Stores and Cellarage.	$526 \ 25$		1353	76
" Sales of Newspapers	110 22	" Commissions	155	43
" Net proceeds of Lectures	27 28	" Books and Periodicals	405	79
" Legislative Grant	200 00	" Newspapers	174	00
3		" Classes	80	00
		" Printing and Postage	138	77
		" Cleaning Hall	78	46
		" Mechanics' Institute Associa-		
		tion	10	00
		" Balance in hand	307	80
	4304 01		4304	01
	9	24		
	<u>~</u>	<u>≱</u> ± (;		

Note.—The Institute has 509 members, and a Library of 2410 volumes, comprising a large number of works of reference, and treatises on the various branches of science and general literature. The issue of books amounted in the year to 8234. The Reading-Room contains 84 Newspapers, 26 Magazines, and 2 Reviews. A class had been conducted in phonography, consisting of 80 pupils. Clear balance of assets, \$137.17.

phonography, consisting of 80 pupils. Clear balance of assets, \$137.17.

The Directors in this, the thirty-first Annual Report, congratulate the Members of the Institute on "its continued prosperity and increasing usefulness." The large additions recently made to the Library, and the various improvements in contemplation, will doubtless tend, when completed, to increase still further the popularity and healthy pro-

gress of the Institution.

MEAFORD MECHANICS' INSTITUTE.

	Receipts.		Expenditure.		
	\$ 0	cts.		\$ 0	
By	Balance in hand 2	05	To Books and Periodicals	39	75
66	Members' Subscriptions 89	00	" Cost of Lectures, &c	21	95
26	Fees from Lectures and Enter-		" Printing	29	75
	tainments 23	19	"Rooms, Furnishing, &c	8	15
66	Donations 5	00	"Salaries, Insurance, Postage, &c	10	32
44	Fines 1	95	" Balance in hand		
			-		
	121	19	1	21	19

Note.—The Institute has 102 members, and a library of 252 volumes. The issues of the last six months reached 790. Nine lectures on various interesting subjects were given, and also the same number of readings; all of which were well attended, and were a source or both amusement and instruction. Clear assets estimated at \$311. The Directors "congratulate the members not only on an increase of their number, but also on the increased efficiency of the Institute generally."

MILTON MECHANICS' INSTITUTE.

Receipts.		EXPENDITURE.		
By Balance in hand	\$ cts. 5 82 93 10	To Books and Periodicals purchased "Cost of Lectures, &c" Salaries	115 30	
" Legislative Grant" " Miscellaneous	50 00	" Printing, Stationery, Insurance, &c" " Miscellaneous" " Balance in hand	66	36 34 45
	329 39		329	39

Note.—Members, 77; library, 721 volumes; number of issues, 1,133. Seven reunions were held, comprising readings, music, and short lectures on various subjects. Clear assets, \$1,050.

MOUNT FOREST MECHANICS' INSTITUTE.

EXTRACTS FROM REPORT.

Your Committee in submitting their Annual Report, would beg to congratulate the members on the success which has attended their efforts in attempting the resuscitation of the Institute. As you are all aware, the Institute has lain dormant for five or six years, but now that we are again in operation, we hope that progress will be the order of things in general in connection with its working.

things in general in connection with its working.

We would take the present opportunity of reminding the members and friends of the Institute that a Government equivalent of dollar for dollar is now in force with regard

to these Institutions, and therefore your Committee would hope that the year upon which we are entering, will be the most prosperous we have had since its formation.

The Committee have only succeeded during the winter in having one re-union, which was well attended, and two lectures.

The receipts for the year have been			\$41	88	
The expenditure	\$16	38			
Cash on hand	25	50	4.1	00	

PARIS MECHANICS' INSTITUTE.

Receipts.		EXPENDITURE.		
By Members' Subscriptions " Legislative Grant " Donations " Municipal Grant " Fees from a Lecture " Arrears from 1868 " Sale of Periodicals	150 00 46 85 50 00 10 25 14 50	To Balance due Treasurer "Books and Periodicals "Expenses of Evening Class "Lecture "Repairs, Fuel and Insurance "Salaries "Miscellaneous "Balance in hand	6 297 32 10 40 52 23	00 00 19 00
	471 07		471	07

Note.—Number of members, 111; volumes in library, 944; amount of issues, 971. Reading-room supplied with 24 newspapers and periodicals. Class for book-keeping and penmanship, 5 pupils. One lecture given during the year. Balance assets, \$1,965.

EXTRACTS FROM REPORT.

Your Managing Committee, at the commencement of the year 1869, determined to use unusual exertions to make the Institute attractive, by adding largely to the library, and by the establishment of classes for instruction in writing, arithmetic, English grammar, &c. To enable them to do so, they applied for and obtained a grant of one hundred and fifty dollars from the Government of Ontario, which, with an equal amount appropriated from the funds of the Institute, placed a sum of \$300 at their disposal.

They regret to have to state that the attempt to establish evening classes did not succeed in accordance with their anticipation, and after keeping them open for three

months, they were discontinued for want of pupils.

Early in the year the scientific books, purchased with the Government grant in 1869, were placed in the library. And in the course of the year the whole, or nearly the whole of the Government grant and Institute appropriation for 1869 has been expended in books, chiefly consisting of works on history, travel, and biography.

PETERBOROUGH MECHANICS' INSTITUTE.

Receipts.	\$ cts.	Expenditure.	\$ ets.
By Balance in hand "Members' Subscriptions "Fees from Pupils "from Lectures "from Exhibition Donations "Legislative Grant "Town Council Grant "Miscellaneous	37 00 72 65 7 00 68 60 60 83 67 50 200 00 50 00	To Books and Periodicals "Expenses of Evening Classes " of Lectures " of Exhibition "Rent, Fuel, Light. &c "Salaries "Miscellaneous "Balance in hand	
	606 84		606 84

Note.—The Institute has 93 members, 492 volumes in the library, and 52 newspapers and periodicals in the reading room. Issues of books, 352; class for bookkeeping and penmanship, 12 pupils; the same in English grammar, arithmetic, and mathematics. Five lectures were given on various popular subjects, and one exhibition of the fine and decorative arts. Clear assets, \$861.

EXTRACTS FROM REPORT.

The Directors of the Peterborough Mechanics' Institute, in presenting their second annual report, are pleased to be able to report that a fair measure of success and encouragement has attended their efforts during the past year. This is the more gratifying when it is remembered that in consequence of the large outlay for furniture, &c., during the first year, they had to commence the present year with a large balance against them, but, thanks to the liberality of the Town Council and many kind friends, they had sufficient funds to work the Institute, supplement the Legislative grant, and make a large addition to the library and reading appliances of the Institute.

It is a pleasing fact that the attendance at the reading rooms during the present year has very largely increased, showing that the young men and others are beginning to appreciate the advantage thus placed within their reach upon such easy terms, and the Directors hope that this encouraging fact will stimulate the Town Council and the friends of the Institute to continue their liberal support to the institution, so that it may be an effectual counterpoise to the many places to be found in the town, that are calculated to

destroy the body and mind of those who frequent them.

During the year the Directors made arrangements for evening classes and lectures, but regret that the classes were not successful; very few availed themselves of the opportunity thus afforded them. This was chiefly owing to the want of a suitable room, for, although the Trustees of the Union School kindly placed a class room at the disposal of the Directors, the locality was a difficulty during the dark stormy nights of winter. A room in connection with the reading rooms would make the evening classes much more

popular, and will be a matter for our successors to consider.

The lectures were a great success. There seems to be a growing interest in the public mind that greatly encouraged us, and gives indications that a better feeling is springing up for this excellent mode of instruction, that we hope will soon wipe away the reproach that has in this respect rested upon the town in the past. The Directors feel it a duty in this connection to acknowledge their indebtedness to J. B. Dixon, Esq., the Principal of the Union School, A. H. Campbell, Esq., T. White, Esq., of Hamilton, and Dr. Nelles, of Cobonry, for their kindness in responding to the invitation to lecture for the Institute, and the valuable, instructive character of the lectures delivered.

RICHMOND HILL MECHANICS' INSTITUTE.

Receipts.		Expenditure.		
By Balance in hand	\$ cts. 9 03	To Books and Periodicals	\$ 6 52	
" Members' Subscriptions	$23 \ 50$	" Cost of Lectures and Entertain-	02	00
" Fees from Lectures and Enter-		ments	36	
tainments		" Testimonial" " Miscellaneous	$\frac{36}{2}$	98
2 011001011011011011011011011011011011011				
	127 98		127	98

Note.—Number of members, 58; volumes in library. 154; periodicals in reading room, 12; a mutual instruction class of 20, and 10 literary meetings and lectures.

SEAFORTH MECHANICS' INSTITUTE.

RECEIPTS. By Members' Subscriptions " Fees from Lectures " Donations	$\frac{74}{56} \frac{50}{00}$	To Books and Periodicals	18 35 46 75
" Legislative Grant" " Life Membership	200 00	" Fuel, Light, &c	62 50 39 30 12 82
	625 83		625 83

Note.—The Institute has on its rolls 148 members, 452 volumes in library, 1,533 issues; two lectures were given; clear assets, \$461. The report speaks encouragingly of the prospects of the institution.

SMITH'S FALLS MECHANICS' INSTITUTE.

Receipts.		Expenditure.		
By Members' Subscriptions " Fees from Readings " Legislative Grant " Donations	71 66 40 00	To Balance due Treasurer	10 43 25	66 00
	166 98		166	98

Note.—Number of members, 63; in library, 1,425 volumes; issues, 1,437; clear assets, \$2,000. Nine readings on various interesting subjects were given during the winter, which were very well attended, and proved instructive and satisfactory.

STRATFORD MECHANICS' INSTITUTE.

Receipts.	EXPENDITURE.	
By Balance in hand	To Books and Periodicals	\$ cts. 92 40 5 90 33 50 3 32
135 12	•	135 12

Note.—The Institute consists of 120 Members, and a Library of 989 volumes. Estimated assets, \$603. The Reports speaks encouragingly of the prospects of the Institution. The Secretary, under date September 9th, 1870, remarks:—"As our accounts were closed last year previous to the receiving of the Government Grant, I am unable to include its receipt, and the subsequent expenditure in this return."

228

STREETSVILLE MECHANICS' INSTITUTE.

Receipts.		Expenditure.	
By Balance in hand	$\frac{49}{197} \frac{70}{00}$	" Printing, Stationery, Postage,	18 00 30 00
		&c " Miscellaneous	33 91 13 65
	340 99		340 99

Note.—Number of members, 63. Library, 913 volumes. Four lectures had been given. Estimated clear assets, \$874.

THOROLD MECHANICS' INSTITUTE.

RECEIPTS. \$ ets 56 00	7 To Balance due Treasurer 2 72 " Books and Periodicals 246 95 " Salaries 22 00 " Cost of Lectures and Entertain-
584 3:	584 32

Note.—The Institute has 76 members, and 700 volumes in its Library, and a class of 25 pupils for mutual instruction; 5 lectures on scientific and geographical subjects, 6 debates and readings, 3 readings, with music, and 1 excursion, had been given—all of which, particularly the last, increased materially the income of the Institution. The removal to more convenient rooms during the past year, has already been attended by beneficial results, which will, the Directors think, be more fully realised in the future.

TORONTO MECHANICS' INSTITUTE.

	RECEIPTS.			Expenditure.		
•	**	\$	cts.		\$ c	ts.
By Cash in hand	at last Report	144	95	To Secretary and Librarian	674	90
	and Subscribers.			" Assistant Librarian	. 226	00
" New	do	1009	83	" Housekeeper	499	98
" Rents		3037	29	" Assistant Housekeeper	. 157	
" Class Fees an	d Requisities	748	40	" Interest on Mortgage	. 1104	00
	ailway Grant to			" Interest on Discounts		56
			00	" Postage Account	72	47
" Legislative G	Frant	200	00	" Fuel		
" Entertainmen	nts	83	12	" Gas, Oil, &c	. 912	92
	and Catalogues		40	" Water and Ice		00

229

RECEIPTS.—Con. \$ cts. By Old Papers sold	EXPENDITURE.—Con. To Binding Books "Blank Books and Stationery Insurances "Classes "Repairs and Furnishing "New Hall Accounts "Newspapers and Magazines "New Books "Printing "Entertainments "Office and Housekeeper's Requisites	\$ 6 175 12 126 672 330 548 484 256 67 118	94 70 95 07 64 35 57 21 79 82
6864 32		6864	32
	" Balance due the Treasurer, brought down	198	92

Note.—This Institute consists of 1160 members and subscribers, and a Library of 7794 volumes, with 114 Newspapers, Magazines and Reviews supplied the Reading-Room. Balance of net assets. \$38,135.

EXTRACTS FROM REPORT.

$Diorect \eta$.				
v	Vols. in	Library.	. Is	sued.
	1869.	1870.	1869.	1870.
Biography	609	613	751	882
History	676	773	623	892
Miscellaneous	612	617	709	1074
Fiction	2289	2302	14106	16226
Poetry and the Drama	. 240	257	564	600
Periodical Literature	. 1140	1212	3009	2968
Science and Art	609	612	591	720
Religious Literature	. 174	184	272	268
Voyages and Travels	520	530	1141	934
Illustrated Works	234	234		
Library of Reference	460	460		
			~~~	
	7572	7794	21766	24564

### EVENING CLASSES.

The series of evening classes organized in the autumn of 1862, has been even more successful than in previous years. The number of pupils in attendance was 326—being far in excess of any previous session, and were classified as follows:—

Number	of	Pupils	
--------	----	--------	--

	1868-9.	1869 - 70.
Book-keeping and penmanship, Mr. Samuel Clare	73	107
Arithmetic and mathematics, Mr. Samuel McAlister		4.1
Architectural and mechanical drawing, Mr. Wm. Gemmell	17	37
Ornamental drawing, Mr. R. Baigent		37
French, Mons. E. Pernet		26
English grammar and composition, Mr. R. Lewis	18	38
Chemistry, Dr. May		12
Elocution, Mr. Richard Lewis		25
Mutual instruction		24
	265	326

The usual examinations were held; and the distribution of prizes awarded to successful pupils took place in the Music Hall, on Monday the 11th of April. His Excellency the Lieutenant-Governor, the Honourable William Pearce Howland, C.B., was present, and took part in the presentation of the prizes.

# LECTURES AND ENTERTAINMENTS.

During the past season your Directors arranged for and carried out eight entertainments, namely: 4 literary readings, 1 reunion, and 3 lectures. As a strong inducement to the members, beyond the mere merits of the entertainments, it was announced that the net proceeds would be devoted to the purchase of new books for the library. Notwithstanding this announcement and the exertions made to render them a success, each one but the last resulted in a loss to the Institute, amounting in all to the sum of \$106.22 while a profit arising from Mr. Robin's Lecture on Scottish Song, given under the patronage of the Caledonian Society, amounting to \$28.49, reduced the loss on the whole series to a net sum of \$77.73.

That so many should discontinue their connection with the Institute, year by year, as the annual returns show, is a fact to be deplored; but with an industrial population so liable to change of residence, and the organization of various national and philanthropic societies and associations, having strong claims upon the active sympathies and efforts of so many of our fellow citizens, it appears to be a difficulty with which this Institute has increasingly to contend. Even in respect to a class of entertainments which originated in this institution, and which, for a time, were so successful, and have been copied extensively by other institutions in the province, the various churches and benevolent societies have taken them up; and by the peculiar claims to sympathy presented to their members and the public, have rendered the success of lectures and reunions in this Institute almost impossible. If, however, the moral and intellectual improvement of the youth of our city is promoted, though in connection with other associations than our own, it is still a matter for congratulation; but your Directors, nevertheless, must submit that this Institute has strong claims, peculiarly its own, and quite different to those of any other organization, to the generous support of the citizens of Toronto.

# IN CONCLUSION,

Your Directors would urge upon the members of the Institute to give the office-bearers, now to be elected, their hearty support during the year. There is much work to be done, which, if successfully accomplished, will be gratifying to all engaged in it and beneficial to the community. To interest and benefit the young and the industrial classes, by placing within their reach a good library, and periodicals for reading and study; and not only to continue but still further to improve the system of evening classes so successfully established in the Institute, for the instruction of such as are daily engaged in industrial pursuits, is a work that will bring to its promoters its own reward.

# WOODSTOCK MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.	
By Members' Subscriptions  " Donations  " Fees from Classes  " Legislative Grant  " Miscellaneous	<b>5</b> 3 65 93 50 190 00	To Books and Periodicals	
	496 05		496 05

Note.—Number of members and subscribers, 161; in library, 1,149 volumes; classes, bookkeeping and penmanship, 30 pupils; arithmetic and mathematics, 21; English grammar and composition, 12. Clear assets, \$900.

# EXTRACTS FROM SECRETARY'S REPORT,

For several years the Institution languished, and barely maintained its visibility, being unable to avail itself of any portion of the Government Grant, consequently, very few acquisitions were made to the Library, and only a small number of magazines were supplied.

In the month of March, 1869, an amalgamation was consumnated with the "Oxford Literary Society," with the happiest results. New energy and increased influence accom-

plished good results.

We have added largely to our bound works in the Library, and increased the number of magazines and periodicals. During the winter we established Evening Instruction Classes, employing two of our best male teachers. The English branches were successfully taught. Forty-eight pupils were in regular attendance. We hope to be able to

commence earlier next season, and with still greater results.

Since the Annual Meeting, we have removed to larger and more suitable rooms in the business part of the town, and opening, in connection with the Library, a Reading-room (open every day and evening). We have a Literary Society connected therewith, which meets weekly, for mutual improvement. We find, since moving there, that the increase in the demand for books and magazines is such, that we can scarcely supply it. The Reading-room is not so well patronized as we would wish, but we anticipate good results when the evenings lengthen.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

# APPENDIX (C).

REPORT OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO, FOR THE YEAR 1870.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts,

# APPENDIX (C).

REPORT OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO, FOR 1870

To the Honourable the Commissioner of Agriculture:

SIR,—I take much pleasure in submitting for your consideration the Report of the Fruit Growers' Association of Ontario, for the year 1870, embracing full details of the discussions had at the meetings of the Association held in October, 1869, and in February, July and September, 1870. These discussions are eminently of a practical character, and set forth the experience of the members in the cultivation of the several fruits under

Appended thereto will be found the excellent Prize Essay on some of the Small Fruits, written by W. Saunders, Esq., of London; and Mr. Saunders' Report on the rewards offered by the Association for the capture and destruction of the Plum Curculio, an insect that destroys the plum crop in nearly all parts of the Province.

The Report of the Directors, accompanied by the Treasurers' Report, was submitted to the Association at the Annual Meeting, held in the City of Toronto, pursuant to the

statute; which, with the President's address, are hereto appended.

It will be gratifying to you to learn that the membership of the Association has been nearly doubled since my last report, and that its usefulness has been thereby largely extended.

> I have the honour to remain. Your obedient Servant,

> > D. W. BEADLE,

Secretary of the Fruit Growers' Association of Ontario.

ST. CATHARINE'S, November 18th, 1870.

## FRUIT GROWERS' ASSOCIATION OF ONTARIO.

# ANNUAL MEETING.

The annual meeting was held in the Agricultural Hall, Toronto, on Tuesday evening, October 4th, 1870, Rev. R. Burnet, President, in the chair.

The Directors submitted their Annual Report, and the Treasurer a detailed state.

ment of receipts and disbursements.

The President read his annual address, which was received with great satisfaction.

Mr. Saunders, of London, seconded by Mr. Ross, of Goderich, moved that the thanks of the meeting be tendered to the President for his very interesting and able address, and that he be requested to furnish a copy for publication in the proceedings of the Association. Carried.

An election of officers for the ensuing year was then held, which resulted as follows,.

viz .:--

President—Rev. R. Burnet, of Hamilton.

Vice-President—J. C. Rykert, Esq., M.P.P., of St. Catharines. Secretary-Treasurer—D. W. Beadle, Esq., of St. Catharines.

Directors—Messrs. James Dougall, of Windsor; Warren Holton, of Hamilton; William H. Mills, of Hamilton; Wm. H. Boulton, of Toronto; A. B. Bennett, of Brautford; Geo. Leslie, Jr., of Toronto; Wm. Saunders, of London; A. M. Ross, of Goderich; Charles Arnold, of Paris.

Auditors—Messrs. W. L. Copeland and W. J. McCalla, of St. Catharines.

After the election of officers, the meeting took up the consideration of miscellaneous business.

Mr. Hammond, of Credit, asked how the Association classed the Ribston Pippin,

whether as a fall or winter apple?

Mr. Dougall, of Windsor, replied that its season of maturity depended upon the place where it was grown; that in the varied climate of our Province—embracing the long, warm summers of the South of Essex, and the short, cool seasons of the Muskoka District—the Ribston Pippin was in the former an early fall apple, quite dry and mealy now, and in the latter was a winter apple, keeping well until March.

Mr. Leslie, of Toronto, said that it varied much also with the warmth of the summer, in some seasons ripening up early, and in other and cooler seasons ripening more slowly

and keeping much later.

Mr. Caldwell, of Galt, stated that the apple kept well until March in that section,

and was truly there a winter apple.

Mr. Arnold, of Paris, asked what are we to do in judging when the apple is entered both in the fall and winter varieties? and suggested that the method of classification now in use should be abandoned, and that prizes should be offered only for the best samples of particular kinds, without reference to their season of ripening, so that the judges would have to determine which was the best sample of Ribston Pippin, or Snow Apple, or Greening, and not which was the best fall apple or winter.

Mr. Beadle stated that, thanks to the efforts of the President and Vice-President, a beginning had been this year effected in this direction, which, it was to be hoped, would

be carried out in all the departments of the fruit list.

Mr. Rykert stated that as soon as the Board of Agriculture should place sufficient prize money at the disposal of the Committee having in charge the Horticultural depart-

ment of the prize list, this much needed reform would be effected.

Mr. A. M. Ross, of Goderich, wished to know the cause and cure of the rot in the fruit of the plum. He had suffered much from this rot during the past season, much more than from the curculio, and deemed the rot a far more serious obstacle to the successful culture of the plum than the little turk.

Mr. Saunders, of London, had also suffered severely from this rotting of the fruit,

but could not suggest any remedy.

Mr. Dougall, of Windsor, had taken pains to have all the rotting plums carefully gathered and thrown on the ground, and then covered them and the ground under the plum trees with quicklime, also dusting quicklime freely through the tops of the trees, and thought he had in this way been successful in putting a stop to all further spread of the disease. He believed that this rotting was caused by minute fungi fastening on the fruit and developing there, and that the quicklime destroyed the fungus. The rot could not have been caused by the weather, for there had been no rain there for three months.

Mr. Mills, of Hamilton, thought that the rot was not caused by a fungus, but that the rot having begun, and the state of the atmosphere being favourable to the growth of this fungus, it found in the rotting portion of the plum a favourable place for its growth and development. He thought the rot was caused by warmth and moisture occurring at a

certain stage of the growth of the plum; and when this did not occur at that particular stage the rot did not occur, hence the plums in some seasons escape the rot altogether.

Mr. Ross said that last season was very wet, and the fruit on only two of his plum trees was affected by the rot, and these were shaded by other trees; this year the rot spread from those affected last year to the trees adjacent, while the trees in another part of his garden wholly escaped; hence he thinks that the rot is infectious in some way, and that if once introduced, if no way of stopping it can be discovered, it will continue to spread until the fruit on all the trees in the vicinity is affected.

Mr. W. H. Boulton, of Toronto, said that the fruit on trees standing in the open ground in his garden was not affected, but on trees at the south side of a board fence the

plums had rotted very considerably.

Mr. Arnold, of Paris, believed it to be an infectious fungus, which under favourable

conditions grew upon the fruit, causing it to rot.

Mr. Saunders, of London, asked why some of the plums on his trees should be rotten, and others near not at all affected, if the cause of the rot be an infectious fungus?

Mr. Arnold replied that he had not observed such a state of things, but that the rot

spread to the plums adjacent.

Mr. Mills, of Hamilton, did not think that the rot is caused by fungi; and that the reason why some plums on the tree escaped while others rot, is in the difference in the texture of the skin of different plums on the same tree, and that those having a skin whose texture resists the influences of moisture and heat escape the rot.

[Note by the Secretary.—Gentlemen in this discussion made use of the term "infectious fungi;" but they did not mean to be understood as using that term in the usual sense of the word, "infectious." Fungi increase by means of minute spores, which are perfected under favourable conditions in a very short time, and in countless millions. These spores are very minute, float in the air, and are carried about by the lightest currents, and these falling on a surface suited to their growth, under conditions of moisture and heat favourable to their germination, soon develop into a perfect plant, again perfecting its spores, to be in turn carried by currents of air and deposited upon some spot where they may germinate and perfect themselves.]

# DIRECTOR'S REPORT.

The Directors, in submitting their Annual Report, beg to say that, since the last Annual Meeting, there have been four General Meetings of the Association—one in October, 1869, at Brantford; the Winter Meeting in February, 1870, at Hamilton; another in July, 1870, at London; and the last in September, 1870, at St. Catherine's.

At all of these meetings some very fine fruit was exhibited, and the discussions were of a very practical and profitable character. These discussions have been preserved by the Secretary, and will be printed in our Report to the Commissioner of Agriculture.

The Directors thought it advisable to offer a reward for the destruction of the Plum Curculio, an insect that destroys our plums, by feeding upon them in the worm or larva state. The insects that were taken were sent to Mr. W. Saunders, Entomologist to the Association, who will submit a report thereon.

The Directors also distributed a vine of the Eumelan Grape to each member of the Association, on the condition that the member receiving it should report to the Secretary for five years the result of the trial. This grape was attracting considerable attention, as being early, hardy, healthy and productive. The Secretary will cause a summary of the

returns he may receive to be printed with our report.

We have determined to distribute among the members next spring, upon the same conditions of reporting to the Secretary annually, for five years, the results of their experience, a young tree of the Beurre d'Anjou Pear, a variety that gives promise of being well adapted to our climate, and of superior quality. Those members who may chance to have this variety already, will be allowed to select another from any one of the following varieties, viz. —Tyson, Howell or Jaminette.

It is believed that, in this way, the Association will be the means of disseminating widely through the Province fruits that promise to be valuable, and of testing their

adaptedness to the different soils and exposures.

As any person may become a member of the Association at any time, by the annual payment of one dollar, there is every reason to hope that by the increase of members by the 1st of April next, the Beurre d'Anjou Pear will have a very wide dissemination.

A list of the prizes offered by the Association for the year 1871, accompanies our

Report.

All of which is respectfully submitted.

R. BURNET, President. D. W. BEADLE, Secretary.

# AUDITORS' REPORT

	AUDITORS REPORT.			
To	Abstract of receipts and disbursements of the Fruit Growers' Assoc W. Beadle, Treasurer, from February 24th to September 20th, 1869. members' subscriptions, received since last audit, February 14th, 1869, to date		Ontar	io,
Lie	ss—Commissions paid in Hamilton for collecting \$30, at 8 per cent.	2 40		
То	Legislative Grant		117 350	
66	Balance due Treasurer last audit	30 45 100 00	467	
To Al	Balance in Treasurer's hands	318 64 350 00		
	Total Assets	668 64		
sh	We certify that the foregoing is a correct statement of accounts for ewn by Treasurer's books, with vouchers for all disbursements.  (Signed) W. J. McCall W. L. Copelar St. Catharines, Sept. 20th, 1869.	the year	ĺ	as
	Treasurer's Report.			
-				

Balance in Treasury on 20th Sept., 1868, as appears by the Auditors'	
Report hereto annexed	318 64
Received from Members since 20th Sept., 1869	381 00
Legislative Grant, August, 1870	350 00
Total receipts to date, 4th Oct., 1870	1049 64

### DISBURSEMENTS.

Directors' and Secretary's expenses	89	64
Expenses connected with purchase and distribution of "Eumelan" vine	327	96
Travelling Expenses of delegate sent to meeting of the Pomological So-		
ciety of the United States	51	00
Postages and express charges	25	66
Stationery and incidentals	5	65
Printing	35	50
Prize Essays	45	00
Curculio Bounties	105	00
Secretary-Treasurer's salary	100	00
Total disbursements to date, 4th Oct., 1870	785	41

--- 1049 64

### PRESIDENT'S ADDRESS.

When a traveller has left his home for a season, and has a definite object in view by his journeyings to distant lands—when he imagines that he is nigh its accomplishment, he begins to think of counting the miles that he has traversed, and the multitude of incidents that has contributed to the successful issue of his plan. When one of our merchants has been long and sedulously engaged in the prosecution of an extensive business, he finds it to his advantage to balance accounts—to take a survey of the means employed to foster and extend his prosperous pursuits. So ought it to be with those who, like the members of the Fruit Growers' Association of Ontario, are diligently endeavouring to impress upon their fellow-men the importance of fruit culture. It is our duty, from time to time, and especially at our annual gathering, to catch up the threads of our sayings and doings, and bid them go and accomplish our objects in every county, township and homestead of our land.

Associations for commercial purposes seem to understand the importance of keeping past progress and attainment carefully before the public supporters of their respective institutions. An Insurance Society, for instance, recommends its advantages by constant appeals to its past successes, and in every annual statement, contrasts the past with the present. Statistics furnish the grand criteria of such comparisons, and inspire the general public with confidence. To such an extent has this become the case, that rival Institutions place their claim to favour on the amount of business which they have successfully accomplished. This is just as it should be. And if our Association is to take a forward place among the beneficial agencies of our Province, we must endeavour to lay claim to the appellation of benefactors, by presenting a careful exhibit of our good doings.

With us, at present, not having in the past employed systematic effort, it is more difficult than many would at first suppose, to give a vidimus of past progress. No general statements have ever yet been made of the rise and progress of fruit-growing among us. Here and there, indeed, enthusiasts have appeared, who have by their influence and example disseminated fruits, and a taste for their cultivation, but no statistics of the amount of acres under cultivation, the best sorts cultivated, have ever

yet appeared from the press of our country.

It has occurred to your President that it may not be an altogether unsuitable subject of address on the present occasion, to take up the subject of "the progress of Canadian fruit culture in our Western Province, and the best means for giving it an increased impetus."

My distinguished predecessor in office, Mr. W. H. Mills, in one of his annual addresses, presented a summary historical account of our Society, and in several other of his papers of a philosophical and practical bearing, has greatly exhausted the field of observation on

our favourite and interesting cultivation.

There can be little question that our fruit culture owes much to the taste and experience of the United Empire loyalists. These men, who are fast disappearing from among us, live among us still by their works. Their zeal not only brought with them from the States, their cherished political opinions, but also the arts and industrious habits which characterized them on the other side. With a hard struggle for existence for some years in their new locations, they did not neglect the means of securing future comforts and

profits.

The late Colonel Land, who settled in Hamilton in 1784, told me years ago, that when he went to Grimsby carrying his wheat on his back to get it ground, he greatly prized a few scions of grafted trees obtained there from older settlers than himself. To prepare for grafting, he sowed the seeds of apples obtained from any quarter, and in due time planted them out as orchard trees, and top grafted them as opportunity presented. Orchards of seeding fruit are not rare in several parts of the country even now. Not to mention orchards, a great proportion of whose fruit trees bear natural fruit even in the neighbourhood of Niagara, there are the remains of large orchards of natural fruit along the shore of Lake Erie, from Sincoe westward.

Francois Baby, Esq., brought up from Montreal, in 1796, the following varieties, which are pretty generally distributed in the south-west: Fameuse, Pomme-grise (two varieties), Red Colville, Roseau, another called Long Roseau, the Borrassa, and one called

White Colville, a sample of which the Fruit Growers' Association had from Nova Scotia a year ago. It was, however, Mr. James Dougall says, "the Winter Pearmain."

In the year 1835, Mr. Dougall, one of our most esteemed Directors, and a veteran horticulturist, began to disseminate the finer varieties. Some years after, the late Dr. Beadle, St. Catharines, and Mr. Leslie, of Toronto, introduced new and valuable sorts.

The advance of our horticulture from small beginnings to its present eminence, is altogether within the memory of "living men." The premier Horticultural Society of the United States, (I refer to that of Cincinnati) dates only back to 1843; and the gentleman in whose house it was formed, Robert Buchanan, Esq., still lives to grace the Horticultural Society of that city, and to urge forward by his enthusiastic example all kinds of fruit culture.

Niagara and District have been long famous for their fruits. As the Old Capital—a military and trading post—its position brought many casual visitors and residents of varied tastes. The late Hon. James Crooks was in the habit of speaking in enthusiastic terms of the Count de Flahault, who introduced into Niagara both apples and pears from France. From his stock much of the best fruit in the Niagara and Hamilton Districts has arisen. Indeed some of the best apples we have, were brought into notice by the Count. There is an apple of superior excellence which ought to be mentioned in this connection, and which unfortunately is not so well distributed as its merits warrant, I mean the Swayzie pomme grise. It was first introduced into the Niagara District by Colonel Swayzie, and is one of the best, if not the very best apple known. Its eating, cooking, and keeping qualities attest its excellence.

Mr. Crooks brought with him on his removal to Flamboro' all the best sort of apples grown at Niagara. From Flamboro' as a centre, the finer and then rarer sorts were quickly disseminated. Mr. Crooks told me that people were in the habit of coming long distances to obtain cuttings, of which he was no niggardly distributor. In any mention of these early times, we ought not omit the tribute that is due to horticulturists on the other side of the line for their enthusiastic and acute prosecution of the trade in fruit trees. Settlers from that country in almost every corner of our land, brought the taste and desire for fruit trees with them, which had an early development in the Old Dominion and throughout the New England States. This fact is yet apparent among the descendants of Americans now naturalized in Western Canada. As a class they are still pre-eminent

for their fruit-growing and taste for horticulture.

The progress of fruit-growing, of late years, among all classes is wonderful. Western Canada is now looked to as one of the great sources of supply for the Province of Quebec. It is an undoubted fact that we are beginning to compete with them, even in their own market, for apples. Large shippers forward great quantities of apples to Montreal and to the City of Quebec. This season I had an advantageous offer from a fruiterer in Montreal for any variety of pears that would take the market, while the Bartlett was especially mentioned. Horticulturists from the States declare that the apples grown by our farmers in the Niagara district will successfully compete with any grown in any part of New York State. This is as flattering as it is remarkable, if we take into account the advanced state of fruit culture in Rochester, Lockport, Canandaigua and the other fruit centres in that State.

It cannot be denied that the art has received a great impetus by the means employed for that purpose by the Fruit Growers' Association of Ontario. Their records show the painstaking efforts made in this direction. The list of apples and fruits best adapted to the different districts of our longitudinal country is valuable, and might be made the means of greater good. The soil and climatic influences are so varied, that it is only by frequent comparisons that we can arrive at the knowledge of which fruit trees are best adapted to any particular locality. For example, varieties of fruit trees that do admirably well in Hamilton, Grimsby and Niagara, often produce poor and stunted fruit at no greater distance than Toronto and further east. Our Greenings are greatly superior to those grown on the north shore of Lake Ontario. The Baldwins and Spys of Wellington Square and Stoney Creek can scarcely be equalled anywhere.

This principle of adaptedness to a particular locality must yet form an important

phase in future operations of this Association.

Pear culture, perhaps, has even made greater strides than that of apples, because it is more recent. It is true indeed, that there is no want of individuals, who have been for years touched with the fever of pear culture. Mr. Dougall, of Windsor, years and years ago, went to the expense of importing new and rare varieties from France. Here and there his efforts and example have borne fruit. There is some fine fruit grown on the northern shores of Lake Erie, which, in many instances, can be traced to his nursery. St. Catherines and Niagara have been, perhaps, far ahead of other parts of the country in the cultivation of the older and finer varieties of pear. Pears excel on alluvial deposits, both in the Old and New Worlds. Windsor and Niagara are striking examples of the remark. The old pear trees in and about Windsor are the wonder of visitors, and there are some specimens of pear trees at and near Niagara, not much behind the former in growth and size.

The cultivation of the peach of late years has not kept pace with apple and pear culture. Owing to the open and unsteady nature of the weather in winter, and the ravages of the curculio, peach trees have suffered severely. Eighteen years ago—which is the extent of my experience in the country—there were few finer sights to be presented anywhere, than a journey from Hamilton to the Falls, by the macadamized road, in the month of May. In that month the blossom was exquisite. Now all is changed; whole orchards have disappeared, and few cultivators of that luscious fruit can be found. It is

all but impossible to raise a peach or a peach tree.

We are satisfied that on the western borders of Lake Ontario, the northern of Lake Erie, and the ridges of "Long Point," parts of Essex and Kent, and the shores of Lake Huron—as Bayfield, Goderich and Kincardine—will yet raise peach culture to an enviable eminence in our Province. Nectarines flourish well in gardens, as standards, at Goderich and along Lake Huron from Sarnia to Kincardine. The inroads of that little Turk, the Curculio, is blamed for the almost total neglect of apricot, nectarine and peach culture; but as "Eternal vigilance is the price of good fruit," perhaps the blame ought to be laid at the door of our neglect. Many fruit-growers have overcome the unwelcome "Turk," and, once got rid of, a good crop is ensured.

Should any one hear me who may desire to enter upon apricot and nectarine cultivation, I strongly recommend, from my experience, that the trees be planted in a western exposure, of a house or other building, as the day is far gone before the sun gets round to shine on that aspect, when a frosty night has rendered the branches and their sap-vessels

liable to injury by the sun shining on and bursting them.

Plums have come into very general cultivation of late years. They have always been considered a most desirable fruit, and are highly esteemed by the public. It is not many years since no variety was to be found in our markets, except the common blue plum. Now the finest sorts are generally cultivated, and bring large prices, five dollars a bushel is no uncommon price for them in the Hamilton market, and all that can be produced find a ready sale at \$3. Public taste is being educated for finer varieties. It is a remark often heard among purchasers, who have patronized the best varieties once, my taste is spoiled for anything else than the best. Duane's purple, Bradshaw, McLaughlin, Guthrie's apricot, and Reine Claude de Bavay, are leading varieties, and all these are productive bearers. Plum culture will amply repay all outlay.

We have never had any great liking for the cultivation of the cherry. There are so many slips between the tree and the lip, that often much labour is lost. What with uncertain crops, bird depredations, and other enemies, such as the cherry curculio, very often the smallest share remains to reward the grower. The advance in the cultivation of the

cherry is quite on a par with that of the other fruits before mentioned,

Perhaps the advance on the whole is greater. Most of us remember the rows of never-failing Kentish that used to grace the farmer's snake fence or garden border. These have been in great measure replaced along our frontier townships by the Black Tartarian, Black Eagle, Elton and Napoleon Bigarreau. The improved modes of canning the smaller fruits, has given quite an impetus to the production of the various sorts of cherries. The tree itself has fewer enemies than most other fruit trees. It is, however, liable to gum on heavy clay soils.

The peach and quince and grape do well wherever you find the chesnut flourish.

They delight in a white, soapy, clay loam, and wherever the circumstances are favorable, large crops reward the producer. It has often occurred to us that the absence of the Medlar is to be deplored. We have made frequent attempts to secure a specimen tree, but have hitherto failed. We don't despair, however.

Small fruits follow in the wake of any advance in horticulture in any country. In newer and more backward districts, the cultivation of the smaller fruits is almost unknown. The want is supplied by the abundant crops of wild native raspberry and strawberry. Hamilton and the Niagara and Erie districts are almost too far south to admit of the profitable cultivation of gooseberries. Currants do well and bear very prolifically.

Grapes are rapidly becoming a specialty in cultivation. Marvellous advancement has been made with respect to grape culture. It seems as if we had become inoculated with the mania from the other side. Visions of fortune-making and good wine-making have been for years so industriously circulated of the Catawba, and of grape-growing in California, that we, too, have been seized with the desire for improvement. Vineyards are springing up in many sections of the Province. Enterprising farmers have begun to think that it is as profitable to produce grapes as wheat, and that a few acres are more profitable under grape culture than the same amount under cereals. Mr. William Lottridge, of Stoney Creek, has this year sold his grapes at 6 cents a pound. This rate will pay. Grape growing in Canada has not undergone the fluctuations usually characteristic of any new introduction of a similar kind of production. Advantage has been so taken of the trials and experiments of others in the United States, that, Minerva-like, it has almost sprung into maturity from the first. Fine varieties are only planted now. The best, perhaps, in point of excellence, hardiness, productiveness, for table and wine making, are the following, named in order of their quality. I am indebted to my friend, Mr. Wm. Haskins, of the City Water Works, for the following information, which may be relied on, regarding the best hardy varieties of grapes:—

The Delaware, which always ripens here; the Hartford Prolific, the first grape for the million; the Concord, which always ripens and is prolific. These three have been tried, and found to succeed beyond a doubt. Rodgers' Hybrids follow in order. The Salem and No. 4 exhibiting all the excellence of Rodgers' Hybrids. Classed with these is No. 15.

Dr. Grant's Iona and Israella are really superior to any other where they will succeed and mature. The Israella (black) ripens anywhere, comes in soon after the Hartford Prolific and the Iona, when it will ripen, and has no superior in the country. These are all excellent table grapes.

The Clinton stands A 1 for the making of red wine. The Americans who once discarded the Clinton now speak of it with great favor, and say that its excellence has been overlooked. The Delaware and Diana stand next for white wine, and Ives' Seedling will always ripen well to make a good claret. The Creveling makes a superior wine, and the Adirondack progresses in public favor.

In entering on the question, "How are we, as fruit-growers, and especially members of the Fruit Growers' Association of Ontario, to advance fruit culture? I crave your patient indulgence and generous criticism. The views are entirely my own, and to be received and acted on with caution, on account of my limited experience in fruit-growing.

The first, and one of the most important influences for the advancement of our interests and those of the country, is the proper outlay of the means placed at our disposal by the Act of our Provincial Legislature. If private means and enterprise have so much benefited horticulture, how much more the intelligent disposal of public money? Many of our members, some years ago, were taken with the idea of an experimental farm. This useful, old and stereotyped notion has been productive of much good in its day, in older and more advanced countries than ours. But what we desiderate, is the formation of the whole Province into an experimental farm, for the propagation and testing of old and new fruits. Our Province is so varied in its climate and height that what suits one quarter seems to be the very reverse in another. Even at short distances the most singular contrasts appear. An apple does well at Windsor, but it fails at Toronto and Kingston. We require, therefore, to know not only the best fruit, but also the locality where it will suc-

.6 241

ceed the best. We are aware that soil has much to do in this case, but we will reserve this question for a distinct paragraph. The plan adopted last year is a good one and has borne the test, and nothing could have been more successful. I mean, the issuing of a plant or fruit that is of superior excellence, asking for its cultivation, and annual report of its success. The dissemination of the Eumelan grape has largely benefited the Society in the way of additions to the membership—not far short of 30 new subscribers were obtained in the city of Hamilton alone, and large accessions throughout the country in general.

It is not to be expected, indeed, none of the promoters of this movement for a moment suppose that the fruit trees distributed will prove wholly suitable—that is not to be expected, but it is no little gain to intending purchasers, for the Society to be able to say such and such a variety has been tried in your neighbourhood, and under similar circum-

stances it will not succeed.

We are satisfied that attention has not been sufficiently directed to the geological strata of our country, and the question of the influence of the different strata on fruit growing. Some years ago I was incidently led in this direction, by the observation of the fact that the finer varieties of fruits flourished well in a friend's garden at Goderich. I tried to account for it, and passed in review before my mind the moderating influence of Lake Huron, and the height above the sea, but to the discomfiture of all my notions, I further found that the same fruits were only produced in certain localities, and not throughout the length of the district-Kincardine, Goderich and Bayfield. In looking at Sir William Logan's geological map, I saw that a certain formation cropped out at these places, and from the fact that the varieties of fruit did not appear to do well at certain intermediate localities, where they had been tried and where a different stratum prevailed, I was forced to the conclusion that the geological formation of a country has much to do with good fruit raising, and that the question of soil, now as of old, is of paramount importance to us as encouragers and directors of fruit growing. So impressed was I with this idea, when Mr. Beadleand I prepared your last fruit report, that I then proposed a new distribution as a basis of comparison, viz. :- A geological one instead of one into districts. It has often happened that you get a report from two members living a stone's throw from each other in the same district, in the same valley, on the same plateau, with similar exposures. Such reports are contradictory and unsatisfactory. Mention may be made of the same fruit trees, doing badly in one case and well in another. Such reports are not only puzzling to compilers of statistics, but worthless as data on which to build up any practical plan and direction for local fruit growing. We would suggest that our Society should bring out the views of members on this point, give a premium for the best essay on the different geological strata best adapted to fruit culture. It would ventilate this important subject, and nothing loses but mustiness by ventilation.

Let me also notice the question of the utilization of fruit when it has been raised. I do not refer to its consumption by the immediate producers and their immediate neighbors, but as to the mode of dealing with it, that others at a distance may also be induced to enquire for it. Exhibitions are most commendable, and I could not, I would not lift up any derogatory word against their usefulness. Our presence here, on this occasion, would be a living rebuke to any such rash censure. It seems to me, however, that we have got beyond the day of exhibitions, pure, and simple, these being accomplished facts.

What we now want is the utilization of our exhibited fruits.

The Hon. George Brown, at a recent meeting of the Local Committee, suggested that subjects of discussion, arising out of the articles exhibited at our Provincial Fairs, should be fairly and temperately canvassed on the different evenings of the Exhibition week. The benefit likely to accrue from this, if undertaken, is so apparent, that it requires only to be put to commend itself to every exhibitor. Publicity is the grand desideratum of our exhibitions. Competition involves publicity. The fact of our having goods or products better than our neighbour, and more deserving of public confidence, requires to be known. What I would urge would be, that not only should our Association order its Directors to prepare questions for discussion connected with our specialty, but that they should be so widely disseminated through the press, that intelligent and practical farmers interested in the Horticultural branch of their profession, should come up to the place of

exhibition and to the meetings for discussion, prepared to take an active and prominent

part for the general good.

The question of utilization does not end here, though it may well begin with the former suggestion. We would like to see the samples of our exhibited fruits at our Provincial shows, more widely distributed, to catch the eyes of as many beholders as possible. Let the Provincial Ascociation pass a rule, that all prize, farm, and garden products are to be considered as the property of the Association, and a difficulty is obviated in these not being the property of the Association. Something similar is done by the owners of stock and machines. Why not with fruits? The same bull that took the prize to-day may be exhibited next week in a distant county, and carry off golden opinions and something else from a different body of exhibitors. So with machines, let it also be with fruits. Let means be established whereby others can derive benefit from our fruit growing. Believing, as I do, that our more immediate districts of Toronto and Hamilton, Niagara and Erie, are yet destined to become the great fruit growing districts of our country, it becomes us not to let our light be hid under a bushel. I would also send samples of our fruit to Newfoundland, and thus show them what we can do so far west, but I would also send to the township and agricultural fairs in the remoter districts where fruit is scarce, and where there is, or rather ought to be, a demand for it, the products that could be put in their way, if only they desire them, as a healthy addition to their food and comfort.

The exportation of fruit ought also to be encouraged. Similar means as the foregoing ought to be used to accomplish so important an object. Our Association should attempt to open up means of communication with the Royal Society of England, the Royal Highland Agricultural Society of Scotland, and with the Dublin Horticultural Society, and enter as competitors as fruit growers in their exhibitions; such intercommunication would do more to develop provincial export than even the reports of our Provincial Exhibitions would do for years. It may be remembered, for I do, that some years ago specimens of our Canadian grown apples were forwarded to the Royal Society, which created quite a surprise among the members. These means must be reiterated, and like efforts made at short intervals. We must make more of our advantages than we have yet done. Good will redound, not only to the country generally, but to the farming class particularly.

In close connection with this subject is the question of the best varieties. This has been somewhat authoritatively settled by some of our savans, in the pages of our publications. With due deference to the extensive knowledge of the practical horticulturists among us, I would suggest the propriety of a double division of "Fruits desirable to be cultivated." First and foremost, market varieties claim our first attention, but the conditions of fruit-growing are far from being served by furthering the production of market varieties; we want another class of fruits to suit a large, and, I am happy to say, an influential class in our Association—I refer to the amateur class. Men who cultivate for pleasure and beauty, as well as for profit, such apples as the Pomme Royal, Summer Rose, Mother, Autumn, Strawberry, Tetofsky, and many of a similar class, and they are many, ought not to be discarded from even general cultivation, although for profit they cannot be compared to the old market varieties. Greater and greater attention is being given by an increasing number of amateurs to these superb varieties. The Pomme Royal—an apple not enjoying that eminent position its merits ought to command-is one of the best summer apples. The same may be said of the Swayzie Pomme Gris as a winter apple. In exhibitions for prizes this distinction ought to be kept steadily in view. At a late competition for excellence in fruits, we saw a plate of Mother apples entirely overlooked, and a poor but common variety carrying off the palm in its stead.

This leads us to notice a distinctive feature of the prize catalogue of the present Provincial Exhibition, and that is the classifying the different kinds of pears and apples, and only bringing varieties of the same kind into comparison. We write in anticipation of the event, but we venture to augur that the display will exceed the most sanguine expectations of its promoters. The change, we believe, will work well, and simplify the labour of the judges. It is scarcely fair to ask a man to decide between a plate of Seckels and a plate of Bartletts. By the new mode the difficulty is obviated, and the decision is not left to individual taste. We would like to see our Association introduce

to general practice some discrimination between market varieties of apples, pears and plums, and those of higher flavor probably, but not so common on account of not carrying so well, or from some other such cause. Such discrimination in our prize exhibitions would go far to introduce a very general cultivation of apples and pears, which at present, for several reasons, are in abeyance We might surely blend the profitable, the beautiful, and the pleasant, the interest of the nurseryman-the adornment of the orchard and table both of the farmer and professional man.

Another point of attention in fruit culture that is to advance its best interests, is the inculcation of the more general practice of thinning the fruit. Being myself one of the greedy sort, I am perhaps the last man who ought to lecture other growers on their failure in securing good fruit. I am so impressed, however, from various reasons, of the urgent

propriety of thinning out, that I cannot but make brief mention of it.

We have all noticed the fine fruit on our trees in the season when it is not bearing heavily. This year, for example, I had a Seckel that bore a heavy crop last year and was allowed to do so. The tree did its own thinning this last season, and only produced a few specimens: the consequence is, that the crop is exceedingly large and handsome-in fact the largest Seckels I ever produced—good results to the tree as well as to the fruit—the tree will bear more generally year after year—the fruit is infinitely finer—and the amount in weight is not far short of a great crop of poor fruit. By a judicious system of thinning, I have also noticed—in having it practised on one tree—that we get rid, to a large extent, of the apple and pear moth worm. This is not a small advantage, for if the thinning out be done just when the moisture of late spring and early summer begins to fail, the tree is much helped in maturing the good fruit, and pests are prevented coming to maturity, and so strengthened to bury themselves for future depredations.

The preserving of fruit and lengthening out its period is an important question to the fruit producer. Much talk, trouble, and money has been expended, but much, almost everything, remains to be done. We believe in burying them in the earth. In the preservation of grapes, we have heard of charcoal water being employed, the stems of the fruit-bearing vine being put into bottles containing the water. The expense and trouble connected with such a process will ever go far to prevent its common use. Our neighbours across the lines have come nearest obviating the difficulty by the use of their preserving cans. Ingenuity, however, will yet discover cheaper and more common means for

preserving grapes beyond the season.

Mr. Reid, of Port Dalhousie, has produced a grape that seems to me in advance of any other, as admirably suited for a raisin grape. When exhibited at St. Catharines last week, it seemed to me to have all the characteristics of a good drying grape. The production of such a grape may be of no pecuniary advantage to the producer, but assuredly

the country will profit by its general introduction and cultivation.

The fostering of the labour of the Hybridizer has received attention from this Asso-This branch of the art of gardening has been long known and practised by the nations of antiquity. What an endless store of observation and production is opened up to us through this wonderful process. We are believers in natural selection as well as in the nicest manipulations of art, and fine seedings are to be looked for from both sources.

An Act of Parliament to enforce the destruction of moth-eaten fallen fruit is much needed. The insect pests are making rapid strides among our crops of fruit. We trust that the Commissioner of Agriculture will give this subject the attention it demands, and should the present Agricultural Act require amendment get a clause inserted, making it

imperative on all fruit growers to destroy fallen fruit.

I cannot close without thanking you, gentlemen, for your kind indulgence throughout my year of office. I shall always look back with honest pride to the uniform urbanity with which you treated me, and in retiring into the ranks of our Association from which your distinguished consideration elevated me, will only feel too happy in furthering, to the utmost of my ability, the best interests of your Association.

With devout thankfulness to the Giver of all good for permitting us to prosecute the arts of peace-having driven the ruthless invader from our border-and to enjoy the peace, happiness, and plenty which crown the labours of the agriculturist and horticulturist

throughout our large and growing country, while others are engaged in deadly strife. I bid you all a kindly and hearty farewell.

# AUTUMN MEETING OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO, 1869.

The Fruit Growers' Association of Ontario held their regular autumn meeting in the Town Hall, Brantford, on the 7th October, 1869; the President, the Rev. Mr. Burnet, in the chair.

The Secretary, D. W. Beadle, read the minutes of the previous meeting of the Asso-

ciation in London. The minutes and resolutions were confirmed.

Mr. Arnold and Mr. Leslie were appointed a committee on apples; Mr. Holton and Mr. Woolverton on pears; Mr. Saunders and Mr. Mills on grapes and other fruit; to examine and report.

The President then proposed the discussion of the first question, namely, "the benefits

of planting trees for shelter, and the propriety of offering a prize therefor."

Mr. Saunders stated that he had no experience; but he had planted a number this

year, and would be able, in a few years, to have something to say in the matter.

Mr. W. H. Mills, of Hamilton, had planted shade trees on his place, and found that he could plant fruit trees successfully where they would not thrive before. He attributed this result to the shade trees protecting the tender fruit trees from the wind.

Mr. Bennett corroborated the last speaker, with respect to grapes, and approved high-

ly of trees for shelter.

Mr. Russel Smith thought they were an advantage to fruit trees and vines.

Mr. Woolverton spoke favourably, as far as his experience, which was limited to

hedges, went.

Mr. Aaron Slaght, of Waterford, lives in a comparatively new country, with many forest trees; thought wind and storm very disastrous to fruit trees, especially peaches, unless sheltered; strongly recommended a large portion of pine trees as a protection, evergreens sheltering in winter as well as summer; suggested the propriety of planting fruit trees more closely, and recommended a prize for the best essay on the subject.

Mr. Hamilton thought trees a great protection, provided they are not too near. In that case he considered them a detriment; thought east worse than north wind.

Mr. W. A. Smith had planted a hedge on the north-west side, which he considered a benefit.

Mr. John Hatch, Woodstock, thought fruit trees, as well as cattle, required protection. Mr. Moyle said that his children planted peach trees under some vines, and they have done better than any others; they survived the winter better, and he strongly advised protection to them.

Mr. Chisholm has an orchard well protected by forest trees; his neighbours complain of their fruit being blown off, while he cannot complain on that score. He has never

planted trees for shelter, owing to a sufficiency of natural forest.

Mr. Ball said there could be but one opinion as to the planting trees on east, west or north sides; but vines did not require to have trees on the south; suggested legislation to restrain persons from cutting down all the trees on their farms; thought pine and other evergreens made good shelter, and grow well; the yellow locust is very good; planted his trees two deep, and not too closely; transplanted his evergreens in May, or early in June.

Mr. Woolverton did not approve of the locust, as being liable to the borer.

Mr. Holton thought shelter desirable to fruits, likes the white cedar, but had had no extended experience.

Mr. Bauer disapproved of the locust, but approved of the maple.

Mr. Hart suggested cedar or pine as shelter; thought the winter hurt trees more than the summer.

The President spoke of Lombardy poplars as being used in France for shelter. They diverted winds to the higher strata of air, and were close in their foliage. He suggested a prize either for the best essay on the subject, or for the best laid out trees for shelter on farms.

Mr. Holton feared the Lombardy poplar might become a nuisance, as they sprouted up from the root very fast, and were very hard to keep down.

Mr. Bennett did not approve of the poplar; said that it was too tall, and produced worms; but spoke, from practical experience, most favourably of the white cedar.

Mr. Holton spoke well of the silver maple.

Mr. Arnold spoke of the Norway spruce; recommended them above all others; and said that the Lombardy poplars were very injurious to his orchard.

Mr. Saunders corroborated Mr. Holton's remarks, as to the silver maple.

Mr. Chisholm spoke highly of beech hedge.

The Secretary favoured the Norway spruce, saying that it could be regulated better than any other, and throve in any soil.

Mr. Bennett also spoke well of spruce, but thought they were expensive.

Mr. Holton corroborated Mr. Bennett, and was also of opinion that the Norway spruce grew slowly.

Mr. Smith thought that half of the white cedars which were transplanted died, while he Norway spruce were stronger.

Mr. Hamilton thought the white cedar was easily raised. Mr. Bennett thought the spruce took too long to grow.

Mr. Mills thought the variety of trees should be chosen by parties about to plant, with regard to the nature of the soil and other circumstances.

The following resolution was then adopted:

Resolved,—"That in the view of this Association, there is no question but that the planting of shade trees for shelter to orchards and farms, from the cold prevailing winter winds, is of the greatest benefit, and this meeting recommends to the Directors to offer a premium for the farm which, within the next five years, shall be most thoroughly and advantageously planted with trees for shelter." Carried.

The Committees appointed to report on the fruits exhibited, presented their reports, which are appended.

The report of Mr. Arnold, delegate of this Association to the Pomological Association of Philadelphia, was then read, and ordered to be printed. This is also appended.

The second question then came up for discussion, namely, "The best and most economical system of vineyard culture."

Mr. Saunders recommended Mr. Fuller's plan of keeping the bearing wood near the

ground.

Mr. Russell Smith said he had adopted the plan of planting in rows, ten feet apart, preparing the soil first. He runs the vines along trellises, and thinks they can be raised in this way on almost any soil. He attends to underdraining, and sets the vines in prepared ridges, training them six feet high, tied to trellises. The fruit seems to ripen better if the vines are trimmed; besides, trimming gets rid of mildew. He trims in the fall, immedi-

diately after the grapes are gathered.

Mr. Bauer thought the trellis should run north and south, and the vines be kept down to six feet, the wood being renewed. Laterals should be cut off, and plenty of air allowed to circulate. The leaves are requisite to shade the fruit. The first year, he said, cut down plants to two eyes, the second year to three eyes, and the third to four. He sulphurs the plants three times a year, by a bellows with a curved nozzle. De la Vergne's system of sulphuring will suit a garden, but not a vineyard. The sulphur is put into the bellows. Sulphur, Mr. B. said, prevented mildew, but would not cure the rot, nor did he know of anything that would.

Mr. Grace said that he adopts Fuller's system of culture.

The third question was then proposed, namely, "The best varieties of vines for making wine."

Mr. Burnet thought the Clinton too acid for wines, but recommended a mixture of the Isabella and Clinton—half and half; thought the Delaware made the best wine; but the Catawba was very good, as was also the Iona.

Mr. Bauer thought nothing better than Clinton and Delaware. For white wine, the

Delaware was as good as any grape raised in Europe; it had all the properties for the best and most solid wine, and if carefully made, the wine would compete with any in the world. The specific gravity of Hartford was 50; Delaware, 75. Arnold's No. 5 was very heavy in the saccharine matter.

Mr. Smith made his best wines by a mixture of various kinds.

Mr. Bennett thought a temperature of 62° or 64°, during fermentation, was essential to good wine.

Mr. Bauer was of the same opinion, but preferred 60° all the year round. The equal-

ity of temperature made the wine more pure and fine.

The Secretary thought that, for red wine, the Clinton, and for white, the Delaware,

were the best.

It was then resolved that, "Whereas a number of parties have brought fruit, especially apples, here, to be named by the Association, a committee be appointed to name such fruit, and that the President name the committee."

Messrs. Beadle, Arnold, Holton and Leslie were appointed.

The meeting took a recess.

### EVENING SESSION.

Subject for discussion: "The best variety of graps for table use."

Mr. Bennett thought Delaware best for this climate; Iona, Creveling, Adirondac and

Israella would be next, and could be cultivated with success in this section.

Mr. Bull thought that no one grape would fill the gap—that they must have a succession; thought those named by Mr. Bennett were very good; thought the Rebecca very good, and the Diana the best keeper.

Mr. Bennett thought the Rebecca did not break well in spring, but the Diana kept

very well.

Mr. Saunders would place the Delaware first on the list; liked the Adirondac, Iona and Israella. These were so good, he did not know which to choose for next best;

liked the Diana very well.

Mr. W. H. Mills would qualify his statement in regard to those grapes just named, as they might be good locally, but not so generally. The Delaware was the best in his own ground, but it does not do well everywhere. The Diana did well with him, but did not ripen evenly, and had to be thinned to get good bunches; would add to those mentioned Rogers' No. 4; thought a great deal of it; thought the Creveling a very fine grape, but it did not set well unless grown with other grapes.

Mr. Saunders thought Mr. Arnold's No. 5 much superior to the Rebecca, and thought it would compare very favourably with the Golden Chasselas and Sweetwater, grown un-

der glass.

Mr. Arnold said the Delaware would succeed in Paris, but it required too much care; with high culture it did admirably. The Iona was a very delicious grape, but it killed to the ground every winter. If confined to a single grape, he would choose Rogers' No. 15; it was the best flavoured grape he had, but not a perfect flower. Rogers' No. 4 was a good bunch; Diana did not bear, was perfectly useless, though it kept well. But he would pit his No. 16 or 2 against the Diana for keeping. Creveling was tender with him. Adirondae, he thought, lacked character—nothing but sugar and water.

Mr. Chisholm thought the seasons, as well as the localities, had a great deal to do

with grapes.

Mr. Beadle said, the best table grape was the first ripe grape he could get. The Adirondac and Rogers' No. 3 ripened the earliest; then the Creveling came in, and was very fine. After that, some more of Rogers' came in, Nos. 33 and 44; then the Delaware. He liked the Delaware very much; it required a porous soil; it did not do well on stiff clay. The Delaware was the best. He found that Rogers' Hybrids, when fully ripe, did not improve; but the Delaware got better the longer it was kept. He had kept it to Christmas. Took Concord next, and found it to ripen better than the Isabella.

Mr. Hislop would enquire if the Association had adopted or appointed a committee for the identification and classification of fruit, and thought it would be a benefit to fruit

growers to do so.

Mr. W. H. Mills would suggest that the classification of summer, autumn and winter did very well, and that any closer classification could not be carried out.

Rev. Mr. Slaght thought the Association should pass a resolution, recommending the various agricultural shows to have fruit correctly classified, and named in all the classes.

Mr. Bennett thought it very important to have all fruit correctly named.

Mr. Beadle then read the report of the Committee on seedling fruit. (See report.)

The report was adopted unanimously. Discussion on the "grape-vine flea-beetle" was next in order.

Mr. Saunders, of London, said this beetle was easier managed in the larva state. In the beetle state it was very active; while it was destructive in both the larva and beetle states.

Mr. Arnold knew enough of the destruction caused by it, but did not know how toget rid of it.

Mr. Bauer thought a lot of chickens would make a clearance of them.

Mr. Beadle found them easily killed in the larva state, which would be the best time to get rid of them.

Mr. Saunders thought hellebore would be effectual in killing the larva.

Mr. Arnold had not found the hellebore of any use; thought the Virginia creeper a nursery for them.

Mr. Saunders thought the same insects that fed on the grape would also feed on the

creeper.

Mr. Bauer said, a wash of tobacco stems, boiled in water, with soap and sal soda added, would be very effectual.

Mr. Saunders thought Mr. Bauer's remedy very good.

Mr. Bauer promised to furnish the exact proportions to the Secretary, by letter, for publication.

The pear blight discussion was postponed until next meeting.

Mr. Mills gave notice of a motion for amendment of the constitution.

The next meeting was ordered to be held in Hamilton, at the call of the President, and the Society adjourned.

At the Directors' meeting, held immediately after, it was resolved that the following subjects should be submitted to the next meeting for discussion, namely:—

1. THE PEAR BLIGHT.

2. The best varieties of Winter Pears.

3. Does close summer pinching in or heading back produce bearing fruit spurs?—If so, is it done without injury to the life of the tree? When is this pinching to be done, and how?

4. What effects are produced by thinning out Fruit, both as regards the Fruit and the Tree ?

5. CAN FRUIT BE KEPT FOR ANY LENGTH OF TIME BEYOND THE NATURAL PERIOD OF RIPENING, AND HOW !

6. What are the best varieties of Apples for shipping?

#### FRUIT REPORTS.

#### REPORT OF COMMITTEE ON APPLES.

Your Committee find a number of seedling apples, namely:

Shown by C. Arnold, Paris, five varieties.

Shown by A. Forfar, Scarborough, three varieties.

Shown by S. M. Durkee, Wellington Square, two varieties.

Shown by James Cowherd, Newport, seven varieties, and six of crabs.

Shown by Thos. Chisholm, one variety.

#### IN CULTIVATED VARIETIES.

James Heaslip exhibits King of Tompkins County.

Mr. Woolverton shows Cranberry Pippin, King of Tompkins County, Cooper's Mar-

ket, Baldwin, and Yellow Bellflower.

Mr. Russell Smith sends Northern Spy, Baldwin, Seek-no-further, Ribston Pippin, Greening, Rambo, Swaar, Spitzenberg, Talman's Sweet, Sweet Bough, Fall Pippin, Fallowater, and several varieties for name.

Mr. James Grace shews about twenty varieties, for which he wishes names.

W. A. Smith shews twelve varieties of apples.

W. H. Mills, Hamilton, exhibits a fine sample of Alexander, King of Tompkins County, R. I. Greening, Gravenstein, Autumn Strawberry, and three crabs.

Mr. James Cowherd, Newport, shows a fine collection of forty-three varieties of

apples. The largest apple amongst them is the Flower of Genesee.

Thomas Spencer shows an exceedingly fine sample of King of Tompkins County.

T. Turnbull shows twenty good varieties of apples, and three varieties for name.

Many of the specimens shewn are very creditable; but of the cultivated varieties, no new ones are noticed, except such as have been on exhibition before. Not having tested the seedlings, we can say nothing of them, more than that some are of fine appearance. The testing them comes under the jurisdiction of another committee.

> George Leslie. CHARLES ARNOLD.

# REPORT OF COMMITTEE ON PEARS.

Your Committee, appointed to examine the Pears upon the table, beg to report that they find the following:

From President Burnet, fifteen varieties, among which they find—very fine—Beurre Bosc, Duchesse and Flemish Beauty,—a specimen of the latter weighing one pound.

F. M. Bennett, 30 varieties, including Winter Nells. Sheldon, Easter Beurre, and

Belle et Bonne, of superior excellence.

From Mr. Woolverton, eight varieties, among which fine Swan's Orange, and Kingses-

sings were noted.

From Mr. Whitlaw, fifteen varieties, including handsome specimens of Triomphe de Jodoigne, Kingsessing, and Louise Bonne de Jersey.

From Mr. Arnold, three varieties.

Prom Mr. R. Smith, three varieties.

From Mr. Grace, one variety.

From Mr. W. A. Smith, eleven varieties, among which were noted good specimens of Stevens' Genesee, Verte Longue, and Louise Bonne de Jersey.

From Mr. Holton, fifteen varieties, including handsome Howell and Napoleon.

From Mr. W. H. Mills, ten varieties, among which we note fine Duchesse, Belle Lucrative, and Vicar of Winkfield.

From Mr. Turnbull, three varieties.

From Mr. Ball, one variety of seedling Pear, small size, not ripe, for further examination.

Your Committee have to express great satisfaction at the splendid display, as a whole. All of which is submitted.

W. HOLTON.
C. E. WOOLVERTON.

#### REPORT OF THE COMMITTEE ON GRAPES.

Your Committee on Grapes, Plums, &c., beg to report as follows:

We find, placed on the table by the Rev. Mr. Burnet, of Hamilton, three varieties of grapes, namely, the Hungarian Princess, better known as the Zinfindal, grown in the open air, weighing one pound and over, a grape very compact, but not of high flavor, which may be owing to the extremely wet season; the Riessling, and the Chester Seedling, No. 1, of very fine flavor, grown in open air, by the Rev. Dr. McMurray, of Niagara.

Mr. William Saunders, of London, exhibited some fine Pond's Seedling Plums, meas-

uring six inches in circumference, and Smith's Orleans, 5\frac{1}{2} inches.

Mr. A. B. Bennett, of Brantford, showed Delaware and Creveling grapes, fine, and quite ripe, and Ionas.

Mr. Hislop, of Ancaster, showed Fox Grapes, very large.

Mr. Woolverton, of Grimsby, showed Allen's Hybrid, Iona and Diana.

Russell Smith, Esq., of Fairfield Plains, exhibited Black Hamburgh (under glass),

Concord (open air), also Hartford Prolific, very good, and Delaware.

Mr. W. H. Mills, Hamilton, some fine Dianas, weighing ten ounces in the bunch; Delawares, 4½ ounces; Isabellas, 9½ ounces; also, a very poor grape, called the King; Rebeccas, Rogers' Nos. 15 and 4, Concords, very good and large, and well ripened; Ionas, nearly ripe; Black Hamburgh (under glass); also, Bowood Muscat, a single bunch weighing 1 lb., 61 oz.; some very fine Plums, namely, Pond's Seedling, Reine Claude de Bavay and Bingham.

Mr. Arnold, of Paris, exhibited some fruit of fall-bearing raspberries, namely, the

Yellow Canada Raspberry, Arnold's Red, and the General Negley.

A variety of Peach, called the Smock Freestone, a late, large, fine Peach for preserv-

ing, was placed on the table by Mr. Woolverton, of Grimsby.

We would not feel justified in closing this report without taking special notice of some very fine Seedling Peaches, placed on the table by Mr. James Cowherd, of Newport -six varieties, some of which, we trust, he may put more prominently before the country by inviting a committee from the Association, next season, to examine and report upon them.

W. H. MILLS. WM. SAUNDERS.

## REPORT ON SEEDLING FRUIT.—APPLES.

# Mr. Cowherd's Collection:

No. 1.—Fall Apple, large, conical, striped, acid, only fit for cooking, and has no dis-

tinctive merits to make it worthy of dissemination.

No. 2.—Said to be a seedling of the Esopus Spitzenberg, possessing, in appearance, much of the characteristics of that fruit, but much larger. A very promising apple, which the Committee would like to test when fully ripe.

No. 3.—Fall Apple, medium size, pleasant, sub-acid, but not equal to other cultivated

varieties of same season.

No. 4.—Medium size, sharp acid, without flavour.

No. 5.—Very fine, medium size, promising to be a good keeper; very acid, but the Committee would like to see it when fully ripe.

No. 6.—Fall Apple, sweet, medium size; no particular merit.

No. 7.—A pretty Apple, but very tart, without flavour.

# Mr. Chisholm's:

One variety, medium size, conical, green, with a red cheek, very acid, and no improvement.

### Mr. Forfair's:

No. 1.—Fall Apple, medium size, flattish, pale yellow; said to be grown on a tree seventy years of age; mild, very agreeable flavour, and fine grain; a very promising table Apple, not to be overlooked.

No. 2.—Fall Apple, sweet, flat, red, striped; no merit.

No. 3.—Winter Apple, flat, green, with a red cheek, and covered with numerous white dots; firm flesh, of a peculiar and rich flavour; an Apple to be looked after by the Committee.

#### Mr. Durkee's:

No. 1.—Conical, red, striped, but no merit.

No. 2.—Good size, very handsome, flat, very red, striped; an early winter apple; in the estimation of the Committee, only fit for cooking. Mr. Durkee has, however, promised to lay the Apple before the Committee during the winter.

In the collection of Seedling Crabs, by Mr. Cowherd, there are none of anything like the quality of the Transcendant, consequently can not be recommended for dissemination. One of them (No. 2) has more the appearance of a small Apple than a Crab, and is quite sweet.

In Mr. Cowherd's selection of Seedling Peaches, the Committee are of opinion that those marked Nos. 4, 7, 9 and 10, are the best, and should not be lost sight of. The Committee hope to see the Peaches numbered above laid before them or the Association another year.

### NOVA SCOTIA APPLES.

The Directors of this Society held a meeting at the City of Hamilton on Wednesday, the 8th December, 1869.

The occasion was made more than usually interesting by the reception of a collection of apples from Nova Scotia, sent by the Fruit Growers' Association of that Province, with their cordial greetings, and the expression of a desire on their part to make exchanges of scions, specimens of fruit, and information concerning the culture of fruit. The collection embraced forty-nine varieties of apple, many of them being well known sorts, which are generally cultivated in this Province, such as the R. I. Greening, Ribston Pippin, Gravenstein, Northern Spy, Baldwin, &c. According to the letter received from the Secretary of the Society, they sent one hundred and sixty-one apples, but only some one hundred and forty could be found in the barrel when it came to hand. The barrel had been opened in the course of its transit and plundered. In consequence of this the apples that did reach their destination were very badly bruised. The fruit was sent from Halifax by steamer to Portland, and thence by Grand Trunk Railway to Toronto, and the Nova Scotia Society paid the freight through, including the bonding charges at Island Pond, so that no Customs Official nor any one else had any right to open the barrel, much less to plunder it. It is a shame that a small parcel of fruit cannot pass from one part of the Dominion to another without being thus molested. The Nova Scotia friends had taken much pains to paste a numbered ticket upon the fruit to correspond with the list forwarded by mail, but nearly all these numbers had been rubbed off in consequence of such unauthorized disturbance, so that the value of the specimens was mostly lost.

It is very interesting, however, to see the samples of fruits well known to our cultivators, and easily recognized even without any numbers, to compare them with the same varieties grown here, and likewise to know the estimate in which they are held in Nova Scotia.

The R. I. Greenings were what would be here considered as a fair sample of that variety, not quite such as would be selected to exhibit at a County Exhibition. They say that it does well there on warm light soils.

The Ribston Pippins were a very fine sample, and their remark is that it ranks high

as a market apple.

The Gravensteins were a fair sample, not extra. This sort is esteemed by them, as by us, a first-class apple for market, for the table, and for profit.

The samples of Yellow Bellflower were very fine indeed, and they say that it is first-

class on light, dry soils.

The Northern Spy apples would be considered of medium size by us, and not very well coloured. They say that this variety has been scarcely tested yet, and seems tardy in bearing.

The Alexanders were doubtless very fair samples when put up, but they reached us in exceedingly bad order. This variety was at first condemned in Nova Scotia, but is

now considered profitable.

Their Snow Apples were very fine, and they report them to be prolific and hardy, but apt to spot and mildew. This is the character of this apple in the warmer parts of Ontario, but in the more northern sections it is much less liable to be spotted.

The Pomme Grise would be here considered an inferior sample. They speak of it as

good, but too small for profit.

The samples of Westfield Seek-no-further were very fine, and evidently confirm their report of it that it does well there, even better, we judge, than with us.

Their Baldwin was a very good sample, and according to the report, is one of their standard sorts.

The samples of the English Golden Pippin were very fine and well grown, and it is

reported by them to do well there, and sell readily at high prices.

They report the Talman Sweet as a long keeper and a good cooking variety; Lyman's Pumpkin Sweet as a first-class baking fruit, that sells quickly where known; the Hubbardston's Nonsuch as prolific and good, and Æsopus Spitzenburg as good, but variable.

From this, our reader will be able to form some idea of the apples of Nova Scotia,

and the capabilities of that Province for their successful cultivation.

A number of local varieties were sent, but owing to the labels being rubbed off, it was quite impossible to identify, save a very few of them. There was one, however, which was called the Iron Apple, that came in an excellent state of preservation, and seemed to be a very fine apple, having a fine grain and a rich and somewhat aromatic flavour.

The Secretary of the Association was instructed to acknowledge the receipt of the apples, with many thanks, and to express to our Nova Scotia brethren the appreciation by this Society of their kindness, and the readiness of the Society and officials at all times to reciprocate in any way that may be of service to them, this expression of their fraternal regard.

CIRCULAR TO THE MEMBERS OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO.

At a recent meeting of the Fruit Growers' Association a resolution was unanimously passed that the President and Secretary should be instructed to prepare a prospectus of the objects contemplated by the Society, for gratuitous distribution among the members and others.

In pursuance of this appointment, the following synopsis is respectfully submitted to

the consideration of our Provincial fruit growers.

Article II. of the Constitution comprises the following summary:—"Its objects shall be the advancement of the SCIENCE and ART of fruit culture, by holding meetings for the exhibition of fruit and for the discussion of all questions relative to fruit culture; by collecting, arranging and disseminating useful information, and by such other means as may from time to time seem advisable."

A wide field is thus opened up to us by the framers of our constitution—room enough on the one hand for the discussion of abstract and speculative principles, and on the other, verge for the most acute, or it my be, the most prosy performances in practical gardening.

The aim and ambition of our Fruit Growers' Association is, directly and indirectly, to lead the votaries of horticulture to the study of vegetable physiology. The highest delights of horticulture are to be derived from a knowledge of the growth of the different species of fruits, and the functions of the various parts of plants; of the principles that govern and regulate growth and maturity, the formation of wood and the production of fruit.

Meteorology, too, looms up as a necessary adjunct to the success of the gardener. Pomologists and fruit-culturists in the United States fully realize the importance of this branch of science as materially modifying the circumstances of weather—heat and cold, drought and moisture—which affect the labours of the horticulturist. The philosophical discussions on this subject in horticultural assemblies or conventions in the United States are worthy of our imitation. It may not perhaps be amiss to hint to our members, that a free discussion on the benefits of scientific study, whether of chemistry, botany, or meteorology, might not be out of place alongside of our animated assertions about "pear blight," "frozen sap," or "fungous growth." What profitable discussion might arise from the simple but prevalent principles of light, moisture, heat, or its negation, cold. How much knowledge is requisite for the adequate discussion of any one of these subjects, and yet how absolutely necessary is such knowledge to the would-be successful horticulturist? We may here direct attention to the fact that Professor Kingston, of Toronto, will furnish, at a small expense, the necessary instruments of observation, and provide (gratis) directions for the use of the observer.

Our Association is also designed to promote the ART of fruit-culture. The first grand pre-requisite of this art is to know "a good soil." A clayey loam is the best for fruit-

growing, although different varieties of fruit require different soils; some doing well on

stiff clay, others on sandy or light texture.

Draining will also come under this division. It is essential to all soils. If the inferior strata be retentive, draining must be executed with the greatest care to carry off the superfluous moisture. In "The Essay on the Philosophy of Drainage" it is shewn that "the thermometer in drained land rose, in June, 1837, to 66° at seven inches below the surface, while in the neighbouring water-logged land, it would never rise above 47°." The reason why drained land gains heat consists in the well-known fact, that heat cannot be transmitted downwards through water. It is melancholy to see the effects of wet land in our Province, or indeed anywhere. Witness the swamp between St. Catharines and Niagara; the level land in the neighbourhood, east and west of Komoka, and elsewhere. How desirable for townships to club together and clear main or leading drains, so as to allow individuals along the line the opportunity of draining their lands. The stunted, undergrown, moss-covered fruit trees, the poor stubble, the over-rank grass, all cry out for agricultural and horticultural societies to do their duty, and urge men to benefit themselves and their neighbours.

Manures.—The proper application of manures to fruit trees also requires our attention. In manuring an orchard, shall we apply the manure to the surface, or let it do the double duty of mulching and enriching? The object of this Association is to ascertain

and disseminate correct views of this and kindred questions.

Shelter for fruit trees, and even for land, is a consideration every year becoming more and more necessary for us on this high table plateau. As the country is getting denuded of its timber, the remark is frequently made, how changed our seasons are now from what they were five-and-twenty years ago. Doubtless, this is a fact not to be gainsayed. From observations by Professor Kingston, Toronto, the rainfall of this district is gradually decreasing. The planting of trees for shelter for land and crops has been proved productive of abundant rain; what rain would do for this country, if sufficiently copious, every summer, is known to every farmer. The climate becomes ameliorated, and many blessings flow in the train of attention to this one of the most essential items of successful agriculture and horticulture. Let only municipalities vie with each other in arboriculture, and an incalcuable amount of good would accrue to themselves and to the country at large. To elicit and disseminate information on this important subject will come within the aims of this society.

Fencing is also pressing itself on the attention of farmers, gardeners, and others. Why should not the members of the Fruit Growers' Association strive to indoctrinate their neighbours and friends with better views than have as yet prevailed on this subject? As lumber becomes scarce, a substitute must be found and employed. In Westminster, the Messrs. Macpherson have miles of thriving quickset thorn hedges round their fields. The Thorn of the country is not winter-killed, and the benefit to the fields is great by the hedge having an open drain, or as it is called, a sunk fence, accompanying it in its length and breadth. We are to ascertain by experiment and discussion what plants are best adapted

to hedging in this country.

#### FRUITS.

The Apple.—As regards the art of fruit-culture, it remains for us to notice the great

staple of Canadian fruit-culture—the apple, and its varieties.

The Province has, unfortunately, been flooded with all sorts of apple trees. A class of middle men, who make a trade on the ignorance and credulity of our farmers, has been of incalculable damage to fruit-growing. Any name is easily attached to the trees after they are got from the nurserymen, and it is only after years of anxiety and labour in raising them, that experience finds out that they are a worthless variety. A local tax on the vendors of such trees is the only means we see of successfully putting an end to this kind of traffic. Every member of our Fruit Growers' Association is invited to lend a helping hand to suppress this evil. In presenting to our present and future members a list of varieties to be cultivated and recommended for general trial throughout the Province, we cannot do better than quote from the prize essay on the apple, which will be found in the Report of the Honourable Commissioner of Agriculture and Arts of the Province of Ontario for 1869, and in the Canada Farmer for November, 1868.

"It will usually be found that an orchard for family use, comprising the following

varieties, will give good returns in fruit, and furnish a supply throughout the season, viz.: For summer, the Early Harvest and Red Astracan, as sour apples; and the Sweet Bough. For early autumn, the Duchess of Oldenburgh, Gravenstein, Primate and Jersey Sweet. For late autumn and early winter, the Ribston Pippin, Hubbardston Nonsuch, Fall Pippin, and Snow Apple. For midwinter to March, the R. I. Greening, Northern Spy, Esopus Spitzenburg, Pomme Grise, and Tolman Sweet; for spring, the Golden Russet, and Roxbury Russet.

For market, the most profitable varieties are Red Astracan, Duchess of Oldenburgh, Gravenstein, and Hubbardston Nonsuch, ripening in the order in which they are named, for a near or home market; and for shipping, the R. I. Greening, Baldwin, Golden Russet,

and Roxbury Russet, will yield the largest pecuniary returns."

The Pear.—For pear Culture we are persuaded that the most profitable varieties for home use or for market are very few, and we would strongly recommend the Louise Bonne de Jersey, Bartlett, Beurre d'Anjou, Beurre Clairgeau, Flemish Beauty, Duchesse d'Angoulême, Graslin, Sheldon, and Winter Nelis.

The Plum.—The following varieties of plum are recommended after trial throughout a large portion of the Province:—Lombard, Washington, Huling's Superb, Jefferson, Smith's Orleans, Coe's Golden Drop, Guthrie's Apricot, and Green Gage.

The Cherry.—Most of the varieties of cherry succeed well in warm and sheltered localities; such as Black Tartarian, May Duke, Black Eagle, Elton, and Napoleon Bigarreau.

Strawberries.—Strawberries of all sorts do well. Wilson's Albany bears the palm, and is by far the most productive of all the varieties. For cultivation the Association recommend Wilson's Albany, Triomphe de Gand, Jucunda, Trollope's Victoria, Agriculturist, Nicanor, and Russel's Prolific.

Small Fruits.—For an exhaustive list of small fruits, their mode of cultivation, insect pests, market value, planting, soil, etc., we would unhesitatingly recommend the prize essay on this subject by Mr. William Saunders, of London, published in the April number

of the Canada Farmer for 1870, and in this report.

Grape Culture is yet in its infancy in Ontario. Mr. Underhill, the veteran vine culturist, recently paid us a visit, and declared to several of our members, that he had seen no part of the North American Continent so suitable for vine culture as the western portion of the Province of Ontario. The leading varieties which have been long tested, are Clinton and Concord, Delaware and Adirondac, Creveling and Rogers' Hybrids.

#### MEETINGS FOR THE EXHIBITION OF FRUIT.

Our Association holds an annual meeting at the place where the Provincial Exhibition is held, at which the office-bearers for the season are chosen. Three other general meetings are held in different localities, where exhibitions and discussions on old and new varieties of fruit give interest to the meetings and profit to the members.

Collecting, arranging and disseminating useful information.—The Honourable the Commissioner of Agriculture issued queries to the several agricultural and horticultural societies; which, having been answered, were condensed and arranged by the Secretary and President of our Association, and appear in a collected form in our Report for 1869. A

copy of this compilation is placed in the hands of all our members.

The Association has also from time to time offered and awarded prizes for the best essays on subjects connected with horticulture. Such essays have been published, and other papers of a similar kind, and these publications are known to have given an impetus

to horticulture among the yeomanry of our Western Province.

The Council of the Association has also offered prizes for collections of insects prejudicial to agriculture and horticulture, and at this moment several of the most learned and enthusiastic entomologists in the country are members of our Association-ever ready to hold their ability and knowledge at the disposal and for the instruction of our Association. Nor ought mention to be forgotten of the efforts the Agricultural Board are making in the same direction, it having recently contributed a handsome sum for a similar purpose. Prizes for the encouragement of hybridizers, and producers of new aud valuable fruits, have been held out as inducements for members to enter the arena, and contend

with enthusiastic producers on the other side of the line. The future is big with wonders, through the efforts of such men as Wilder, Dana, Hovey, Grant and Arnold.

Correspondence, too, has been opened up with the neighbouring Provinces, and an interchange of fruits for exhibition has been the result. Our reports are thus widely circulated, and only the other day we received a valuable gift on agriculture from Sir William Young, through the Board of Agriculture of Nova Scotia. We desire others to share in the advancement of the common good of this and the other Provinces of Canada.

More recently we have entered upon another means for the advancement of fruit culture, in that we have unanimously agreed to present to every member a specimen of some new rine or fruit tree. This year "the Eumelan," a new vine highly recommended, was placed in the hands of every member desiring it, on condition of reporting to our Society of its success or failure during the next five years; a condition we hope to see generally

complied with.

Nor does the Association leave the horticulturist at a loss what to do with his fruit, and how to keep it, after he has raised it. We have had profitable discussion on the marketing and preserving of fruits. We desire generalization on both matters, and anxiously look to the old and new members for expressions of their experience on such matters,

in order to a wide circulation for the public benefit.

There is just one desideratum that we would like to mention, and that is the enlistment of the middle class of society in this good work—the encouragement of the amateur who has only his quarter or half an acre. The study and practice of horticulture has an elevating and humanizing tendency. To the wearied artizan on his return from a heavy day's work, there is nothing so refreshing as the tending of a few fruit trees in his garden patch. Indeed, wherever this taste has assumed the form of enthusiasm, comfort, content, health and happiness, have almost invariably been the concomitants. With the increase of fresh members, intent on the accomplishment of the grand objects of the Association, we may look for fresh successes and triumphs on new and unbroken ground.

ROBERT BURNET, President. D. W. BEADLE, Secretary.

# FRUIT-GROWERS' ASSOCIATION OF ONTARIO.

The regular winter meeting of this Association was held on the 3rd of February, 1870, at the Court House in the city of Hamilton. There was a very good attendance of members, and considerable interest manifested in the subjects discussed.

The meeting was called to order by the President, Rev. R. Burnet, and after reading

of minutes,

Mr. Rykert called attention to the Fruit Prize List of the Agricultural and Arts Association, and suggested the desirability of having it extended and better classified.

Mr. Mills stated that he had no doubt the Agricultural Association would alter the Prize List to meet the views of this Society, as they had made many changes last year upon his recommendation.

This subject was left in the hands of the President, and the meeting proceeded to the

discussion of the first subject,

#### THE PEAR BLIGHT.

Mr. A. P. Farrell, of Cayuga, had tried iron filings, applied to the roots by mixing them with the soil, and at the same time carefully and thoroughly cut out the blighted

and affected portions of the trees, and they had grown very thriftily since.

Mr. Bennett, of Brantford, had tried the same application and treatment, and thought he had found it to be very beneficial until this year, when very many of his trees blighted, and there seemed to be nothing left but to cut off the diseased portions as often as they appeared.

Mr. Arnold, of Paris, was entirely at a loss what to say or do concerning this disease. It had baffled all his skill, and set at nought all his attempts to devise a remedy, and he

had none to offer.

Mr. Morse, of Smithville, had but little experience with the pear blight. (Fortunate

man.) It was only when trees made a very luxuriant growth that he had found them liable to be killed back, probably by the effects of the winter. He mentioned an experiment that had been tried by some gentleman, who gave some of his trees very high cultivation, and some very little care. Those that were highly cultivated were all of them more or less affected, while those with but little cultivation were all good and sound. He was inclined to believe that the trees suffered most from sudden changes from heat to cold in the early part of the growing season. He thought that the application of ashes, and perhaps, of a little lime, was of the greatest possible benefit in the culture of the pear, both as regards the blight and the general growth and vigour of the tree.

Mr. W. H. Mills, of Hamilton, thought there were three causes of blight in the pear tree:—First, frozen sap blight; second, summer blight, arising from different causes; and third, a blight caused by fungoid growth. He thought that if evaporation is rapid during the growing season, and the tree is not well supplied, and this condition is followed by a few days of warm rain with a close atmosphere, then the tree becomes gorged with sap, the over-strained sap-vessels burst, turn black, and are in a fit state to be attacked by some fungus, which finds in this condition of things just that which is most conducive to

its own rapid growth.

Judge Logie, of Hamilton, had applied coal ashes, mixed with wood ashes and a little well rotted manure, and has never known the trees thus treated to become blighted. He thought the soil had much to do with the blight, and that in soils in which lime is deficient, the application of a moderate quantity was highly beneficial.

Mr. A. M. Smith, of Lockport, N. Y., said he had much faith in the use of lime and wood ashes. He also washes his trees with soap and lime water, and does not cultivate

very highly.

Mr. Holton had watched with much interest the progress of a pear orchard belonging to Mr. Lewis Springer, who had made an incision into the bark of the trees, running from the limbs down the trunk to the ground. This cut was made just through the outer bark, but not down to the wood, in the month of June. Thus far, this orchard had escaped the blight. He has also been seriously troubled with a blight in his crab apple trees, especially in the Montreal Beauty, which is not a very rapid grower, and thought the disease to be the same as the pear blight. It usually began in the tops of the trees and worked downward.

Mr. Arnold asked if any one had seen a pear tree blighted, the cultivation of which

had been wholly neglected.

Mr. Rykert replied that he knew of an orchard of dwarf pear trees in the vicinity of St. Catherines which had been totally neglected, was allowed to grow up with weeds and grass that nearly hid the trees from sight, and a large part of that orchard had been killed with blight.

Mr. Mills said he had for several years past been in the habit of making longitudinal incisions in the bark of his pear trees in the manner mentioned by Mr. Holton, and had not found any of his trees to be affected with the blight since he had tried this plan.

Mr. Saunders, of London, stated that he had an orchard of pear trees in a light, hungry soil, and one of those trees was killed by the blight. That one had made the least growth of any.

Mr. Bennett remarked that the frozen sap blight which appeared in trees making too rapid growth was easily understood, but the other blight, which he thinks is quite distinct,

known as the fire-blight, is a puzzle.

Dr. L. Cross, of St. Catherines, has noticed a form of blight which is indicated by the bark turning black in spots, and that the trees which are attacked in this way always die.

Mr. Freed, of Hamilton, thought that the blight was more prevalent after a severe winter. He was disposed to believe that the severe frost was the first cause of the blight,

the hot summer finishing the evil then commenced.

Mr. Deadle thought there was only one disease, which was varied in its manifestations, and that it was well known by the name of fire blight. He had seen this disease in seedling pear trees that had never passed through a winter, and known them killed entirely by it. He had known charcoal used, and for a time it seemed to have the effect of preventing the blight, none having been seen among the trees so treated for some eight

or ten years. But all at once the blight broke out again, and many of those trees were killed by it. He had seen trees growing in clay soils, in sandy soils, and in gravelly soils, alike suffer from this fire blight; had seen them blighted when growing wholly neglected in a fence corner, as well as when well carefully cultivated in the garden. He trusted, however, that further and protracted experiments would be tried, in hopes of yet finding some remedy or preventive of this disease.

On motion of Mr. Morse, seconded by Mr. Rykert, leave was granted to introduce at this meeting a memorial to Parliament, in effect praying that our Government would impose upon fruit trees coming into Canada from the United States the same duty that is

imposed by that Government upon the same articles, when sent there from Canada.

The meeting then took a recess until two o'clock p.m.

#### AFTERNOON SESSION.

Messrs. Holton, George Leslie, junr., and C. Arnold were appointed a committee to

examine and report upon the seedling apples and other fruits on the table.

There was a very fine collection of many varieties of winter apples and late keeping pears on the table, brought together by the members from different parts of the country. The reports of the Society for the year 1869 were distributed to the members present. Members entitled to them who were not present received them by mail.

Mr. Morse introduced the memorial to the Legislature, stating that he was a free trade man, and felt that if our Government would impose upon the products of the United States the same duties that they impose upon our products, they would soon see the folly of attempting to drive us into annexation by the course they were now pursuing, and would be very glad to return to a more liberal policy.

Considerable diversity of opinion was expressed, and an animated discussion was maintained for some time, which we omit, as throwing no light on the cultivation of fruit.

It was at length resolved, by a vote of seventeen to ten, to send the memorial introduced by Mr. Morse, to the several branches of the Legislature, and that the President and Secretary sign the same.

Nothing new was elicited on the subject of winter pears. The President spoke very highly of the Beurre Millet, had found it a very fine pear, and thought it well worthy of

trial

The Beurre Millet, of Angers, is a very vigorous and productive tree. The fruit is of medium size, having a greenish skin, covered with russett, and thickly sprinkled with minute russet dots. The flesh is whitish, somewhat buttery, juicy, melting, with a brisk vinous flavour. In use in December and January.

# SUMMER PINCHING

Was the next subject discussed. The President stated that for eight or nine years he had pursued the system of pinching in the growing shoots. This should be done in dry weather, and on no account is it to be done in wet weather. The effect of this summer pinching was to increase the quantity of fruit and induce the trees to fruit earlier. This pinching should be done in the end of June or beginning of July.

Mr. Townsend, of Hamilton, said he had a large number of pear trees under his care, always summer pinched in the manner described by the President, and was fully satisfied

of its beneficial effects.

Mr. Saunders agreed in the main with the President, but had found that you could not always depend upon obtaining greater fruitfulness by summer pinching. He had a plum tree which he had summer pinched most thoroughly, in the hope of making it fruit, but it had spent its whole force in making wood, in despite of all his pinching.

Mr. Beadle was of opinion that the tendency of summer pinching was to arrest the wood growth and induce the tree to form fruit spurs. There may be occasional exceptions, owing to some peculiar counteracting cause, but in the main the effect may be re-

lied upon.

#### THINNING OUT THE FRUIT.

Mr. Morden, of Halloway, County of Hastings, thought there could be no question but that the thinning out of the fruit was very beneficial both to the development and

perfection of the fruit that was allowed to remain, and to the tree.

Mr. Mills had had considerable experience in thinning out the fruit, and found it to be exceedingly beneficial. He instanced a dwarf apple tree, of the variety known as the Alexander. He commenced to thin this out when the fruit was quite young, about the size of a walnut, and removed about half of the fruit. Later in the season he became satisfied that he had left too much fruit on this tree, and he thinned it out again, and finally left about half a bushel on the tree, and as the result of this thinning, every apple was perfect, they were of uniform size, and perfect beauties. He takes off the smaller and imperfect fruit, and is confident that the value of the crop thus obtained is decidedly greater than if the entire crop set were allowed to remain on the tree.

Mr. Morse and Mr. Freed confirmed what had been said, believing that both size and quality of the fruit were improved by proper thinning out, and that the price realized from the fruit of an orchard would be greater than if the whole were allowed to grow.

The President stated that if only the proper quantity of fruit were allowed to grow, which, of course, varied with the size and vigour of the tree, plenty of fruit spurs would be formed by the tree for the production of fruit the following year; but if all the fruit was allowed to grow and ripen, the tree would not form fruit buds for the next year, so that there would be always fruit only every other year. By judicious thinning a crop of fruit is secured every year.

Mr. Beadle believed from actual experience that it would pay to hire a good hand at a dollar and a quarter per day to go carefully through the orchard, and thin out the fruit

from those trees that had set too much.

#### KEEPING FRUIT.

Mr. Mills said that while in attendance upon the American Pomological Society at Philadelphia, he saw fruit that had been kept for a year in a fruit house, without change or deterioration, and thought it was very desirable to adopt such a plan. He kept his own fruit in an ordinary cellar, lined with water-lime.

Mr. Saunders said that it would be very easy to try the experiment of keeping fruit in an atmosphere of carbonic acid gas, which prevents the action of the air upon the fruit,

and suggested that members make the trial.

Mr. Bauer, of Hamilton, said that he had kept currants and grapes in cans charged with sulphurous acid gas, if put in a cool place. He had tried to keep them in this way in a warm place and had failed. This gas had no effect on the flavour. He had kept cherries nicely until Christmas, and should experiment further,

Mr. Saunders had tried sulphate of soda, but found it to give a strong nutty flavour, which was not satisfactory. Carbonic acid gas, on account of its great specific gravity,

was very easily tried. Sulphurous acid gas escaped easily.

Dr. Cross said that sulphurous acid gas absorbed oxygen from the fruit, and kept it in a fresh state without fermentation or decay, while carbonic acid gas only excludes theoxygen of the atmosphere.

PACKING FRUIT.

The President said he would recommend to pack fruit in nice, clean, washed sand. It would keep plums and cherries for a considerable time beyond their natural period of ripening. A cold room of even temperature would keep fruit much longer than one where the temperature was constantly varying. Pears placed in a close drawer kept in perfectly good condition for a month or six weeks longer than those exposed in the open air of the room. Pears tied up in paper bags keep much longer and ripen better than if exposed to the air.

Mr. Mills said he put some Belle Lucrative pears in clean washed sand. They kept for three weeks after the others were ripe, and were then not ripe, but on being taken up-

stairs ripened in a few days, but lost their flavour.

Mr. Hatt, of Dundas, headed up tightly in a barrel some snow apples, and kept them in a cold cellar, almost at freezing point, and they turned out exceedingly well.

### SHIPPING FRUIT.

Mr. Ball, of Niagara, said that any clean-looking, well-flavoured apple, can be shipped if properly packed. The chief point was the packing. He had shipped with sweating and without. Only first-class apples should be used. Each basketful of apples, when put into the barrel, should be carefully shaken down, and the barrels filled nearly even with the top, the heads put on and pressed to their places. He had shipped several varieties—Russets, Ribston Pippins, &c. Apples required to be of good flavour and colour to sell well in Europe, and to be of uniform size, never more than two sizes in the same barrel. He did not think it advisable to press more than an inch and a half.

Mr. Mills described Mr. Springer's mode of packing apples. He does not shake them down as he puts them into the barrel, but after he has filled the barrel he puts on a cone of inferior apples to receive the crushing and then presses them down. Mr. Springer is

very successful.

Mr. Keating thought that when the apples had to be transported over rough roads it was necessary to press more than when they need to be taken only a short distance in wagons over smooth roads. He is in the habit of pressing the fruit down about three

inches. Only the top ones are bruised.

Mr. Ball recommended that each shipper should put his name and mark on each barrel of apples he sends out. In this way the fruit and shipper become known and obtain a character in the market, and a price suited to that character. He also remarked that the Green Newtown Pippin sold for the highest prices in England, and if it could be grown clean and free from spots on a favourable soil, would be a profitable variety to ship to Europe.

Mr. Beadle said it was an utter waste of time and money to grow the Green Newtown Pippin for shipping from this country. It does not grow anywhere in this country in good order with certainty; it spots badly, and the tree fruits sparingly. It will not pay

to grow it.

Mr. O. Hammond said he grew it in good order, but it did not bear so well as other

varieties

A resolution was passed recommending to all growers of fruit to mark their packages with their names, or some distinctive mark, by which they shall be known readily in the market.

The subject of holding an autumn exhibition of fruit was laid over for consideration

at the next meeting.

It was requested that the "Pruning of Fruit Trees" might be discussed at the sum-

mer meeting

The committee appointed to examine the new seedling apples and other fruits on the table made their report, and the Association adjourned, to meet in London at the call of the President.

REPORT OF THE COMMITTEE ON SEEDLING APPLES AND OTHER FRUITS.

Seedling apples shown:-

Mr. James Best, Toronto, a pretty, medium sized, red cheeked apple, much resembling

the Wagner, but inferior to it in flavour.

W. J. Marsh, Clarksburg, two seedling apples, both past their season, one resembling the Holland Pippin, but not equal to it; and one resembling the Rambo in appearance, but earlier, and not having, in our opinion, any distinctive merits.

W. E. Coleman, Lyn, two seedlings, one a small to medium apple, mild flavour, nomerit; the other a very large, exceedingly showy, red apple, very much dotted, rather

over ripe, evidently a late Fall apple, flavour mild sub-acid; worthy of trial.

Mr. Attwood, London, shows an apple of large size, supposed to be a seedling, in flavour and appearance very much resembling the Ribston Pippin; if proved to be a seed-

ling of Canadian growth, we consider it to be the best that has been brought before our notice.

D. Hammond, Toronto township, one seedling apple, conical, with a red cheek, handsome, flesh almost white, rather coarse, mild flavour, core large; worthy of trial; also one called Andrew's Russet, a flattish, medium sized Russet, with a very red cheek, flesh white and of good flavour, specimens past their season.

E. R. Morden, two seedlings, small fruit, both past their season.

In apples of cultivated varieties, the display was very large and fine. Amongst the best, we note Swayze Pomme Grise, Cayuga Redstreak, King of Tompkins County, Melon,

Swaar, Wagner, Northern Spy, and Lady Apple.

The display of pears, comprising some twenty kinds, was, for the season, very good; but many kinds were past their season, and nearly devoid of flavour. Well preserved specimens of Beurre Diel, Beurre d'Anjou, Vicar of Winkfield, Duchesse d'Angoulême, Winter Nelis and Verte Longue, were noted.

Mr. Cross, Oakville, exhibited samples of a strawberry basket that seemed to your

Committee to combine cheapness with durability to a very desirable degree.

CHAS. ARNOLD, W. HOLTON, GEO. LESLIE, Jr.

## MEETING OF DIRECTORS.

A meeting of the Directors of the Fruit Growers' Association was held in the Court

House, Hamilton, on the evening of the 3rd of February, 1870.

After the transaction of some routine business, the Secretary laid before the Board the three essays which he had received in competition for the prizes offered by the Association, and the Board appointed the President, Mr. Mills and Mr. Holton a Committee to read the essays and award the prizes.

After hearing Mr. Freed's report on some crab apples-

A resolution was passed, thanking Mr. Cowherd, of Newport, for his exertions in producing superior varieties of the crab apple.

Mr. Rykert gave notice that he should, at the next meeting of the Directors, move

a resolution that a Fruit Show be held by this Association in the fall.

The auditors' report was read, and the Secretary instructed to obtain sufficient vines of the Eumelan grape to give one to each member, and to each person who shall become a member before the first day of April, 1870, and who notifies the Secretary of his willingness to make the report thereon required by the Association.

Adjourned to the call of the President.

#### REPORT ON CRABS.

I examined and tasted the two varieties of fruit left at my place for my opinion, and beg to say:—

No. 1, from Sarnia, is of very fair size for a crab, and although past its best, I would say it is a desirable fruit for a crab, particularly on account of its good keeping qualities.

No. 2, from Brantford (Mr. Cowherd's variety), is a very handsome fruit, of medium size, and very pleasant flavour, losing all the harsh and austere flavour of the crab, for the higher and finer flavour of our best apples, approaching very near to the Scarlet Pearmain, which is a very good early dessert fruit.

To call it a crab, I think, surely, is a misnomer, and one that I think should engage

the attention of the Society for a more suitable definition.

And here I would beg to remark that I know nothing of its parentage, but understood it to be a cross effected by Mr. Cowherd. This success of Mr. Cowherd in breaking down the harshness of the crab for the better qualities of the apple deserves encouragement, and a special vote of thanks by the Directors of the Association.

And I trust the Directors will offer good inducements for the best six or any other number of cross seedlings, raised from our best varieties of crabs and Russian varieties of apples, in the hope of raising hardy fruits of good size, and suitable for cooking and dessert. Fruit that can be raised in our far northern counties, of good second quality only, would confer a great boon on them, and one which I think the Association should keep in view.

JOHN FREED.

P.S.—My remarks are meant to apply to our northern counties for the fruit in question, thinking that in our more favoured locality more crabs are not required.

J. F.

Hamilton, December 29, 1869.

# FRUIT GROWERS' ASSOCIATION OF ONTARIO.

#### SUMMER MEETING.

The summer meeting was held at London, July 13th, 1870. A telegraph having been received from the President, stating that he was unavoidably detained, the Vice-President, J. C. Rykert, Esq., M.P.P., took the chair. Minutes of last meeting were read and approved.

The Chairman stated to the meeting, in reference to the matter of the prize list of the Agricultural Associasion, that the revision of the Fruit Department had been entrusted to the President and Vice President of the Association, and that two hundred dollars had been added to the prize list.

The first question was then discussed, viz. :

# WHAT VARIETIES OF RASPBERRY ARE BEST AND MOST HARDY?

Mr. Chas. Arnold, of Paris, named the Philadelphia, Mammoth Cluster, and General Negley. The latter is of the Black Cap family, being equal to the Mammoth Cluster in size and flavour, but he thought it on the whole to be more productive, it being a perpetual bearer. The Mammoth Cluster ripens later than the Doolittle. The Philadelphia is an immense bearer, medium in flavour. All these are perfectly hardy. He spoke also of the Orange King, a seedling raised by himself, which is perfectly hardy and of superior flavour, quite thornless, not as large a berry as Brinckle's Orange. He has grown it for seven years; has about an eighth of an acre; the fruit is too soft to ship to distant market.

Mr. Holton, of Hamilton, named for market use the Doolittle, Davison's Thornless

and Miami, and for home use the Brinkle's Orange.

Mr. James Dougall, of Windsor, said that his soil is rather heavy, and with him the Black Cap varieties do best. He named the Doolittle and the Philadelphia as being very prolific, while for flavour he esteemed the White and Red Antwerp.

Mr. Saunders of London was much pleased with the great productiveness of the Philadelphia. The Mammoth Cluster is also very productive; ripens later than the

Doolittle.

Dr. Francis of Delaware, had found the Antwerps all too tender. The Philadelphia is an immense bearer, but too soft to be sent away to market. Doolittle is hardy, and the berry quite firm.

Mr. McColl, of Stratford, had thought that it did not pay to raise raspberries for market in Canada, there was so much competition from the wild raspberries, and the

common red cherries.

Mr. A. M. Smith, of Grimsby, was pleased with the Davison's Thornless; it ripens two or three days earlier than the Doolittle; thought it is not quite so productive, but that is more than overbalanced by the ease with which the fruit can be gathered, because the plants have no thorns. The Clarke raspberry promises well.

Mr. Farrell, of Cayuga, spoke of the White Antwerp, which, when not too highly cultivated, bore abundantly; but if it was largely manured, produced leaves, but not fruit.

The Brinckle's Orange had failed with him.

Mr. A. Leslie, of London, said that the Philadelphia was the hardiest red raspberry he had grown. The Black Caps are hardy and do well.

Mr. Chas. Ridout, Clinton, said that the Red Antwerps did not require any protection in the County of Huron; the snow giving the plants all the protection they required,

so that any and all varieties could be grown there.

Mr. Beadle, of St. Catherines, said that he had found the past season very severe upon the raspberry canes. The Franconia canes had been nearly all killed to the ground, so that he had very little fruit of that variety. Yet he thought that variety very valuable, usually passing through our winters without much injury, and bearing good crops of fruit. The berries are of good size and flavour, and sufficiently firm to bear transportation to market. Has known them to have been sent by rail from Lockport to New York City, arrive there in good order, selling readily for twenty-five cents per quart. The yellow Antwerp is often much injured by our winters, and the berry quite too soft for market use. The Philadelphia is the most hardy of all the red or yellow raspberries; it passed through the past trying season without injury, and is bearing an immense crop; is the most produc-The berry is not of the largest size, but is above medium, and suffitive of them all. ciently firm for a near market. The flavour is not the highest, but is sufficiently good to make the berry quite acceptable to buyers. Davison's Thornless is a decided acquisition; the fruit is of fair size, of good flavour, and ripens early, while the canes are without thorns, and bear an abundant crop of fruit. The Mammoth Cluster is late in ripening, very productive, fruit of large size and good flavour. Is valuable by reason of its extending the season of raspberries. Brinckle's Orange is a very fine variety for family use, of excellent quality, and continuing to ripen over a period of six weeks. It is tolerably hardy, usually passing through our winters without suffering very much.

A vote was now taken in order to ascertain the position which the different varieties

held in the estimation of those present.

#### FOR MARKET.

The Philadelphia had the highest number of votes.

Doolittle's Black Cap received only one vote less than the Philadelphia.

Mammoth Cluster had three-fourths of the number cast for the Philadelphia.

Davison's Thornless had nearly half as many.

#### FOR HOME USE.

Brinekle's Orange had the highest number of votes.

Franconia had half the number cast for Brinckle's Orange, and so had Orange King, Mr. Arnold's seedling.

Fastolff and Yellow Antwerp had each one less than Franconia.

On the subject of Insect Enemies of the Raspberry, members had not much to say. It would seem that on the whole this fruit is remarkably free from the ravages of insects. Mr. Saunders referred to his essay on small fruits as comprising the results of his investigations up to this time, and remarked that this season there had not been as much of the raspberry saw-fly as last year.

Mr. Arnold had seen a small bee boring out the pith of his raspberry canes.

## Are Bees injurious to Fruit Blossoms?

was the question then discussed.

Mr. Attwood, of Vanneck, said that some corporation had enacted a by-law forbidding the keeping of bees within its limits, on the ground that they caused the loss of the fruit. He was of an opposite opinion, believing that they and other insects helped to earry the pollen so as to fertilize the fruit-producing organs, remarking that if wet weather prevails while the fruit trees are in blossom, the bees not being able to fly about, the fruit does not set well.

Mr. Saunders remarked that it was true that fruit did not set well if cold wet weather prevailed during the time of flowering, and it was also true that the bees did convey the pollen from one flower to another, but that he thought the failure of the setting of the fruit in wet weather was not wholly to be attributed to the absence of the bees; but the pollen being damp in wet weather, did not float in the atmosphere, and

hence was not carried by the currents of air, as it is in dry weather.

Mr. Dougall spoke of the necessity of fertilizing melons by hand which are grown under glass, and felt confident that bees were useful rather than injurious to fruit.

This appearing to be the general opinion of the meeting, the next question was then

taken up.

# THE PLUM CURCULIO, HOW TO CATCH AND KILL?

Mr. Saunders read a very interesting report on the curculio, based upon the information he had received from those who had sent collections of this insect to him for the prize offered by the Association. Mr. Saunders asked leave to extend and complete his report, and when finished it will be published in full. A vote of thanks to Mr. Saunders was then passed for his very interesting report, and his service to the Association in receiving and counting upwards of ten thousand curculio which had been sent to him.

Mr. Arnold stated, in reply to an inquiry, that he had found his plan of whitewashing the ground under his plum trees to be of great service, and believed that the insect did not lay its eggs on his plums, knowing that the young larvæ could not pene-

trate through the crust of lime, and must therefore perish.

Mr. Shedd had also tried this plan, but the curculio had failed to see that the larvae would be unable to penetrate into the earth, and had continued to sting his plums and deposite their eggs the same as they had done before. He had fancied it to be a good plan to bore a small auger hole into his plum trees, and insert a bolt of iron just fitting the hole, and to strike smartly on that. The jar thus made caused them to drop off at sonce, and the blow did no harm to the tree. This was better than to drive a spike into the tree, as had been done by some, for each blow on the spike drove it farther into the tree, and there was danger in the end of splitting the tree.

Mr. Dougall had found that jarring apricot and nectarine trees brought down the fruit. His plum trees, some two hundred, are enclosed with a high board fence; in this enclosure he keeps his fowls, and they eatch the curculio for him. Young pigs were also suggested as good to eat up the fallen fruit, and with it the larvæ of the curculio in the

fruit. Large pigs sometimes would gnaw the lark off the trees.

The method of jarring the trees and catching the curculio on a cotton sheet as they fall, had been most tried, and had served a good purpose. It was also remarked by Mr. Saunders that the plan of laying shingles, chips, pieces of bark, and the like, under the plum trees, and seeking for the curculio under these, might also be employed in connection with that of jarring the trees, and that by these combined methods a most destructive war could be waged against them.

# THE BLACKBERRY—BEST AND HARDIEST VARIETIES.

Mr. Saunders had found the Kittatinny to winter-kill the past season, but the Sable Queen had passed through without injury.

Mr. Farrell had succeeded well with the Lawton.

Mr. Arnold had tried Wilson's Early, Missouri Mammoth and others, but found them all to be quite inferior to the common wild sorts.

Mr. Schoff had not been successful in growing the blackberry at all.

Mr. Holton found the Dorchester to do well; it was good flavoured, not so large

nor as acid as the Lawton.

Mr. Smith had found the Dorchester the hardiest variety; thinks the Early Wilson the best in flavour. The Dorchester berry is rather small, and the plant not a very heavy bearer.

#### PROTECTION OF ORCHARDS FROM MICE.

Mr. Saunders had saved his apple trees by raising a mound of earth about them. He had learned by experience that the mice would destroy spruces and other evergreeus.

Mr. Schoff had found banking up with earth a preventive.

Mr. Dougall had known small trees protected by placing a couple of horse-shoe tiles

so as to enclose the tree.

Mr. Attwood had known the mice to build their nests inside of pieces of bark that had been put around the trees with the view of protection.

Mr. Slaght recommended, besides banking with earth, to tramp the snow hard

around the trees. Had known Horse-Chestnut trees girdled with mice.

Mr. Saunders thought that if the trees were washed with a strong decoction of quassia, the mice would not gnaw the bark, because of the very disagreeable bitter taste of the quassia.

Mr. Weld had found banking with earth in the fall would prevent the mice from

girdling the trees.

Mr. McBeth had placed pieces of stove pipe around his, and in this way had saved

Another had strewed poisoned corn about his trees, and killed off the mice. He had found that in most cases the trees could be saved after the mice had girdled them, by immediately, as soon as the snow went of, banking fresh earth around the tree, so ascompletely to cover the part that had been gnawed. Had also saved trees by inserting scions so as to keep up the circulation of the sap across the girdled portion.

Mr. Saunders had applied a mixture of sulpher and cow-dung to his evergreens,

covering the girdled part; some of them seemed to be doing well, others died.

Mr. Attwood had tried inserting scions according to the plan recommended in the Canada Farmer, and had succeeded admirably. If the inner bark is not all eaten off, the tree can usually be saved by covering the girdled part with earth sufficient to keep it moist all the time. This needs to be done before the girdled part has been exposed to dry winds or the sun, and become dried.

Messrs. Schoff, Dougall and Farrell had all tried the inserting of scions after this-

manner, and had succeeded.

Mr. Smith had poisoned the mice, and so got rid of them.

Mr. Arnold spread butter and arsenic on bread, and placed it in old tin oyster cans, and laid them in the way of the mice, and saved trees by thus poisoning the mice.

A communication was read by the Chairman from Mr. D. Noxon, of Allisonville, on the Flea-Beetle that infests the grape vine.

The following is the paper:—

# THE GRAPE FLEA.

"Its habitation will be found at the root of the vine, scattered some three or four inches from the stock, leading down into the ground. After removing about an inch of earth you will begin to find them, even down on the large roots leading off. This examination is presumed to be at the time of opening or uncovering the vine in the early spring, when they will be found in a partially dormant state.

"Their Destruction.—Presuming the earth has not been pulled away from the root of the vine—take of common wood ashes from two quarts to one gallon, more or less as the vine may be large or small, spreading the ashes at the stock of the tree, an inch thick, gradually thinning them for a foot each way. This will effectually kill every flea that

may be beneath the ashes.

"Let the ashes remain undisturbed around the vine for fourteen or fifteen months—for this plain reason. In the month of May, June, and probably July, the full-grown flea lays her ova, in the earth around the stock of the tree. When incubation takes place they subsist upon the sap and juices of the root, and remain there until their age or maturity furnishes them with the necessary means of preying upon the buds and foliage of the tree. As the ova will not incubate in the ashes—and I presume sawdustwould answer quite as well in this case—the plan of allowing them to remain for so long a period, completely cuts off the possibility of the next year's generation.

"These are the results of several years of unwearied and vexatious trial, and search-

ing examination against that little destroyer of the grape vine.

"In regard to the slug or grub found on the under side of the grape leaf, I am not able to say anything of its habits; whether they burrow at the root of the vine—which I am inclined to think they do—for they were equally troublesome to my vines. I saw no more of them when I discovered the habits of the flea, and destroyed them as above. My discovery, if it may be called such, has its date from the spring of 1869, and since that time I have not discovered half a dozen of the flea, and not any of the slug."

Some gentlemen present suggested that the Flea-beetle in the larva state fed on the leaf of the grape vine, and that the slug mentioned in the communication was doubtless the larva of the Flea-beetle; that the larvæ probably went into the ground to pass into the pupa state, and that the alkali of the ashes caused the death of the insect at that time.

On motion of Mr. Saunders, it was resolved that Messrs. Beadle and Rykert be a

committee to draft a series of questions to be submitted to members.

On motion of Mr. Saunders, it was unanimously resolved that the sum of fifty dollars be appropriated for the purchase of electrotype plates of insects, for the illustration of

that part of the entomological report which related to fruits.

Miscellaneous business being in order, Mr. Schoff inquired if other members had lost their grape vines during the past winter. He had lost many, varying from two to fourteen years of age. Had lost three or four each of the Adirondac, Hartford Prolific, and Delaware; some five or six Isabellas, and one Catawba. Some of the Isabellas and Catawbas were killed down, but are now starting from the ground or near the ground. The ground is well underdrained, and the vines are on a trellis. He did not lose any of his Clintons. Does not cover his vines in winter. When he used to cover them he got a crop of grapes one year out of three, but since he ceased to cover them he has had good crops every year until this. He regards this year as very exceptional, and attributes the death of the vines last winter to the want of sufficient heat last summer to ripen the wood.

Mr. Saunders said that he had lost none in his garden but one Diana; in the field he had lost a few of the Rebecca, Delaware and Hartford Prolific.

Mr. Peters and Mr. Attwood had not lost any.

Mr. Slaght wanted a cheaper remedy for the current worm than the white hellebore.

Mr. Saunders thought that the hellebore was not very expensive, that it was sold at forty cents a pound, that an ounce mixed with a pailful of water was quite sufficient for

forty cents a pound, that an ounce mixed with a pailful of water was quite sufficient for twenty bushes.

Inquiry was made concerning the best method of killing the pear tree slug.

Mr. Saunders had tried sand, also unleached wood ashes; and though they were well coated with it, the slugs merely crawled out of their skins and came out quite sleek and fierce, and went to eating again as if nothing had happened to disturb them. He then tried the solution of hellebore, and it killed them.

Mr. Schoff had used fresh slacked lime, and it killed them. Mr. Arnold had killed them with unleached wood ashes.

Mr. Dougall said, if they are quite young the lime and wood ashes will kill; if old,

they crawl out of their skins and go to work again.

There was a collection of many varieties of raspberries on the table, some cherries, gooseberries, plums, apples of last year, and ripe Doyenne d'Eté pears, the latter brought by Mr. Dougall from Windsor.

Mr. Attwood also exhibited some jars of very fine honey, taken from the combs this season by the revolving comb separator; a part gathered from the white clover, and some from the basswood flowers. At the close of the meeting the members seemed to resolve themselves into a tasting committee of the whole, and fruit and honey were laid under considerable tribute.

The meeting was very pleasant and profitable; the London Directors did everything possible for the comfort of members from a distance, and we can only regret that there

were not more from abroad to enjoy the occasion.

### EXTRACTS FROM LETTERS TO THE SECRETARY ON FRUIT CULTURE.

Winona, Sept. 22nd, 1870.

I use a good deal of leached ashes about my vines, and think they improve the sweetness of the grapes. The grape crop is very good in this locality, I never saw them better, large, and free from mildew or anything else. The apple crop very good and fair.

The peaches almost a failure, but the trees are uncommonly thrifty, nothing troubling them. The pear crop is a failure here, the trees are free from blight and growing well, the pear blight does not seem to be so prevalent in this neighbourhood as it is in many places, there is an orchard of some three hundred trees just near to me having been planted some six or seven years with very common culture, and I don't think there is a single blighted tree among them, growing well, too; some of them had a few pears last year but none this year; my own old trees or young have never suffered but very little from blight. The plum crop is a failure here too, the trees of some of the good old kinds are gone, the knot and curculio have finished them, but we hope for a good time to come yet for the plum.

LEVI LEWIS.

### SEBRINGVILLE, Oct. 3rd, 1870.

I herewith give you my experience of apple grafting this summer; June 29th, I put in nine apple grafts, four in two old trees, and five in young seedlings, only one failed; longest growth, 13 inches; shortest, 5 inches. I again grafted, July 23d, growth  $4\frac{1}{2}$  inches. An apple tree here was loaded with fruit and this fall was also in blossom at the same time. I send this information, believing that it will be acceptable to the Association.

ROBERT MOORE.

### DELAWARE, Sept. 19th, 1870.

I send you, by express, a specimen of a seedling apple growing in this vicinity, I enclose receipt. The tree is about twenty years old from the seed, and is in possession of the grower. It is of fine form, vigorous growth, and upright habit. The fruit, as you will see, resembles the early strawberry. I do not think that it has any particular excellence of quality to recommend it, except its appearance, but it is distinguished as an early, a constant and an encormous bearer. It is now loaded to such an extent that were it not that the wood is tough it would break, and the owner tells me that it has borne an average of 10 bushels a year for quite a number of years, and has never missed yielding a full crop since it came into bearing. The tree has had no particular care bestown uponit, has had to fight its way against adverse circumstances, and has managed to live and thrive where less hardy varieties have starved. For these reasons, I take the liberty of requesting you to submit it to the inspection of the association. Should they consider it worthy of being placed upon the list for trial, I can furnish cuttings at the proper season.

N. AGNEW.

### OWEN SOUND, Oct. 3, 1870.

Fruit in general is poor in this Section. Many trees injured and killed by the effect of last winter and the imperfect ripening of the wood. The mice also have done great injury. Only the hardier varieties are bearing. The Baldwin will not do in this Section even on the border of the Lakes, there is a few trees, but the most of them die out. I planted 150 trees of them that grew well for three years, then came a severe winter and swept all except about 6 or 7 trees, the roots are healthy yet, which I will graft low on some of the stronger shoots, for they are always killed back.

Pears will only succeed in very limited varieties. I have found the Flemish Beauty perfectly hardy and bears regular, it is the best. I cultivate about 20 varieties, varying from 5 to 20 of each kind, the Louise Bonne in great number, all dwarfs. The standards are Flemish Beauty, Winter Nelis, *Lawrence, *Beurre Clairgeau, *dead, Beurre Easter, *damaged; Winter Nelis *and Lawrence *suffered this winter past. Dwarfs, White Doyenne Glout Morceau, *Beurre Diel, Buffum, Louise Bonne, *Bartlett, *Oswego Beurre, Vicar of Winkfield, *several others I cannot name, all those marked with a star are injured. Many of the Louise lost all the tops, and none bearing, except Flemish Beauty, this year.

Plums poor in quality and quantity, and many injured from the above cause.

Brantford, Sept. 16, 1870.

I have a new Tomato, that I think is going to be an improvement, if any one is coming down from here I will send one to the meeting.

JAMES WOODS.

DUNDAS, Sept. 21st, 1870.

I have sent a half dozen apples from one of my neighbours, who asserts it to be a seedling, the trees have been planted about 40 years. I was sure at first they were the Colverts, but now think they are not. They are famed for their cooking and drying properties. They are not so acid as the Colverts of mine, and become quite mellow when fully ripe.

JAS. HESLOP.

Hamilton, 6th Sept., 1870.

Being desirous of giving some of Mr. Arnold's hybrids a trial, I resolved to plant two or three in the same plot of ground, in the same soil and exposure, and subject them to the same training as the Eumelan, so that a fair comparison could be instituted between them. I accordingly wrote to Mr. Arnold, and he sent me No. 1 Othello, (two vines), No. 2,the Cornucopia, and No. 16, the Canada. They arrived late in the season, and with the exception of the Cornucopia, they had few roots. The Cornucopia has made a growth equal to the Eumelan. The Canada met with an accident, the first shoot having been broken off when about four inches in length. It was some time before another bud started, and the growth it has made is about 18 inches. Both vines of the Othello were late in making a start, one has grown about two feet, the other about 15 inches.

Thinking it might be interesting to the members of the Association, I purpose sending in a report of these grapes of Mr. Arnold's with my annual report of the progress of

the Eumelan.

A. Logie.

BARRIE, Sept. 20th, 1870.

A further experience with the cultivation of the grape vine generally will, I hope, enable me next year to speak of future prospects in this part of the country. This year, however, bids well so far, the following grapes having ripened with me:—The Adirondac and Delaware, 5th September. Rogers' Hybrids, Nos. 3. 4, 15, 19, and the Concord and Diana, perfectly ripe on the 10th September. The Clinton on the 15th September. The Isabella is well coloured, and even the Catawba is colouring; but as I think this, as well as 1868 and 1869 are exceptional years in their way, I would add a fortnight more to the times of ripening here.

THOS. D. LLOYD.

TORONTO NURSERIES, Sept. 19, 1870.

I send you to day, by express, a sample of apples—seedling Fall—grown by Mr. Chas. Cameron, Credit P. O., and on which he wishes a report of the Fruit Committee. One of the apples he would like you to keep for a month or so until fully ripe. He names it "Prince of Orange."

GEO. LESLIE, JR.

SHERIDAN, Sept. 20th, 1870.

I send by express a sample of seedling fall apples, for comparison or otherwise, as you may direct respecting the prize offered by the Association. You will remember, perhaps, my sending a sample of winter (seedling) apples to Hamilton last February, I have none at present. The tree had some on, but a few weeks ago there was a very high wind one day, and they every one blew off the tree, it standing in a very exposed place, consequently I have none of that variety to exhibit this year. If the trial for the fall apples is at some other time and place, it will be necessary, as the fruit is ripening earlier than

common this year, to have it at the earliest convenience possible. I also send, for your investigation, a limb bearing two kinds of fruit. I have shown it to different persons, and told others of it, but none can account for it in any way. You will see what variety of fruit the tree is of, the large apple being the kind it bears—the russet being the mystery. If the Association can explain in any way the cause of its bearing the russet, without human agency (which it certainly is), you will confer a favour. I send this last as a fact of interest, as requested in circular, having fallen to my experience. You will please excuse any essay or paper to be read at the meeting, other than the above. Any information in connection with any of the foregoing will be thankfully received by your obedient servant.

O. Hammond.

### LINDSAY, 19th Sept., 1870.

I am anxious to obtain all the information I can with reference to the culture, modes of training, &e., of the grapevine, although I have as yet but a few vines planted, say about 150, which comprise about 25 varieties, but principally the Clinton which appears to be about the hardiest, but have found the "Delaware," "Rogers' Hybrid" No. 3, "Israella" and "Telegraph" somewhat the earliest; next to these the "Sherman," "Clinton," "Chippawa," "Adirondac" and "Hartford Prolific;" the latter I find is very subject to drop its berries just before ripening. I have adopted three modes of training, which all seem to answer. One is the one in the form of a long arbour, similar to the system practiced at Cooksville; the second, the long arm laid horizontally on the trellis; and the third, trained to single stakes from 8 to 12 feet apart, the vine (in some cases one, and in others two to a stake) twisted spirally round the stake. The Clinton seems to do well on the stakes.

Our climate here is far from being as favourable as yours. Last year I had a very full crop from my few vines, but they did not fully mature, at least the later varieties, and more than that the wood did not fully ripen, consequently owing to the winter setting in earlier than usual, I failed to cover a single vine of any variety; the result was that most of the wood which should have borne fruit this season was winter-killed, therefore I have little or no fruit, say a bushel at the most, and these principally Clinton, Sherman and Chippawa, which seem to be all equally hardy. My soil is a strong clay with a large mixture of small round stones. What few inferior bunches I have of Delaware, Rogers' No. 3, Telegraph, Israella and Hartford are now pretty fairly ripe. I have found the "Iona" the least hardy of any. The Concord, Ontario and Diana I find too late in most seasons. As I have no good specimens of any variety, I concluded not to send you any.

With regard to plums, they have been a great crop in this section of the Province, and seem better adapted to our soil than any other orchard fruit. I had some fine specimens of different varieties, but they ripened so much earlier than usual that I have not been able to preserve a single one to send to the meeting, or would have done so. We know nothing of Curculio or Black Knot in this part of the country. Of apples I had not a bushel from 30 trees, and these so affected by the apple moth, that not one-third could be used. I cannot account for the failure of the crop, unless it was occasioned by a hail storm which passed over the trees when in blossom. What was unusual, I may also observe, was the winter setting in so early last fall, before the wood fully matured. The leaves remained on the trees all winter.

J. KNOWLSON.

### BERLIN, COUNTY OF WATERLOO, 20th Sept., 1870.

This County has been blessed with a wonderful Fruit crop this season—nothing hihertoto equal it. The apples, however, are seriously injured with Curculio or Codlin moth.
The plums are not affected, and they are most abundant. I hope to exhibit 12 varieties
at the Provincial Show, though late in the season. I succeed well with them and apples
in very heavy clay soil, with which I have mixed great quantities of stable manure, saw
dust and old bark from the tannery. I find the bark good to keep open the soil, and
more lasting than chip or other manures. I use considerable old iron filings around my

268

trees, and even drive spike nails in them. I cannot say I see any advantage, yet I have most abundant crop every year, and little or no black-knot. I approve of grafting the tame plum on the wild stock a foot or so above ground, but not in the root, and prune from the top, so to keep the tree low and limbs near the ground. The only protection I have is a single row of ornamental trees along the outer north edge of the garden.

The only insect with me this season is in the apple. I burn or bury in ashes all small fallen fruit. This season all fruit seems much earlier than usual, and rot more on the trees.

I raise too few pears to say any thing about them, they do not seem plentiful about here this season.

I raise the crab apple as an ornamental tree, having five varieties on the one stock.

M. C. Schofield.

Campbellford, Sept. 20th, 1870.

I consider the Delaware the very best of the following vines which I fruited this season:—H. Prolific, Concord, Clinton, Isabella, Bloods Black, Hydes Eliza, Ontario, Laura Beverly (same as Creveling), Rodgers, 3 and 15—the two latter are next in quality to Delaware. J. W. Johnston.

#### REPORT ON THE "EUMELAN" GRAPE VINE.

The number of vines distributed by the Association to members, was four hundred and twenty. Of the recipients, some two hundred and seventy-five have acknowledged the receipt of the vine.

The reports received thus far have been very favourable, very few deaths having been noticed, and usually a fine, healthy growth. Those reported from the County of

Brant-Have grown from 2 to 6 feet; one had mildewed considerably, the others were healthy.

Bruce—Have all been healthy and done well. Bothwell—Also healthy, and made a fair growth.

Elgin—Generally healthy, and ripened the wood well; one says the leaves mildewed some, and another that they mildewed badly.

Frontenac—Complaint is made of long drouth, and consequent small but healthy growth.

Grey—Healthy all, and ripened up well.

Haldimand—All healthy.

Halton—One dead; the others are healthy.

Huron—One failed to grow, another made twenty-three feet of wood; generally strong and healthy.

Kent—One mildewed badly, remainder healthy.

Lincoln—I'wo dead; grew from 2 to 4 feet, no mildew.

Lambton—Grew from 3 to 15 feet; all healthy but one that showed some mildew on the leaves.

Middlesex—Grew from 2 to 10 feet; one failed, two mildewed some in August.

Northumberland—Made moderate growth; healthy.

Ontario—Grew from one to two feet, and ripened up well.

Perth—Grew about four feet; healthy.

Peel—Grew well, some five feet; very healthy. Russell-No mildew; one made 20 feet growth. Simcoe—Grew well; seem to be perfectly hardy.

Victoria—Made a moderate growth; no disease. Waterloo—Grew from 2 to 7 feet; no mildew, one dead.

Wentworth—Grew from 2 to 5 feet; one showed some mildew, one dead.

Welland—Grew well; all healthy.

Wellington-Made fair growth, as good as Concord; all healthy.

York—From 10 inches to 4 feet growth; one dead, no mildew.

D. W. BEADLE,

Secretary.

### AUTUMN MEETING, 1870.

The Association held its regular autumn meeting in St. Catharines, on Thursday, the 22nd September, 1870. There was a very full attendance of members, and a very fine display of fruit. The collection of grapes was very extensive, embracing a great number of varieties, and many of the newer sorts, including the Eumelan, which latter sort was exhibited by Mr. John Brown, of Thorold, and Messrs. Merrell and Coleman, of Geneva, N. V.

The meeting was called to order by the President. The minutes of last meeting were

read, and the following Committees appointed:

Committee on apples and pears—Messrs. Dougall, Morse and Bennett.

Committee on grapes—Messrs. Read, Taylor and A. M. Smith. Committee on other fruits—Messrs. Mills, R. N. Ball, and Saunders.

Committee on wines—Messrs. Farrell, Logie, and White.

Committee on seedling fruit—Messrs. Cross, Arnold, and Holton.

The discussion of the

"Best Method of Pruning and Training the Grape Vine"

was then entered upon.

Mr. M. Y. Keating, of Jordan, stated that he trained his vines on the arbour system. His vines did not cover the top of the arbour trellis as yet, and therefore he allowed the vines to fruit on the perpendicular part of the trellis; but as soon as the vines are able to cover the top, he intended to prune off the branches from the perpendicular part of the trellis, and confine the fruit and foliage to the top or horizontal part. He has about an acre and a half planted with the Delaware, of which one acre is trellised. He pruned in March and April, and has three canes to each vine, but has not practised summer pruning, but is of the opinion that a little pinching-in during the summer would be serviceable. The vine now exhibited by Mr. Keating, and covered with ripe fruit, has been planted six years. He manured his vineyard two years ago by ploughing under clover, and last spring applied a dressing of well-rotted barnyard manure. His soil is sandy loam, the soil about eight inches deep, with a hard, yellow, sandy subsoil, having a hard pan two and a half feet below the surface, and clay from eight to nine feet down.

John W. Ball, of Niagara, trained his vines on the arbour trellis plan, no foliage allowed on the sides of the trellis, the vines are trained up the sides of the posts to the top of the trellis, and the sides are open all around, so that he can drive under the trellis in every direction, and cultivate with the horse every part of the vineyard. The posts are seven feet long, not planted in the ground, but set upon a flat stone placed under the foot of each post. The horizontal bars are nailed on to the top of the post, so that the whole weight of the top rests on the ends of posts; and braces run from the posts to the horizontal bars. Made in this way, there is no rotting off of posts, nor strain upon a nail, nor blowing down by the wind, nor heaving out of place by the frost. His soil is a clay loam, about a foot deep, with a retentive clay sub-soil, well under drained. Has manured them with leached ashes. His vines are planted twelve feet apart each way. Of course, his

vines get no winter protection.

W. H. Read. of Port Dalhousie, said that he pruned both in the all and spring, mostly in the fall, because it was more convenient to do it then. He vafries his pruning according to the habit of the vine; those of very strong growth and vigorous habit requiring to be left with longer shoots than those of a slower habit of growth. He has never seen any evil to result from fall pruning. Some of his vines are trained to stakes, others to upright trellises; has not tried the arbour trellis; thinks the best ripened grapes are those near the ground, because they get the radiated heat of the earth. His soil is a sandy loam, about eighteen inches deep, with a hard-pan subsoil, located on the south shore of Lake Ontario. He thoroughly manured the ground with barn-yard manure when he planted the vines, ten years ago, but has not given them any manure since. High manuring may produce larger grapes, but poorer in quality.

Jas. Taylor, of St. Catharines, prunes his vines in the fall, and finds that they do not

get injured by the winter in consequence. He has more leisure to prune in the fall, and therefore prefers to do it then; is also satisfied that grape vines are not benefited by high manuring, and has abandoned the practice of manuring them, except by a mulch of barnyard litter over the roots. His soil is a lime-stone gravel, naturally porous and well drained. Some of his vines are on a side hill, with a western exposure. He has also given up the practice of summer pruning, having become convinced that much summer pruning is injurious, and now contents himself with merely pinching in the ends of shoots that seem to require it.

The meeting adjourned until 2:30 P.M.

#### AFTERNOON SESSION.

The President called the meeting to order, and called upon Mr. Haskins, of Hamilton, who remarked that he preferred the arbour system of training, and spring pruning, especially for the free-growing sorts, such as the Clinton and its confreres. He uses as fertilizers leached ashes, and bone dust, and stable manure. He mixes two tons of bone dust with four tons of ashes, and four tons of gypsum or plaster, and applies it to five acres of vines. He finds that many varieties kill back badly in the winter if fall pruned, and therefore he prefers the spring. He has nine-and-a-half acres of grape vines in cultivation, planted two years ago last spring. The vines are showing a little fruit this year. The sorts are mostly Rogers' Hybrids, with a good many Delaware and Clinton, with about twenty other sorts for experiment. Is much pleased with the Iona, Delaware, and Rogers' No. 4. Thinks the Creveling one of the very best of wine grapes, but the bunches are very imperfect, because the berries do not set well, but are too scattering. The soil is sandy loam, clay bottom, well under-drained.

Mr. Babcock, of Lockport, New York, said that vine cultivators in the United States were now beginning to prune longer and train higher. They have heretofore been in the habit of cutting off too much of the vine at the winter pruning. If the vine sets too much fruit, they thin it out, either by thinning out the branches, or by cutting off the entire branch, fruit and all. They usually cultivate on upright trellis, composed of three wires, fastening the vines to the wires with willow twigs or rye-straw. There is a new wire contrivance for fastening the wire to the trellis, known as Underhill's patent wire hook. They

have a machine for tightening the wires of the trellis.

Here several members described different contrivances for tightening and slackening the wires of the trellis; the most simple of all seemed to be one described by Mr. Barnes, of Hamilton; but we forbear attempting to give a description, hoping to obtain from Mr. Barnes a full description, with illustrative drawings.

### "THE BEST METHODS OF GRAFTING THE VINE."

W. H. Mills, of Hamilton, said he had not been successful in grafting a vine that was already established growing in the soil; but when he dug the vine up, and then grafted it, and planted it out again, he had met with very good success.

W. H. Read, of Port Dalhousie, said that he had grafted in the fall, and then carefully protected the grafts from the frost. In this way, forty-five per cent. had done well.

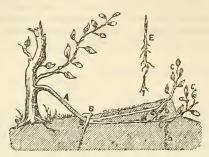
C. Arnold, of Paris, had succeeded well in the same way; it was not necessary to have the bark of the scion and stock fit together, as in grafting the apple, but they grew just as well when inserted in the middle of the stock.

Mr. Brooking, of Ancaster, planted out some old vines, thirteen in number, and then grafted them. Of these, twelve grew. This was done in April, and the crown where the graft was inserted was covered with earth, leaving one bud of the scion at the surface of the ground.

Mr. Dougall, of Windsor, had tried grafting the vine, but always failed.

Hugh Smith, of Sarnia, exhibited to the meeting some samples of a method which was a combination of layering and grafting. The branch of a tree or shrub is bent down, so as to admit of the twigs being readily layered; the twigs are then tongued on the under-side, as for layering. A piece of root of the same species is cut about six inches long, pointed like a wedge at the upper end, and inserted in the slit made in the twig, the bark

of each being fitted exactly on at least one side, and fastened to its place by tying with basswood bark or cotton yarn, and then the root is inserted in the ground, with enough of twig to keep the point of union moist below the surface of the ground.



The accompanying sketch may illustrate the process. a is a branch bent down to the ground. b is a hooked peg, to hold the branch in place. c c are the twig slits on the under side. d d are pieces of root inserted into the twigs at the slit made on the under side. e shows the wedge form of the root at the end to be inserted in the slit.

Mr. Smith stated that he did not suppose that this method would be generally used, but that it would be found to be of service in the propagation of those trees, plants and

shrubs that are difficult of propagation by the ordinary methods.

President Burnet, of Hamilton, had cut his grape scions in the fall, and kept them in a cool place, where they remained in a dormant state until the vines were in full leaf in June; then he inserted a scion, of two or three buds long, in a branch of a growing vine, in the usual manner of cleft grafting, fastened the graft by tying, and then buried the place of union in the soil, sufficiently deep to keep it moist; and, in order the more certainly to secure this, he covered the place of union, before burying, with a thick coating of cow-dung. In this manner he had been very successful.

### "THE BEST METHOD OF MANURING THE VINE."

Mr. Arnold, of Paris, would use very little manure; and never use coarse or highly

nitrogenous manures.

Mr. Mills, of Hamilton, would manure according to the requirements of the variety. Some varieties, such as the Delaware, required high culture, and would never yield their best results in poor soil; others, as the Diana, required no manuring, but yielded their finest crops and ripened them best in a poor soil, abounding in lime.

Dr. Cross, of St. Catharines, manures only those varieties which are slow growers.

Mr. Farrell, of Cayuga, would manure according to the habit of growth of the variety.

Mr. Bennett, of Brantford, thought that vines succeeded best in the natural soil; at

least, he would not manure highly.

Mr. Read, of Port Dalhousie, uses leaf mould, cow-dung and ashes.

Mr. Taylor, of St. Catharines, top dresses with coarse stable manure, more as a mulch than otherwise.

Rev. Mr. Campbell, of Niagara, has an old Isabella vine growing in grass in the lawn, which fruits abundantly, and ripens its fruit well.

Mr. Mills also had an Isabella that had stood for seven years in sod, that bore fine

fruit, and ripened its fruit.

Dr. Cross, of St. Catharines, cultivates the ground between his vines, and never failed to ripen the Isabella, except in 1869; and when there are no severe September frosts, his Catawbas ripen. He prunes on the renewal system, and finds the Isabella and Catawba grow finer fruit, and ripen it better on young canes.

### WINTER PROTECTION OF GRAPE VINES.

Mr. Saunders, of London, said that he was of the opinion that a grape vine which required winter protection was not worth having. He had found most of our varieties suf-

272

ficiently hardy without any winter protection, though his Diana had been killed to the ground.

Mr. Read, of Port Dalhousie, protects by a light covering of pure soil or earth.

Other coverings are apt to afford a shelter for mice.

Mr. Arnold, of Paris, finds few varieties that succeed without winter protection. He thinks branches of evergreens the best winter protection that can be used. Inquiry was made as to the hardihood of his seedlings, to which he replied that he had supposed that they were all hardy, but that of late the white variety seemed to be tender. Brant, Canada and Cornucopia were tolerably hardy.

Mr. Paffard, of Niagara, protected only those of foreign origin, as the Sweetwater,

Zinfindal, &c.

Mr. Farrell, of Cayuga, used formerly to protect all his grape vines in the winter, but had gradually abandoned the practice, and now only protected newly planted vines during the first winter.

Mr Bennett, of Brantford, had been in the habit of protecting his vines every winter, and has uniformly had good crops, but last winter he left his vines exposed, and they were badly winter killed. He thought it quite possible that, having been heretofore protected, they were now less able to withstand the winter than if they had never been protected, and hence the injury last winter to even old canes some inches thick.

Mr. Arnold, of Paris, suggested that vines can be too much covered, especially with

soil, for if buried too deep, the wood of the vine is kept too moist, and the buds rot.

#### INSECTS ON THE VINE.

Mr. Bennett, of Brantford, remarked that he had been remarkably exempt; the only insect he had seen was one that had punctured the berries of the Diana.

Mr. Mills, of Hamilton, had been very much troubled with the vine thrips, but could

not suggest any mode of getting rid of them.

Mr. Dougall, of Windsor, had noticed that the thrips injured only the thin leaved sorts, such as the Delaware and Clinton, but was unable to injure the thick leaved varieties, such as the Concord, &c. He had been very much afflicted with a worm in the berry of the grape, probably the same as the insect in the Diana mentioned by Mr. Ben-

Mr. Saunders, of London, mentioned that the thrips could be very much lessened by having a man pass through the vineyard, bearing a lighted torch, while another went with him and shook the vines; the thrips, disturbed from their hiding places under the leaves, flew into the blaze and perished. The flea-beetle could be easily killed in the larva state, and it only required proper attention to keep this pest in subjection.

Members mentioned the varieties of grapes which they had found, on the whole, to be the earliest. The four sorts which were mentioned by nearly all the members, were the following, viz. : Hartford Prolific, Adirondac, Massasoit (Rogers' No. 3), and Creveling.

Mr. W. H. Read, of Port Dalhousie, stated that he had some seedling grapes which ripened in August, and which, he fully expected, would prove to be perfectly hardy, and ripen earlier than any of those that had been named.

### PEAR TREES, THEIR CULTIVATION, MANURING AND PRUNING.

Judge Logie, of Hamilton, did not give his pear trees any special cultivation; he supplied them liberally with ashes, and an occasional top dressing of manure; had expe-

rienced a little blight, and some spotting and cracking of fruit.

Mr. Jas. Taylor, of St. Catharines, had not found the cultivation of pear trees very satisfactory; has lost a good many trees. His soil is a gravelly loam; trees are dwarfs;

some have thrown out roots above the quince stock, and become standards.

Jas. Dougall, of Windsor, has a heavy loam, and a strong clay loam; had tried 350 different sorts on the quince stock. Some of these grew finely, many would not grow at all. Had learned that some sorts were not suited to the quince stock, and should never be grown as dwarfs, such as the Bartlett, Seckel, Doyenne d'Eté, &c.; on the other hand, the Beurre d'Anjou, Duchesse d'Angoulême, Ananas d'Eté, &c., would thrive well as 18 273

dwarfs. He would plant a pear orchard of standards and dwarfs together, setting the standards thirty feet apart each way, and put dwarf trees between them, so that the trees would stand fifteen feet apart each way. Has no blight. Angiers quinces are the only suitable stock for dwarf pear trees. In cold latitudes, strong shoots should be pruned back to the ripe wood, early enough to heal over before winter.

A. Slaght, of Watford, had found the pear tree to be generally healthy, and prosper best in clay soil; they should not be too highly manured, especially with raw manures.

He named the Flemish Beauty as one of the most hardy and desirable varieties.

Thos. Keyes, of Grantham, preferred the standard pear trees, especially of the Bartlett and Flemish Beauty varieties; dwarf pear trees need good culture.

Mr. Arnold, of Paris, said that all young trees should receive good culture.

Mr. Saunders, of London, had just visited two distinguished cultivators in the United States, who advocated and practised opposite systems of pear culture. One adopts the system of no pruning—the other prunes considerably. He thought that if results were a just exhibit of the effect of the two methods, the man who pruned his trees had the advantage decidedly. This was Mr. Qninn, whose pear orchard is near Newark, New Jersey. He plants only dwarf trees, at one year old, setting the point where the bud was inserted six inches below the surface, trains the branches low, and plants only a few sorts. He gets from \$12 to \$16 per barrel in New York for the Duchesse d'Angoulême; from \$12 to \$14 per barrel for the Seckel; \$20 per barrel for Flemish Beauty; for the Bartlett, \$10 per barrel; and for the Beurre Clarigeau, \$25 per barrel. He does his pruning in the spring, about the 15th of March, and cuts the strong growers well back.

Mr. Morse, of Smithville, thinks that while the pear should have liberal culture, yet the trees can be injured by too liberal application of barn-yard manure. He uses leached and unleached ashes with good results, and has never yet failed of having a good crop of

pears.

The session having continued until nearly ten o'clock, p.m., at which time many of the members were obliged to leave for the train, the Association adjourned, to meet in Toronto at the annual meeting, to be held on Tuesday evening, the 4th of October.

Some samples of fruit that were sent by express, and intended for exhibition at the meeting, failed to arrive in time; among these, a branch of an apple tree which bears small Russet apples and large smooth apples, resembling the Vandevere. This was sent by D. Hammond, Sheridan P. O., who writes thus: "I also send for your investigation a limb bearing two kinds of fruit. I have shown it to different persons, and told others of it, but none can account for it in any way. You will see what variety the fruit is of, the large apple being the kind it bears, the russet being the mystery. If the Association can explain in any way the cause of its bearing the russet without human agency, which it certainly does, you will confer a favour. I send this last as a fact of interest that has fallen to my experience, as requested in the circular."

The several committees appointed to report on the different fruits exhibited, handed

in their reports, but there was not time to read them to the meeting.

Many reports have been received by the Secretary of the growth of the Eumelan vine. Nearly all state that it has made a good growth, and ripened its wood well; two or three state that the leaves were attacked with mildew, in which cases, of course, the wood has not been well ripened.

#### REPORTS ON FRUITS, 1870.

The Directors instructed the Secretary to send the following inquiries to some of the members located in different parts of the Province, viz.:

What varieties of Strawberry do you value most highly, and why?
 What price did Strawberries bring in your market the past season?

3. What varieties of Raspberry do you find to be most desirable, and why?

4. What is the present prospect of the Apple crop in your vicinity?
5. What price per barrel do Apples bring in your market?

6. At what price per barrel can good Pears be bought in your locality?

7. What is the price per bushel for Plums ?

To these the following replies were received:-

Mr. Luke Bishop, of St. Thomas, says that the Hooker and Wilson Strawberries have done best this year, being most productive. The Hooker found readiest sale. The berries sold during the first two weeks of the season for 20 cents per quart, but after that for 10 to 15 cents.

The Philadelphia and Naomi Raspberries do best, the former is most productive, but the latter is more prized and a more solid berry. I have found the Naomi quite as hardy as the Philadelphia. I would recommend the Naomi above all others.

The Apple crop was never better than this season, they are larger and finer than

usual. They sell for about \$1.25 per barrel, and I don't think they will be more.

Pears are not so good a crop as apples, and sell at about \$3 to \$3.50 per barrel, according to quality.

Plums sell at about \$2 per bushel.

Mr. Wm. Sanderson, of Brantford, replies, that he values most highly the Wilson, no other sort here equals it in productiveness, and it brings as high a price as any. It produces at least five times as much fruit as any other variety. They sold at from 10 to 20 cents per quart; the average price paid by the retailer to the grower was from 9 to 10 cents per quart, for the season.

The Doolittle Black Cap Raspberry is the only variety of Raspberry that has been cultivated here, and that only to a very limited extent. Other sorts are being placed on

trial. The foreign varieties are only cultivated by amateurs.

Summer and Fall varieties of Apples have been a very heavy crop, and quite a drug in the market. Winter Apples promise a crop above the average. Fall Apples are, at present, bringing \$2 per barrel for choice hand picked fruit.

Pears are too scarce here yet for quotation by the barrel. Flemish Beauty and simi-

lar sorts bring from \$2 to \$2.50 per bushel, according to quality.

Plums bring from \$2 to \$4 per bushel, according to sort.

Rev. Robert Burnet, of Hamilton, states, that he values the Wilson, La Constant, and Jucunda, the most highly of all the Strawberries with which he is acquainted, the Wilson because it is best for market, the most prolific, and most profitable. The others are good for cultivation by amateurs. They brought in the market 30 cents, 25 cents, 10 cents, and 8 cents, according to season.

He finds the Fastolff, Philadelphia, and Brinckle's Orange, the most desirable. The

Philadelphia for market, because it is productive and hardy.

The Apple crop was never better within my experience, the fruit bringing \$2.50, \$3, and \$4 per barrel, according to quality.

Pears are bringing \$5 per barrel, and choice varieties from \$8 to \$10.

Plums bring about \$3 per bushel.

Mr. W. Saunders, of London, values the Wilson Strawberry most highly, because it is by far the most productive, and when well ripened the quality is good. For highest flavour I would recommend Triomphe de Gand, Charles Downing, and Jucunda, but these are much less prolific. The early berries sold this year for 20 cents per quart. As soon as the Wilsons began to come in the price fell to 15 cents, then to twelve, and for a short time, during the period of greatest abundance, to 10 cents.

He finds the Philadelphia Raspberry to be the most desirable, because it is hardy, exceedingly productive, and of very fair quality. I very much prefer Brinckle's Orange for flavour, and in some seasons it is nearly as productive as the Philadelphia, the yield

being spread over a longer period, but it requires winter protection.

The Apple crop is very plentiful. Summer varieties, such as the Red Astracan and Early Harvest, brought, at first, \$2.50 to \$3 per barrel, but as the bulk of the crop came in the price fell to \$1.50. Good fall apples have sold at about \$1.50. Winter varieties

are held back for higher prices.

Good Pears have been exceedingly scarce, hardly any to be had in our market. Bartletts were comparatively plentiful, but our supply came chiefly from Ohio, and cost about \$5 per bushel. Good pears of home growth, such as Flemish Beauty, Duchesse d'Angoueme, and Louise Bonne de Jersey, brought from \$3 to \$5 per bushel. and very scarce at.

that. Common, coarse, seedling pears have sold from \$1.50 to \$2.50 per bushel. Good plums have brought from \$2 to \$2.25 per bushel, the common blue plums about \$1.50.

Mr. Simon Roy, of Berlin, writes that the Wilson, and Triomphe de Gand are the most valuable strawberries. The first is an excellent cropper, and the second is the best dessert variety yet introduced. The Wilson brought 10 cents per quart this season and the Triomphe 15 cents.

Wild Raspberries are too abundant here to warrant the cultivation of the fine sorts. The Apple crop is the best for the past ten years. This season apples will be very cheap, they are now (5th Sept.) selling for 25 to 37 cents per bushel.

The Pear crop is very poor this season, the trees are exhausted by overbearing last season.

What plums I have sold brought \$2.50 per bushel, and in small quantities at the rate

of \$3, that is for the finer varieties.

Common blue plums sold at 75 cents to \$1.12 per bushel, and sometimes a drug in the market at that. Damsons are not cultivated to any extent here, but are being introduced.

T. G. Vidal, Esq., of Sarnia, states that the Wilson and Triomphe de Gand strawberries are the most valuable, being good bearers and bearing carriage. The fruit brought 15 cents per quart.

Raspberries are not much cultivated. The Apple crop is very good, bringing from \$1.50 to \$2.50 per barrel, according to quality. Not many Pears to be had. Plums

bring about \$4 per bushel.

D. Caldweld, of Galt, thinks that the Wilson is the most valuable because it is the most productive. The price this year was from 9 to 10 cents per quart wholesale. The Philadelphia and Franconia Raspberries are the most desirable because they are the most hardy and productive.

The Apple crop promises to be above an average, and the fruit is bringing \$1 per

barrel. Pears bring from \$4 to \$5 per barrel, and plums \$2 per bushel.

Doctor A. Francis, of Delaware, says the Wilson is the most prolific strawberry and best for market. Strawberries bring from 10 to 25 cents per quart. The Philadelphia and Doolittle Black Cap Raspberries are the most desirable, being hardy and productive.

The Apple crop is good, the fruit fine and but little wormy or defective. They are now (8th Sept ) selling at 25 cents per bushel. In summer they bring \$1.50 to \$2, and in winter and Spring \$2,50 per barrel.

Good Pears bring from \$6 to \$7.50 per barrel, and the price of plums is from \$2 to

\$3 per bushel.

A. M. Ross, Esq., of Goderich, values most highly the Wilson and Russell Strawberries, because these varieties succeed much better than any other he has tried. There are others he writes, better in quality, but none so prolific. The Russell requires to be planted beside other varieties. The general price of strawberries this season, when the crop was fairly in the market, was 10 cents per quart.

I do not cultivate the Raspberry, the current worm has rendered the cultivation useless. There is a prospect of a fair average crop of Apples on heavy soils, on light soils the worm has nearly destroyed all the fruit. They are now selling at 50 cents per bushel, (15th Sept.) but good winter varieties generally bring after October, from 75 cents to \$1

per bushel.

Pears have not heretofore been so extensively grown as to be offered much in market by the barrel. A few are offered at from \$2 to \$3 per bushel. Plums sell from \$1 to

\$2 per bushel, they are extensively grown here and succeed well.

James Dougall, Esq., of Windsor, writes I value the Wilson Strawberry most highly on account of its great bearing and carrying qualities. Agriculturist is also profitable and bears well. Russel is large, bears well and sells high. They have averaged 12 cents per quart in this market at wholesale.

No Raspberries are grown for market, have no experience on a large scale.

The prospect of the Apple crop is poor, the fruit is generally imperfect and wormy.

Good winter apples will bring \$2 per barrel, wholesale.

No Pears grown in any quantity for market, worth from \$1.50 to \$4 per bushel, according to quality. Plums range from \$3 to \$4 per bushel from small to large, to dealers.

### REPORT BY W. SAUNDERS, LONDON, ONTARIO.

STRAWBERRIES. The crop has been a very good one. The steady winter, with its almost perpetual snow, was favourable for the preservation of the plants, and the spring and early summer for their growth and ripening of the fruit. Wilson's Albany comprised by far the greater portion of the berries offered for sale, other kinds are not much cultivated for profit. Although the quantities marketed were large, the sales were ready and brisk.

CHERRIES blossomed well, and many varieties set their fruit very finely, but in some instances the fruit dropped, or a large portion of it, before it was much more than half grown. The common red variety was abundant and cheap, and there were fair crops of Early Purple, Elton, Black Tartarian, and Napoleon Bigarreau. Cherries are not cultivated by any one here on a large scale, for, provided the crop is good, the difficulty of preserving it from birds and rot is considerable, and then the fruit is troublesome and laborious

to gather.

RASPBERRIES of the wild sort were common enough, and sold for fair prices, but the finer varieties were almost entirely wanting. Philadelphia is only just being introduced to any extent; it has, during several years' trial, stood the winter well, and borne excellent crops. Most of the finer sorts were winter killed. The summer, last year, was very unfavourable for the ripening of the wood, and the snow and frost set in so early and suddenly that but few people managed to get them covered at all; among my own only a a cane here and there survived, so the crop was very light. Black Caps are cultivated to some extent but do not meet with a very ready sale, the public do not appear to appreciate

them as they deserve to be.

CURRANTS have been scarce and dear. The worms, so destructive to the foliage, have been almost incessant in their labours this year—one generation succeeding another so rapidly, that those who resolved to fight it out with them to the end had to exercise constant vigilance, and be ever ready with hellebore in some form to give them their quietus on first appearance. Few care to take the necessary trouble, so that by far the larger portion of the bushes, both of currants and gooseberries, have been entirely stripped of their foliage, some of them twice or even three times during the season. The Gooseberry moth, too, pempelia grossularia, has been troublesome to the currant as well as the gooseberry, the larva living on the fruit, drawing the several berries in the bunch together and fastening them by silken threads, resides within the enclosure thus made, and its presence is soon manifest by the withering and shrivelling of portions of the bunch; even the black currant, which has usually been avoided by insects, has come in for a share of attention from this pest, and in my own garden the loss from this source has not been less than one third of the crop. These combined evils have materially increased the trouble of growing such fruits, and consequently enhanced their price. Gooseberries, I refer to Houghton's Seedling, have been plentiful and cheap enough, the bushes of this variety seem possessed of so much vital force that they ripen the crop pretty well, even if a large proportion of the foliage is lost, and so vigorous is their growth that the leaves are soon reproduced. Foreign varieties mildewed so badly that but few matured. Downing's seedling produced a good crop, larger than the Houghton, and quite free from mildow.

BLACKBERRIES. The larger sorts are almost unknown in this market, and even the wild ones are rather scarce, they command about the same price as the wild raspberries,

10 cents, and sometimes 12 cents, per quart.

Plums. The crop has been very abundant all through this section, the quality good, and prices low. The curculio has been less troublesome than usual, but the rot has prevailed to a considerable extent, dependent probably in some measure on the wet character of the season. It is a matter of regret that those who supply the market have not fully awakened to the advantages of growing the finer sorts; the common blue plums have been offered in larger quantities than any other variety. Those who have cultivated the superior kinds have been privileged with a six weeks feast of luscious fruit in such perfection and abundance as we rarely see.

Peaches are not much in favour owing to the uncertain character of the lives of the trees, they are so often winter killed. As a rule, those who have had any living trees old

enough, have had them well laden with fruit during the season.

PEARS have borne but poor crops Some varieties which usually succeed well, have

partially or wholly failed, for example, Louise Bonne de Jersey. Again Osbands' Summer, White Doyenne, Duchess, and Seckel, have done moderately well, but much of the fruit has been imperfect. Very few good pears have found their way to our markets, and even the common varieties have been scarce. Our Bartlett's are nearly all brought from the United States, there being no sufficient home supply.

Grapes. This has been a favourable season for grapes—no early frosts to nip the blossoms, and almost uninterrupted warm weather during the long season, so that almost every variety has ripened well. The wood has also made vigorous growth and is well matured, so that the prospects for another year are good. The crop has been on the whole good, and prices rather lower than usual. Hartfords, Concords, Delawares, and Isabellas have been all gold at about the same price viz. 7 to 8 cts wholesale and 12 to 15 cts retail.

have been all sold at about the same price, viz., 7 to 8 cts. wholesale, and 12 to 15 cts. retail.

Apples are very abundant and cheap. The earlier varieties, in consequence of the plentiful crop, did not bring much more than half the usual price—the same may be said of the fall sorts. The winter supply promises also to be abundant, but prices for these

will probably improve.

### REPORT BY A. MORSE, SMITHVILLE.

I have much pleasure in submitting the following as my Report for the year 1870:—
The season opened fair and promising for fruit, the trees having a heavy and full bloom, especially the apple, but the setting of the fruit did not equal the expectations of fruit growers, the failure is attributed to heavy showers of rain followed by strong easterly winds at the time of blossoming. Fruits are generally about two or three weeks earlier

than last year.

APPLES are somewhat below an average crop, yet the samples and flavour are quite superior to former years, Harvest apples of different varieties, and Red Astracan, are large and well flavoured, perhaps never better, and an abundant yield. Fall apples, such as Gravenstein, Duchess of Oldenburgh, Janetting, Fall Pippins, Colvert, and Sweetbough have done well. Winter apples have not done as well as earlier varieties, Baldwins and Spitzenburgs are lighter crops than some other kinds, Golden Russetts are good. Trees have grown well The codling moth is somewhat troublesome. No caterpillars or other insects have been on the trees this year.

Pears may be considered a failure, the trees blossomed well, but few of them bear fruit. The Belle or Windsor Pear, Glout Morceau, Bartlett, Sugar Pear, and White Doyenne, are nearly, or quite, the only successful ones this year. I know only one case of blight. I know one man who has a good crop, and has used ashes under his trees as manure, thinks the ashes caused the crop, while others in the neighbourhood who did not

use them have no pears.

Plums, like pears, are nearly a failure. Occasionally some Blue Plums, Green and Yellow Gages, and Imperials are found in well-tilled gardens, the quality good, but as a

crop, quite deficient.

PEACHES. This delicions fruit is yet more scarce than pears or plums. The trees

are thrifty and healthy, but little fruit on them.

CHERRIES were a very good crop, and the quality excellent; nearly all the varieties grown here have borne fruit and ripened well, and free from the attacks of curculio and other insects.

Grapes are of good size, ripened well, and of superior flavor as compared with for mer years; all varieties that have been tried here have ripened well, and are free from mildew. The season has been highly favourable to the growth and perfect maturity of the grape.

RASPBERRIES and BLACKBERRIES have been abundant wherever cultivated, but this is rather limited. The Black Cap does well. The Lawton Blackberry is grown with success.

STRAWBERRIES. The season has been favourable for the strawberry. The Triomphe de Gand, Wilson's Albany, and the Jucunda are the kinds mostly grown here, but none of them extensively.

CURRANTS and GOOSEBERRIES have been good in all cases, except where the currant worm and saw-fly worm have injured or destroyed the bushes. A large majority of people deprive themselves of these valuable fruits by sheer negligence.

A. MORSE.

### REPORT ON THE PLUM CURCULIO—(Conotrachelus nenuphar).

BY W. SAUNDERS, LONDON, ONTARIO.

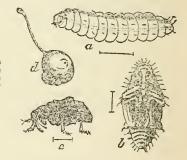
To the Fruit Growers' Association of Ontario.

GENTLEMEN,—When the Directors of this Association agreed to offer the prizes they did for the capture of Curculios, they did not, I apprehend, imagine the extent of the evil. Few would have believed that so many could have been taken in Canada as have been sent to me during the season. I have received in all 13,653.

Tarrier.	01 70 7 70 01 0			
From	George Peacock, Mount Salem, Or	ntarı	0	506
44	Wm. W. Emery, Wellington,	"		869
66	D. Culbert, St. Catherines,	66		1,016
"	Samuel H. Cornell, Arkona,	6.6		1,015
٤٤	George Cook, Bloomfield,	"		1,040
4.6	Miss Mary Anderson, East Zorra,	+6		515
6.6	F. J. Drew, Oshawa,	66		522
44	R. H. Ramsay, Cobourg,	66		1,073
"	James Cowherd, Newport,	44		1,046
6.5	John H. Eberlee, Clearville,	66		2,280
44	John McLaughlin, Tyrone,	66		849
"	Johnson Petit, Grimsby,	"		1.822
+6	J. F. Latimer, Port Stanley,	66		1,100

13,653

The accompanying figure shows the Curculio in its different stages. a, is the larva or grub; b, the chrysalis; and c, the perfect insect, all magnified. The hair line along the side of each object shows its natural size. d, shows the Curculio, natural size, working on a young plum, in which one egg has already been deposited.



It was a matter of surprise to find so few other insects sent with the Plum Curculios. I had expected to see many more beetles, resembling in size and colour the genuine article, mixed with them, but in this there was an agreeable disappointment. The Curculio is better known than I anticipated. There were a few of the pea weevil Bruchus pisi, several of a much larger Curculio Hylobius pales, a few interesting specimens belonging to the family Conotrachelus, but distinct from nenuphar, and as yet undetermined, with an odd insect or two in some of the bottles belonging to other families of Coleoptera.

I requested all the parties who had forwarded Curculios to send me notes as to their mode of procedure in capturing them, the number of trees operated on, the time of day in which the jarring took place, and whether experience taught that one time of the day was better than another. I also requested details of any observations which might have been made on the habits of the insect, with the hope of bringing something new to light. A number of replies have been received, containing information of considerable value and interest, the substance of which I shall here submit.

The mode of procedure does not vary much. One takes two sheets, and tacks a framework on one side, and two ends of each, and places one on one side of the tree, the other on the other side. Another, two pieces of cotton, six feet by twelve, with a strip of wood at each side only, the inner one wide, with a semi-circular notch cut in the centre, so that when placed together they form a circle in which the trunk of the tree is

enclosed. A third takes four large sheets, without framework, and spreads two on each side of the tree; while a fourth buys 18 yards of cotton, out of which he constructs a single large sheet, the centre stitched only half way up, so as to allow the body of the tree to pass to the middle, a strip of wood is tacked to each side to enable the operator to spread it readily. Some use padded mallets to jar with, or a bag of pea straw, or some such material, held against the tree, and struck with a mallet; others use nothing more than the hand.

Mr. D. Culbert, gardener to T. R. Merritt, Esq., of St. Catharines, sends with his 1,016 Curculios, a valuable table showing the number taken each day. He jarred morning and evening, and his results point to the evening as the best time for jarring. He says, "up to this year I have invariably found that the largest quantity was caught in the morning, but now it is the reverse. At the commencement of the Curculio season this year the nights were very cold and the days warm, which, I think, will account for it."

He commenced jarring on the 27th of May, taking in the

M	ornii	ng	29	Evenin	ıg	112	Total	141
							"	
30th,	"		165	66		112	"	277
31st,	44		0	66		99	٠	
June 1st,	66		57	66		raining	"	57
3rd,	66		0	66		71	66	71
							"	25
								45
<i>'</i>							_	

1,018

The number of trees Mr. Culbert operated on is not given.

Mr. John McLaughlin, of Tyrone, Ontario, sends 849 Curculios, which he obtained from thirty trees. He jarred them at all hours through the day, but found most in the morning, when he thinks the insect is less inclined to walk or fly than at any other time. He spent about two hours per day at the work for the first ten days, after that it only took him about one hour. The jarring was continued for three weeks, every second day. He has found the Washington plum more difficult to save than any of the others, and thinks this is a peculiar favourite with the Curculio. He is also of opinion that Prince's Yellow Gage, Columbia and Reine Claude, are less liable to attack.

Mr. J. H. Eberlee, of Clearville, Oxford, Ontario, who sends 2,280—the largest number of any—jarred twenty plum trees, ten English cherry and thirty peach, but obtained a large proportion of the insects from the plum trees. He began on the 24th of May, when the blossoms were scarcely off the tree, and the fruit just commenced to set.

May	24th,	Morning	25	Evening	25
66	25th,	"	50		66
46	26th,		66		76
66	27th,		0.0		
66	29th,	"	109		
66	31st,				

June 1st, 140; 2nd, 136; 3rd, 112; 4th, 109; 5th, 153; 9th, 210; 10th, 74; 12th, 89; 16th, 71; 17th, morning, 54; evening, 61; 18th, 96; 19th, 176. Some more were caught after this which he does not give details of. In this case also, as far as the record.

was kept, the evening catch was the largest.

Mr. Samuel H. Cornell, of Arkona, sends 1,015. He has about 26 bearing trees, which he operated on. He observed the Curculio at work as early as the 27th of May, and thinks from the quantity of fruit stung at that time, that they commenced working about the 25th. He jarred in the morning and caught 300 the first time, after which they began to decrease until they were reduced to twenty or thirty a day. He says, "after this I determined to try the evening, and caught quite a few for several evenings, until I could get no more, when I gave up the contest, well satisfied with the result. I found that at any time before 7 a.m. was a good time for catching, but after that they became very lively from the effects of the sun and disappeared. We caught quite a num-

ber about sunset, and I have arrived at the conclusion that they commence ascending the tree about this time, and work during the night or early in the morning, and begin to leave again as soon as the warm rays of the sun are felt, although I have caught a few specimens during the day." Mr. Cornell took his 1,015 Curculios in eleven days. He says he has had no fruit on his trees for two years past, but seeing the prizes offered by the Fruit Growers' Association in the Weekly Globe, he resolved to wage a war of extermination against the Curculio, and besides earning a ten dollar prize, he expects to save a crop of twenty-five bushels of plums.

Mr. R. H. Ramsay, of Cobourg, who contributes 1,073, says he caught this number of the "vile wretches" in seven days from twenty-one trees. Beginning on the 2nd of June, he took 242; 3rd, 222; 4th, 230; 6th, 72; 7th, 133; 8th, 90; 9th, 124. He has jarred successfully at all times of the day. When jarring he carries a phial with him half filled with water, into which the Curculios are put as fast as caught. His work has resulted in a good crop of plums, with which he is highly pleased. Some of the trees were so heavily laden that the branches needed propping. Mr. Ramsay thinks that a united effort among plum growers throughout the country, faithfully carrying out the jarring process for two or three years, would almost exterminate the "little Turk." Let all try it.

Mr. F. J. Drew, of Oshawa, who sends 522, took this number in five days from fifteen trees. The trees are seven years old this spring, and he thinks the crop will average two bushels per tree, all saved by jarring. He prefers the evening to the morning for the work on account of the dew. He also says that his neighbours, seeing his success, are

tapping in earnest in order to save their plums.

Mr. Wm. H. Emery. of Wellington, sends 869 Curculios. He has about 500 plum trees in all, grafted on the wild stock, fifty of them bearing this year. Among them are four wild plum trees, which he says set their fruit earlier than the other varieties, and on these the Curculios first collect, and he can usually gather from 20 to 30 from each tree at each time of jarring. In this way he decimates the enemy considerably before the more valuable fruits can be operated on. He says his neighbours have their fruit all stung and falling off, and if he had not attended closely to his, he should not have had a plum, for in consequence of the neglect of his neighbours he is obliged to look after many of their Curculios as well as his own. However, as it is, his trees are full of nice large fruit, excepting the wild plum trees before referred to, nearly all the fruit of which is stung. It takes him about three hours to go over his trees, and his 869 Curculios is the result of five times operating. He says he has destroyed about 1,500 altogether this season, but this is not half as many as he killed last year. He keeps at them at odd times till the fruit is nearly ripe.

Mr. James Anderson, of East Zorra, not having time to attend to his trees himself, persuaded his daughters to work at them, and with the stimulus of a reward from the As-

sociation in view, they jarred bravely and vigorously till they had collected 515.

Mr. George Peacock, of Mount Salem, sends 506. He says that they have been very destructive to his fruit this year, having destroyed all his plums. Every plum has one or more grubs in it, peaches one, two, or three, and that his cherries are badly stung. He

usually jarred his trees during the hottest part of the day.

Mr. James Cowherd, of Newport, who sends 1,046, obtained this number by jarring 31 trees, four of which were wild plums. The principal part of the Curculios were taken from twelve trees in full bearing. He began the jarring June 2nd, and continued it till June 22nd. Trees in the warmest and driest situations were attacked first. He observed one wild tree in a cold, damp place, from which no Curculios fell for the first five or six days, but on the last day's jarring six were taken from this tree, and none from any of the others. The result of the first two days operations, June 2nd and 3rd, were thirty each day; on the 5th and 6th, the weather became very warm; on the 6th, took 250; 7th, 140; 8th, 80. Then less every day till June 21st. Several of the trees were young and have never fruited, none were taken from these; but a few were taken from trees which had fruited last year, but were barren this season. He has been jarring his trees every year but one for ten years past, and has never failed to obtain a erop. The year he did not jar, there was so little blossom on the trees that he did not think it worth while, but the result showed that he was in error, for after stinging the few plums which set on the

trees, the Curculios attacked the cherries, destroying nearly all the Napoleon Bigarreaus, Black Heart was badly injured, American Amber a little, the Dukes about half destroyed, and besides this, some of the pears were stung. He never could see that Curculios were any less plentiful from year to year, and attributes it to the fact that they remain unmolested on his neighbour's trees, and on the wild plums, which are very plentiful in his neighbourhood.

Mr. Johnson Petit, of Grimsby, who sends 1,822, says that the greater part of them were taken on some seven or eight cherry trees (common red), and a couple of plum trees, at a distance from the house, those in the garden and near the house giving but few. The jarring was begun in the latter part of May, before the Curculio commenced puncturing the cherries, and kept up until the middle of June, though not very regularly towards the last, as he got but few at a time. The greatest numbers were taken in the beginning of June, the first three evenings he got 900, after which they gradually became scarcer. They were all taken in the evening, as this was the only convenient time for him to operate. Towards the last he got more from the peach trees than the cherries.

J. F. Latimer, of Port Stanley, who sends 1,100, obtained his from a few large plum trees in his garden. By attending to the jarring regularly, he saved a fine crop of plums,

which would otherwise have been destroyed.

These packages of five hundreds and thousands coming in day after day, through the season, somewhat astonished me. I knew that the large fruit growers in some parts of the United States could catch the Curculio by the 500 or 1,000, but I had no idea that they were so abundantly distributed throughout Canada. I operated in my own garden on fifteen trees regularly, occupying me about half an hour each day, and never captured more than eight at any one time, collecting during the season not more than 100 in all, and this I thought was doing pretty well, but when compared with some of the results just given, where two or three hundred or more have been taken in a day, it appears trifling indeed, and clearly indicates that there are worse places for plum raising than the neighbourhood of London. Probably they may be scarcer than usual with us this year. I believe this opinion is general among our fruit growers. It would be matter for devout thankfulness were this diminution in their numbers to continue to final extinction—we could well spare the creature, but this we need not hope for, so we must fight on. The efforts of our Association this season have awakened a general interest in the subject all over the country, and the jarring process has been brought prominently before the minds of every one interested in the matter, and resulted, doubtless, in the destruction of a much larger number of these injurious insects than we are at present aware of. Besides the results will, no doubt, be lasting, for those who have saved their crop of plums for the first time this year, will not need the stimulus of a bonus to set them at work another season.

I shall now refer to some experiments of my own on this insect which will, I hope, add something to our knowledge of the creature's habits. I had seen it stated somewhere that the Curculio was active at night, and I had also seen the idea ridiculed, and being somewhat sceptical on the point, resolved to test it. Accordingly I went out about midnight with lantern and sheet, and on jarring one tree down came two Curculios, and from another tree one. Whey they drop to the ground from jarring in the day time, they usually remain motionless for a good while, feigning death. But there was no shamming about these creatures taken at this time of night, for they commenced to run about at once on the sheet, and fearing they would fly they were quickly transferred to a pill box. They were then taken into a room where there was a lamp burning, when on opening the box one of them at once took wing, attracted by the lamp and flew around the light. Thinking this activity might be due in part to the stimulus of a bright light, I placed them in a dark room for a while, and then approached them with the faintest glimmer of light, just enough to enable me to see them, when I observed them running about very quickly, faster than I have seen them move in bright daylight. This ended the experiments for that time, and the insects were closely shut up in a box for safety.

The next night the operation was repeated, and two Curculios taken from one tree as before. These manifested just the same symptoms of activity as their predecessors, and along with them (now five in all), were put into a box having a glass lid, with a small branch from a plum tree having five plums on it, each one of which had been carefully

examined and found quite free from puncture or bite of any sort. The box was placed in a darkened room and covered with a black cloth, so arranged that no light could possibly penetrate until its removal. Early in the morning the cloth was suddenly taken away, and two of the Curculios found working on the plums, while the others were quiet or leisurely walking around in other parts of the box. The branch was at once taken out and examined. Plum No. 1 had a puncture at the tip, hollowed out so that the skin was getting black; No. 2 was in the same state, with a second large puncture in the side; No. 3 had two punctures on the top, one large and one small one; No. 4 a small puncture near the base of the stem, while in No. 5 four eggs were deposited, and it was also punctured in four places, one of the punctures being very large, deep and crescent shaped, a second quite shallow, barely through the skin. I observed that they were much less active in the morning than at night.

Being anxious to see how they would do their work in the day time, another branch was cut with sound plums on it a little before noon, and placed in the box with the same insects. When exposed to the sunlight they were nearly as active as in the night, occasionally flying around the box inside. They were left exposed under a slight shade afforded by a small tree, and examined at noon, when it was found that two eggs had been deposited, this was within an hour from the time of their exposure. Again it was examined early in the evening, when the number of eggs deposited had increased to nine, and a great many punctures had been made on different parts of the fruit where the Cur-

culios had been feeding.

These experiments, I think, clearly prove that they work in the dark as well as in the light, feeding and depositing eggs at night as well as in the day time—that is during the warmer parts of the season, for it should be observed that at the time I operated the

nights were quite warm.

With regard to the best time for jarring, experience leads me to believe that the evening is preferable, provided the work is not undertaken too early, say about sunset; or if it is done in the morning, the earlier the better. I will give you a little incident connected with evening jarring. Having just observed a Curculio drop on the sheet where I was at work, and having a few minutes to spare, I resolved to watch to see how long the creature would feign death. For half an hour a careful scrutiny was kept up, during which time it did not move a muscle. How long it would have continued in this state is uncertain, as I had no more time to devote to the experiment just then, an attempt was made to pick the Curculio up, when as soon as it was touched, it began to run vigorously. While watching this specimen another was observed on a low, outer branch of the same tree, which the slight previous jarring had failed to bring down. It remained quite still for a good while on the branch, then walked a few steps, stopping a while again and so on, during the half hour it did not progress more than two inches in all. An attempt was now made to see if shaking would bring it down on the sheet. Beginning lightly the shaking was increased in rapidity every time, until it became quite violent, much more so than any large tree could be shaken, but it maintained its hold on the limb, and became more active between the intervals of shaking. Being satisfied that shaking would not do, jarring was tried, when a single tap brought it to the ground.

A new method of capturing the Curculio has lately been brought into notice by Mr. W. B. Ransom, of St. Joseph, Michigan, which promises to be of great service, although not likely to supersede jarring entirely. Most of the insects, it is believed, pass the winter in the ground either in the larva or chrysalis state, awaking to life during the first warm days of spring. During several weeks, while the weather is chilly and changeable, they are fond of taking shelter in any convenient hiding place. Taking advantage of this habit of theirs, it is proposed to set traps for them. Having made the ground quite smooth and clean for several feet around the base of the tree, place a few pieces of bark or chip, or what is better, pieces of shingle close around and against the trunk of the tree. These will afford convenient hiding places, and under them the Curculios take refuge, and if turned over any time during the day the insects may be found attached to the under side, when they are easily caught and destroyed. In this way Curculios have been taken by the thousand in Michigan in a single day, and as it is a method involving much less labour than jarring, its adoption is likely to become very general. The proper time for

the employment of this method is from the opening of spring till about the first week in June, turning over the traps once or twice every day, and picking the Curculios off and destroying them. C. V. Riley, Esq., State Entomologist of Missouri, who has thoroughly investigated this subject, and from whose valuable reports some of the information here given is obtained, recommmends pieces of new shingle in preference to any thing else, since the Curculios adhering to these would be so much more readily seen. Mr. Ransom, however, prefers small pieces of oak bark, placed close around the tree, with the inner or concave side to the ground. After the first of June the old jarring process should be vigorously resorted to, indeed it might be well to commence even sooner than this, as the heat of the weather in some seasons might predispose them to discontinue their hiding habits earlier than in others. The use of both methods together, which could be easily worked, would make sure work of the enemy, and would, we think, insure good crops of plums in any and every district, no matter how badly infested with this pest.

There is still another method which I wish to refer to, and although it has been sometimes ridiculed, is worthy, I think, of further investigation. I refer to the tying of bottles of sweetened water, or other attractive material, to different parts of the tree. I have no personal experience in this, but I learn from a correspondent who has resorted to this method alone for several years, that he invariably has a good crop. Different liquids have been recommended, such as weak vinegar and sugar, a little sweet wine of any kind, such as myatt or currant, or a mixture of beer and water sweetened with molasses. The bottles are partly filled, and tied to the tree with their mouths close to the main limbs, especially where the branches fork. The theory is that the insect in crawling up the tree, which is probably its usual mode of ascent, is attracted by the odor of the liquid, crawls into the bottle and is drowned. My informant tells me that he has captured a great many Curculios in this way, but never having had the opportunity of examining the contents of a bottle which had been thus exposed, I cannot vouch for the correctness of the testimony. No doubt many other insects would be captured besides Curculios, and we might possibly destroy many of our friends as well as foes. Still the method is worthy of further trial, and as it is easily carried out, I should be glad to receive next season from different parts of the country, the contents of such bottles for examination.

#### PRIZE ESSAY—AWARD.

To the Directors of the Fruit Growers' Association of Ontario.

The committee appointed to render judgment upon the essays on small fruits, have had placed in their hands three essays, with the following mottoes, viz.:

First. "In labor there is profit."

Second. "Whatever tends to promote production, increases the wealth of any nation."

Third. "Poma mitia;"

and now beg to report their award.

In their opinion, they are confined to the consideration of the two first mentioned essays, since the third, bearing the motto "Poma mitia," contrary to the resolution offering a prize to the best essay on the raspberry, blackberry, strawberry and currant, treats only of the strawberry.

After a careful perusal of the two essays first above named, the committee have decided to award the first prize to the essay bearing the motto, "In labor there is profit," and the second prize to the essay endorsed with the motto, "Whatever tends to promote

production, increases the wealth of any nation."

The committee desire to express their opinion of the great merit and excellence of the essay to which the first prize has been awarded, and earnestly recommend its publication, and a careful perusal of it by the public.

We beg to submit this award.

Given at Hamilton, this 21st day of February, 1870.

W. H. MILLS. ROBERT BURNET. W. HOLTON.

#### SECRETARY'S REPORT.

To the Directors of the Fruit Growers' Association of Ontario.

Gentlemen,—I have this day received the award of the Committee appointed to read the essays that had been received in competition for the prizes offered by this Association, and to adjudge the prizes; and therefore I have proceeded to open the envelopes endorsed with the mottoes to which prizes were awarded, and find that the envelope endorsed with the motto, "In labor there is profit," contains the name of William Saunders, Esq., of London; and the envelope bearing the motto, "Whatever tends to increase production, increases the wealth of any nation," contains the name of David Nichol, Esq., of Cataraqui, Kingston.

Your ob't servant,
D. W. Beadle,
Secretary to Fruit Growers' Association of Ontario.

PRIZE ESSAY ON THE RASPBERRY, BLACKBERRY, STRAWBERRY AND CURRANT.

BY W. SAUNDERS, LONDON, ONT.

#### THE RASPBERRY.

Our improved varieties of raspberry have all originated from two or three wild native or foreign species—the European sorts chiefly from "the European Raspberry" (Rubus idaus)—our own from the common wild red raspberry (Rubus strigosus), and the black raspberry (Rubus occidentalis). These have been improved chiefly by cultivation, selection, and hybridization, or crossing. A number of plants have been raised from seed, and from these the most promising have been taken and cultivated; when fruited, fresh seeds have been obtained, sown, and subjected in turn to the same process of selection; or a hardy variety, lacking flavour, has been crossed with a tender, high-flavoured sort, with the intention of raising from the resulting seeds, plants inheriting the hardiness of the one, and yielding fruit possessing some portion of the delicate aroma of the other.

* [In pursuance of this latter method, we obtained during 1869, ten or twelve berries, more or less perfect, of Philadelphia crossed with Brinckle's Orange. The Philadelphia was taken as the female—the Brinckle's Orange as the male. The crossing was attended with great care, and every precaution taken to exclude any subsequent influence from either atmosphere or insects, so that we are satisfied that the cross is a genuine one. The seed was sown in the fall and the plants obtained this season 46 in all, present very marked differences in foliage and habit—some having the dark reddish wood, and comparative freedom from thorns of the Philadelphia, while others have the light colored wood and thickly set thorns of the Brinckle's Orange, and there are some with these characters blended. We hope when the fruit appears, that some of them will prove valuable.

The soil best suited for the raspberry, and indeed for all the small fruits to be treated of in this essay, is a rich, moist, deep loam, inclining to clay rather than sand, well drained and thoroughly worked, either trenched with the spade, or ploughed and subsoiled as deeply as possible. Such working, and, where the land has been at all previously exhausted, a liberal manuring, will place it in good heart to give strong growth to the plants placed in it. Individuals who are not favoured with such suitable soil may still grow good crops of fine fruit, even if the soil be very light and sandy; but in this case a far more liberal and continuous manuring will be needed, for the raspberry is a great feeder. It is useless to attempt to grow this, or any other of the small fruits we shall treat of, in a cold, wet soil, for no amount of preparation short of thorough draining will remedy this defect.

285

^{*} The paragraphs enclosed in brackets, are additions to the original essay, suggested by the experience of the past season, and added to make it more complete.

With regard to the proper distance for planting, a difference of opinion exists; some-advocating that the rows be placed four feet apart, others six feet or more. Where land is abundant, six feet, we think, is little enough, as this allows room for plenty of air and light, and also provides for horse culture, which is a matter of considerable importance where a large piece is under cultivation. For similar reasons, in such a case we would advocate the placing of the plants four feet apart in the rows, rather than two, as this would allow of horse-culture the other way; for we are satisfied that there is nothing will tell so well on the health of the plants and abundance of the crop as a frequent stirring of the soil. Where land is scarce, as in the garden of the amateur, and it is desirable to crowd as much as possible into a small space, the rows may be reduced to three or four feet apart, and the plants from one to two feet in the rows, with fair results.

The red raspberry is propagated by suckers, which usually spring up in abundance from the roots of the plants as soon as they obtain good foothold in the soil. Some varietics sucker less readily than others—the Philadelphia, for example. Where it is wished to increase this propensity, a sharp spade should be thrust down into the soil all around the plant, to sever the roots, say a foot or less from the base of the plant, when the pieces of root thus cut remaining in the soil will usually throw up young plants in com-

parative abundance.

The black raspberries do not send up suckers, but are propagated by layering the tips of the canes. In the autumn, the extremities of the canes lengthen much, become drooping and slender, finally touching the ground, and from this point sending out a mass of fibrous rootlets, soon developing, when undisturbed, into a vigorous plant; this, when

well rooted, is severed from the parent by cutting the cane.

The spring is the proper time for planting; then the well-rooted suckers or tips are dug up, and transferred to their place in the new plantation, taking care not to expose the roots unnecessarily to drying winds or the heat of the sun. The rooted tips require no preparation in planting, but the stems of the suckers should be cut down within a few inches of the ground, so as to induce a strong shoot from the base for next year's fruiting. It is very unwise to attempt to obtain any fruit from raspberries the first year planted; with care, a few berries may be ripened, but the fruiting process is an exhaustive one to the young plant, and it will often take years to recover from this foolish tax on its then limited resources. If the plants become well established the first year, a certain amount of fruit may be allowed the second without injury to the future prosperity of the planta-

tion, but a full crop need not be expected until the third or fourth year.

Pruning.—Canes which have once borne fruit, bear no more. Hence, these should be removed as soon as the fruiting season is over-cut off close to the ground, so that the young canes may have more room and air. At the same time, due regard must be paid to the thinning out of the new canes, removing all that promise to be weakly or slender. Since we depend on the strength of the current year's growth of wood for our next year's crop, any process which will conserve the vigour, and concentrate the energies of the young plant, is deserving of regard. Summer pruning and pinching we deem a valuable means to this end. The young plant, when it has attained the height of about three feet, should be pinched off at the tip; this will cause the side branches to develope, which, in turn, should be subject to similar treatment when from six to eight inches long, This pinching should be repeated, if necessary, but should not be continued too late in the fall, since it would cause a late growth of tender wood, which would suffer during winter. It might be practised safely enough till about the beginning of September, and any subsequent growth not wanted might be removed by a light spring pruning. This method we regard as much less wasteful than that of allowing the summer's growth to proceed unchecked throughout the season, and then prune back in the spring to a proper height. By this latter method the plant is allowed to waste its strength in the unnecessary production of wood which must be removed, and the growth is often long and slender; while in the former case all its energies are concentrated in the development of a stocky, wellripened cane, far better fitted to bear its destined weight of fruit the ensuing season. This treatment is equally applicable to the Black Caps, unless where it is desirable to raise new plants; then the natural extension of the cane, or portions of it, must be allowed.

Manures.—It is universally conceded that stable manure contains all the elements required to recuperate the soil, stimulate the energies, and increase the vigour of growing plants, and since this is probably readily obtainable by all our readers, we shall not enter into the subject of special manures. Stable manure should be well rotted before being used. If spread out in flattened heaps, about three feet deep, in fall or spring, and turned over several times during the summer following, keeping it properly supplied with moisture, it will be in good condition in the fall to apply to growing plants, and a small quantity thus well prepared will be found more than equal in its effect to a much larger quantity of such as is coarse, and only half decomposed. In this latter condition, however, it often serves a good purpose, as a mulch, to protect the roots either from the severe tax of a summer's drought, or the pinching cold of winter.

Picking and marketing fruit.—Women and children are usually engaged in picking berries, and paid either by the day or quart, most commonly the latter; the price averaging about one cent per quart. The pickers take to the grounds with them the quart wooden boxes in which they are to be shipped, and when they are filled, carry them to a shed, or other suitable place near by, where they are enclosed in well-ventilated cases, holding from thirty to sixty quarts. The pickers receive tickets corresponding to the number of boxes they bring in, which are produced when the time for payment arrives. All small fruits should be gathered carefully, free from leaves and other dirt, and also free from unripe berries. The pernicious practice resorted to by some, of placing a few fine specimens on the top of a box, while below the fruit is inferior, should be carefully avoided. Such a course disgusts both dealer and consumer; the surface should fairly represent the interior. In some localities, where large berries are appreciated, it would doubtless pay to select the fruit, separating what is extra fine from the small and inferior; this applies particularly to strawberries; the latter would have to be sold at a reduced price, but the selected fruit would command a figure very much above the average, and the whole might thus be made more profitable. In all cases, growers should avoid mixing their fruits; an assorted package, even if some of the varieties are superior, will seldom sell as readily as one the contents of which are uniform. All imperfect fruit should be rejected; half a dozen of such in a box will attract the attention of a purchaser far more readily than twice that number of extra good specimens. The best policy is to consign such to the pig-pen or the manure-heap; reputation for quality is quite as valuable to the fruit grower as to any man in any other department of business.

Varieties.—These may be conveniently divided into three classes. 1st. Such red or yellow raspberries as are tender, and require winter protection; suited chiefly for amateur culture. 2nd. The hardy varieties, including some new ones claimed to be so, but as

yet unproven in Canada. 3rd. The black raspberries.

Brinckle's Orange.—Of all raspberries we regard this as the finest. Its flavour, aroma, and appearance are equally charming and delicious. It is large and of a beautiful orange yellow colour, and its full and slowly maturing crop supplies the table of the grower with a daily portion for three or four weeks. We think this variety might be grown with profit for a near market, but it is too soft to bear shipping far. In most parts of the country it would need winter covering; but in some of the more northern sections, where the snow lies deep and unbroken throughout the winter, if pruned low this would probably be a sufficient protection. In localities less favoured in this way, the canes might be allowed to grow moderately long, bent over as closely to the ground as possible without breaking, their tips covered with earth, and some loose litter—pea straw or light manure—thrown over them. The expense of covering an acre in this way would not be very great, and we think that the additional price the fruit would bring over any other variety, would more than compensate for the extra labour.

Franconia is a large red variety of fine appearance and flavour, and very productive. In the milder portions of Canada, the Niagara district for example, it is hardy enough to stand most winters without injury, but it cannot be relied on in other sections away from the influence of the lakes. With me it has proved quite as tender as Brinckle's

Orange.

Hornet.—This is a still larger red fruit, very productive and of good flavour. Besides these we may enumerate the Fastolff, Belle de Fontenay, Red Antwerp, French, and Marvel of Four Seasons—all good varieties.

We now come to the second class, embracing those which will endure uninjured the

cold of winter without protection.

Philadelphia—Of all the hardy varieties this has been most widely tested, and maintains its character for hardiness and productiveness every where. It is dark red, medium to large in size, moderately firm, but very deficient in flavour, not equal we think in this respect to the wild fruit. We doubt very much whether this variety will pay for cultivation in localities where the wild fruit abounds, for although larger, it would necessarily be brought into competition with the native variety, and would hardly sell at a much higher price. A great deal would depend on how it was marketed.

[During the past summer, we have fruited Philadelphia on a larger scale than heretofore, and have found it superior in flavour and larger in size, which might partly be due to the season, but more, we think, to increased strength and greater maturity in the plants—we liked them well, and feel disposed to modify the views expressed above, as to the probability of their producing a paying crop, for their yield has been enormous, and

the fruit we know from its appearance, would have sold readily.]

Yellow Canada, and Arnold's Red are two seedlings raised by Mr. Arnold, of Paris, Ont., which promise well. They are undoubtedly hardy, and are said to be very productive. They deserve fair trial, and we hope they will prove to be a valuable acquisition. Mr. Arnold merits great praise for his many efforts to improve our fruits.

Clarke—This new variety is highly esteemed in many parts of the United States on account of its hardiness, but we believe it has not yet been subjected to the test of our Canadian winters. The fruit is said to be large, light crimson, sweet and highly flavoured.

It is doubtless worthy of being tested.

Naomi—Much is said in favour of this new variety. In size and quality it is good, but it is doubtful if it will sustain the character claimed for it by its originator for hardiness.

Class 3rd—Black Raspberries—The Doolittle Black Cap has been well tried throughout Canada, and has proved hardy and prolific. The berry is moderately large, black,

with a slight bloom, sweet, juicy, and similar in flavour to the wild black cap.

Mammoth Cluster, introduced to public notice by Purdy & Johnston, of Palmyra, N. Y., is doubtless an improvement on the Doolittle, being larger and more productive. We hope this berry will be extensively tried. Its period of ripening is just after the Doolittle.

[The Mammoth Cluster has fruited with us the past season, and we have found it all that it has been represented. It stood the winter well, and produced a large crop of

fine fruit. The berries larger and more juicy than the Doolittle.

Negley's Ever-Bearing.—This berry has been brought under the notice of our Canadian fruit growers during the past season, by Charles Arnold, Esq., of Paris, Ont. Originally from the United States, it has proved hardy and very productive in Canada. The fruit is large, nearly the size of the Mammoth Cluster and of good quality. It also bears a second, though smaller crop, late in the season—we hope it will be widely disseminated.]

Davison's Thornless is another new claimant for public favour, ripening about a week earlier than the Doolittle. The absence of thorns on the canes will be of great

advantage in gathering the fruit.

Golden Thornless is a new yellow raspberry belonging to the same family, is nearly if not quite as large as the Mammoth Cluster, firm in texture, of handsome appearance, but deficient in flavour.

Although we have now enumerated many varieties, all of which possess some good points, we still feel that they all have their defects. We want a raspberry that will combine the good qualities—hardy, productive, large, juicy, moderately firm and high flavoured. Whether we shall ever attain to this degree of perfection, time alone will disclose. We sincerely believe it to be possible, and trust that the many labourers who are working to produce new varieties will never relax their efforts until something near this desired end is obtained.

Dr. Asa Gray, in his Manual of Botany, speaking of the black and red raspberries, says. "Some curious forms are known, with fruit intermediate between these." We are not aware of any such in cultivation, but the fact of their being met with in a wild state,

would suggest the idea of a natural crossing of these two through the agency of insects. Might not some valuable varieties be similarly produced by the more intelligent workings of man? Here is an almost unexplored field for the enthusiastic fruit grower.

[During the summer, we have succeeded in crossing the Doolittle with the Philadelphia, and have sown the seed thus obtained, which seemed perfectly good. Should they germinate as they promise to do, we shall watch with interest the growth and habits of

the plants.

Insects—The raspberry is not without its insect enemies. A borer, the grub of a long horned beetle (Oberea tripunctata) burrows its way up and down the middle of the cane, weakening and destroying it. The beetle girdles with its jaws the new cane not far from the tip, in two places, one ring an inch or more below the other, and between these, in a puncture, the egg is deposited, which soon hatches into a grub, furnished with powerful jaws, and which at once enters upon its destructive career. The tip above the upper ring on the young cane withers and droops, by which the presence of the enemy may be readily detected. The operations of the parent insect begin early in July, and continue for several weeks. By looking through the canes occasionally at this season, and removing all the withered tops, down to the lowest ring, this insect may be pretty well subdued, as it is never abundant. The worm lives in the cane, and undergoing its transformation there, appears as a beetle the following June.

[A closer examination into the cause of the girdling of the cane as described above, shows that it is not always due to the beetle referred to—viz: Oberea tripunctata. Indeed, we now think it is doubtful whether that insect ever girdles the cane as described. We know that it does destroy the raspberry canes, for we have found its larva late in the season boring down the middle of the stem; but at the suggestion of Mr. Riley, State Entomologist of Missouri, we have carefully examined a number of these examples of girdling duing the summer, and found in every case, that they were the work of an Orthopterous insect—one of the grasshopper family, which girdling and puncturing the cane as already detailed, deposits a single large, long yellow egg in it, which, when hatched, produces an insect at once similar to the parent, but without wings, which works

its way out of the cane to enter it no more.]

A much more troublesome pest is the grub of the raspberry sawfly (Selandria rubi), a green worm covered with short green spines. This eats out the soft parts of the leaves, leaving the skeleton frame-work of tougher veins. There are two broods during the year. The fly deposits its eggs early in spring, on the under side of the young leaves, soon after they begin to expand, where they speedily hatch, and in a few weeks become full grown worms, about three-quarters of an inch long. Entering the chrysalis state, just below the surface of the earth, they appear again by the middle of summer as perfect flies, deposit their eggs, and from these the second swarm is produced, the survivors of which pass the winter in chrysalis under ground. Hellebore is a sovereign remedy here; an ounce or so mixed with a pail of water and showered on the bushes with a watering-pot makes short work of them.

The tree cricket (*Ecunthus niveus*) is another enemy—a green, active, grasshopperlooking creature, appearing late in the season, and chirping merrily among the
green leaves all the day. The female has a long ovipositor, which she thrusts more than
half way through the cane, and by means of which she introduces her long yellow eggs.
A row of these, placed closely together, and occupying perhaps an inch or more of space,
so weakens the stem that it readily breaks from its own weight as soon as the foliage
appears in spring, and thus the crop is lost. We know of no method of destroying these
as ready as that of cutting the affected portions out, and burning them sometime between
fall and spring. They are readily discovered, appearing as a short seam with lit le
raised dots on it.

#### THE BLACKBERRY.

Much that has been said about the raspberry applies equally well to the blackberry. The methods of raising new varieties—the soil and its preparation, proper distances for planting, propagation by suckers, time of planting, pruning, and insect enemies all apply here, and need not be repeated. It remains then only to treat of the varieties in cultiva-

19 289

tion. These, like the raspberry, have originated from our wild sorts, of which there are

five or six species.

Lawton or New Rochelle, a very large juicy berry, moderately sweet when fully ripe. This variety has been tried in many parts of Canada, and usually proved a failure. The canes will not stand the winter, and their growth is too robust and thorny to admit of their being laid down for winter protection.

Wilson's Early—A new variety, said to be hardier than the Lawton, a very large, oblong, oval, firm, sweet berry, ripening earlier than the other varieties—will be a great

acquisition if it will endure our winters.

Kittatinny—Also recently introduced to notice, and reported to be very hardy. Fruit large to very large, sweet and firm, a good grower, very promising, and should be extensively tried.

Sable Queen—This fruit was first offered to the public last year; it originated in Massachusetts, where it has stood the winters for some years. The fruit is fine looking,

and will doubtless be widely tested.

[A plant of this variety, stood the test of last winter with us, and came out perfectly hardy. As we had occasion to transplant it in the spring, we could not judge of the fruit.]

#### THE STRAWBERRY.

All our large and luscious strawberries, which charm the eye and delight the palate, have had their origin also in the wild vines of the woods. These wonderful changes have been brought about, too, by selection and hybridization, man assisting nature, as it is always his happy privilege to do. New varieties have thus been multiplied, until now their number is almost confusing.

Soil such as has been described as suitable for the raspberry is equally good for the strawberry, for although the wild vines are often found luxuriating in arid sandy spots, yet no fruit shows in grateful growth a readier appreciation of generous treatment than the strawberry. The richer the ground the heavier the crop, is a safe rule to go by, to

any reasonable extent.

The vines are usually planted in rows, two, three, or even four feet apart, with the plants set a foot apart in the rows. The wider distances are required when it is intended to use horse culture. The runners are cut off as fast as they appear, and the ground kept free from weeds. Before winter sets in, it is well to cover the entire surface with straw or other litter, removing it only from the crowns of the plants in the spring, leaving it all on the ground until the fruiting season is over, as it will help to keep the earth moist and the fruit clean. After the berries are all picked, it will require removal and the ground well weeding and pulverizing, since it will have become very hard by the continuous tread of the fruit gatherers. The plants may be renewed after two crops have been taken by allowing the runners to spread over the surface, and plough under the old plants and nearly all else, leaving only a narrow strip of young plants every three or four feet. The ground after ploughing may be levelled with a cultivator.

The plants should be carefully set, not thrust into a hole with the roots compacted into a bundle, but in a natural position. Much of the success of a plantation will depend on proper attention to this point. Unless the vines can be got out quite early in the fall, so as to be well rooted before the winter, we prefer spring as the season for planting. There is not much gained in point of time by late fall planting, and the plants are very

likely to be injured by the severe frosts of winter.

Varieties.—We think it is generally conceded that there is only one variety as yet in common cultivation which will really pay to cultivate for market purposes—that is, the Wilson's Albany. Every large producer in the country depends on it for his main crop. It is true, when compared with some other varieties, it is acid, and lacks flavour, but when well ripened it is not so far behind in these respects as some would have us believe. For our own part, we can eat Wilson's Albany, when we can get them, without making a wry face, and the general public seem to regard them with equal favour, judging from the immense quantities which ever find a ready market.

Many other varieties claim the attention of the amateur, some for their delicate

flavour or aroma, others for their immense size, but none of them, in my experience, come near the Wilson for productiveness. The following list embraces nearly all of much. merit:—Jucunda, Agriculturist, Bishop's Seedling, Nicanor, Charles Downing, French, Ida, Downer, Hooker, Green Prolific, Golden Seeded, Ladies' Pine, Russell, La Con-

stante, Trollope's Victoria, and Triomphe de Gand.

The strawberry has not usually been much afflicted with insect pests. Occasionally the crop will be partially destroyed in some particular field by the ravages of cutworms, the caterpillars of some of our common moths or millers, or by the grub of the cockchafer or May beetle. But of late two new enemies have appeared upon the scene which demand a few remarks, since, should they become generally troublesome, the profits of the strawberry crop would be much diminished. One of them is a leaf-roller, a small green caterpillar which rolls up the leaves and fastens the opening blossoms into a ball with silken threads, and living within consumes them. These are the progeny of a small yellowish moth, who lays her eggs upon the plants quite early in the spring, so that the caterpillars become nearly full grown, and capable of most mischief, just at the time when the plant is coming into full flower. On one patch we examined the past season the damage from this cause alone would be moderately computed at half the crop. We have also observed this insect in several localities on the wild strawberry. The other is a borer, the issue of a still smaller brown moth, who lays her eggs on the crown of the plant late in July or early in August, which soon hatch into small reddish caterpillars, which burrow through the heart of the plant in various directions, through the fall and winter, either killing it outright, or weakening it so much that it sends up in spring only puny barren shoots from about the base. Late in May, when the leaf roller is active and full of mischief, this twin brother in the work of destruction sleeps quietly in chrysalis, appearing in the winged state about the middle of July. The following remedies are suggested—Dusting with fresh air slaked lime, or with soot, or watering with hellebore, mixed as for the currant worm. These would certainly be of service, but whether they would singly or jointly entirely meet the case is a matter of doubt.

### THE CURRANT.

Of these we have red, white, and black, varying in foliage and fruit and time of ripening, all requiring a rich soil, well worked and manured, to produce fine crops

of large fruit.

They may all be propagated by cuttings, which are best made in the fall, tied in bundles and buried under ground during winter, and planted in spring. The young bushes of one or two years' growth should be planted out in rows, from five to six feet apart, and four feet in the rows. The pruning and management of the red and white currant is somewhat different from that required for the black. The fruit of the former is mainly produced on wood that is two or three years old, hence in pruning the new wood may be shortened considerably to induce the formation of strong fruit spurs; in the black variety the fruit is produced from one year old wood as well as from small spurlike shoots from the older, which should be borne in mind in pruning, so that a sufficient amount of wood of last year's growth be left to insure a full crop of fruit. In both cases a portion of the old wood should be removed from time to time, as as well some of the shoots or suckers, when they are likely to become crowded, so as to keep the head open and admit light and air to the centre of the bush. The stool or bush form is the natural mode of growth for the current, and is less trouble, and, we believe, far better than the method sometimes recommended of growing in tree form with a single stock. The chief objection to the latter is that should the currant borer visit this single stem the bush is lost, for the small hollowed trunk would necessarily break from its weight of foliage.

Varieties—The following are some of the best in cultivation.

Red Dutch—Fruit large, deep red, rich and good, bunches long and tapering, a vigorous grower and very productive, an old and well known sort.

Victoria-Fruit large, bright red, acid, but of good flavour, bunches very long and

tapering, very productive.

Cherry—Fruit very large, dark red, acid, only second in quality, bunches vary much in size, this is the largest red currant in cultivation.

Versailles—Very closely resembling the Cherry, by some thought to be identical.

Prince Albert—Fruit large, bright red, rather acid, not rich in flavour, very produc-

tive, later than most of the other varieties, for which it is chiefly valued.

White Grape—Fruit large, yellowish white, transparent, juicy, moderately sweet and rich, bunches medium size, habit vigorous, very productive, the best white currant.

White Dutch—Fruit very similar in appearance and quality to the White Grape,

but somewhat smaller.

Black Naples—This variety has now almost entirely superseded the old English black. It is very large, black, sweet, with a peculiar musky flavour, bunches medium

size, loose, a vigorous grower and productive.

Insects—There are several insect enemies, affecting chiefly the red and white varieties, with which almost every currant grower has to wage continuous battle, and so troublesome have they become of late that the culture of these valuable fruits has been sadly interfered with, many having given it up almost in despair. First in its destructive powers we should place the currant borer, a small whitish grub with brown head and legs, which lives in the stems of the bushes, burrowing up and down, making them so hollow and weak as to be liable to break with every wind. The parent of this worm is a pretty little clear winged moth (Egeria tipuliformis) something like a wasp, with three gold bands across its body. The moths appear about the middle of June, flying in the day-time only, depositing their eggs singly near the buds, where they soon hatch into small worms, which eat their way to the middle of the stem, and there enter on their career of destruction. When mature they are about half an inch long; they live in the stems through the winter, change to chrysalis early in the spring, appearing as moths in June again. These can best be kept within bounds by carefully removing in spring every stem found to be hollow, and burning it.

The caterpiller of a geometric moth (Ellopia ribearia) called a measuring worm, feeds on the leaves, when numerous stripping the bushes bare. Its colour is yellowish, dotted with black, with its sides streaked with white. It is about an inch long when full grown, and has its feet placed at each extremity of its body, so that in moving it loops itself up at every step. The moth from which this worm is produced is a delicate looking creature, measuring about an inch across the wings, which are yellowish in colour, spotted with pale brown; the spots being arranged into one or two irregular bands extending across the wings. The eggs are usually deposited in May, but sometimes later. The worms are found during the month of June, and occasionally in July. The best remedies

are hellebore and hand-picking.

The Gooseberry Saw-fly (Nematus ventricosus) also deposits its eggs on the currant leaves, and proves usually a much greater pest than the measuring worm. The perfect insect is a small fly nearly as big as a common house-fly, which appears early in spring, and deposits its eggs along the ribs on the under side of the new leaves as soon as they are sufficiently expanded. These speedily change to small green worms dotted with black, which at once begin to devour the leaves. They grow rapidly and are often so numerous as to strip a bush entirely bare in a few days. When fully grown they are about three fourth of an inch long, and at their last moult lose their black dots, appearing in uniform pale yellowish green. They spin a small, tough, papery-looking cocoon, sometimes at or under the surface of the ground, at other times attached to the leaves or stems of the bush, from which the perfect insect escapes early in July. There are two regular broods during the season, and often a few odd specimens appear out of season, between times, so that constant vigilance is necessary to insure successful resistance to their repeated onslaughts. A ready means of destruction we have in powdered hellebore; an ounce of this well mixed with a pail of water, and applied with a watering-pot, clears the bushes effectually in a very short time.

A green worm occasionally affects the fruit, drawing the berries together in a bunch, fastening them with silken threads, and consuming their contents. This, however, is seldom met with, excepting on the gooseberry, and needs only a passing notice. Where

they prove troublesome we can suggest nothing better than hand-picking.

[During the past year, this worm has been very abundant and destructive to the red and white currant, as well as the gooseberry. It has also affected the black currant in our own garden, where fully one third of the crop has been thus destroyed. It is the offspring of a small moth, Pempelia grossularia, which, when its wings are expanded, measures nearly an inch. Its fore wings are long and narrow, and pale grey in color, streaked and dotted with brown—its hind wings dusky. The moth appears during the latter part of April, and deposits its eggs singly on the fruit, almost as soon as it is formed. The egg soon hatches into a minute grub, which burrows into the fruit, and as it grows larger draws together three or four, or more of the berries, and fastening them with silken threads—devours their substance at its leisure; making but one hole in a berry, and that but barely large enough to admit its body. When disturbed, it wriggles itself out of this hole backwards and drops to the ground, or hangs suspended near the ground by a silken thread attached to the berry. The fruit is soon discolored and withered.

When full grown, the grub measures in length three-fourths of an inch, and is of a pale shining green color, with sometimes a yellowish, at others, a reddish tint. The head is small, pale brown, and the next segment behind the head, has a pale brown patch above. When ready to change to chrysalis, which is usually about the middle of June, it drops from the bnsh, and forms a little silken cocoon amongst leaves and rubbish, on, or just below the surface of the ground, where it undergoes the change, and remains inactive till

the following spring, when the moth again appears.]



# FIRST ANNUAL REPORT

ON

# THE NOXIOUS INSECTS

OF THE

# PROVINCE OF ONTARIO.

PREPARED FOR THE AGRICULTURAL AND ARTS AND FRUIT GROWERS' ASSOCIATIONS OF ONTARIO, ON BEHALF OF THE ENTOMOLOGICAL SOCIETY OF CANADA,

ву

### THE REV. C. J. S. BETHUNE, M.A.,

Head Master of the Trinity College School, Port Hope; and Secretary-Treasurer of the Entomological Society of Canada;

### WILLIAM SAUNDERS,

Vice-President of the Entomological Society of Canada; and

#### EDMUND BAYNES REED,

Secretary-Treasurer of the London Branch of the Entomological Society of Canada.

### Coronto:

PRINTED BY HUNTER, ROSE & CO., 86 & 88 KING STREET WEST.

## INTRODUCTORY.

The following primary Report on some of the noxious insects of Canada has been prepared on behalf of the Entomological Society, for the Agricultural and Arts, and the Fruit Growers' Associations of Ontario. The Council of the former Society, about a twelvementh ago, unanimously adopted the following resolution:—

"That the sum of four hundred dollars be appropriated in aid of the Entomological Society, for the ensuing year (1870), on the condition that the Society furnish an Annual Report, and form a Cabinet of Insects, useful or prejudicial to Agriculture and Horticulture, to be placed at the disposal of this Council, and that they also continue to publish their Journal."

The Entomological Society accepted the grant on these conditions, and has endeavoured faithfully to carry out the different tasks thus imposed upon it. Its Journal—

The Canadian Entomologist—has been published at stated intervals, and has now reached the ninth number of its second volume. The Cabinet of Noxious and Beneficial Insects is being duly prepared, but owing to the amount of time and labour required for its proper arrangement, has not yet been transferred to the rooms of the Association. The Report—the remaining condition—is herewith presented.

In order to render this Report, and those that may follow it in future years, as valuable as possible, it has been deemed advisable to take up a few special fruits, vegetables or crops, and give a complete account of the insects affecting them, rather than to treat of a larger number in a less elaborate manner. The following pages include reports on insects affecting (1) the Apple, by the Rev. C. J. S. Bethune; (2) the Grape, by Mr. W. Saunders; (3) the Plum, by Mr. E. B. Reed; each writer is responsible only for the statements contained in his own portion of the work. It is intended to treat of, next, the insects injurious to the wheat, potatoe, hop, and pea crops, the strawberry, currant and gooseberry, cucumber and squash, and cabbage; and so to go on, if the work is continued and Providence permit, till the farmers, gardeners and fruit growers of this country are fully informed respecting the habits of their insect friends and foes, and the best modes of dealing with them.

As mere descriptions of insects are seldom intelligible to the general non-scientific reader, special pains have been taken to present an illustration of almost every insect referred to in the following Report; and everyone will, no doubt, at once admit that any little value these pages may have, is greatly enhanced by the excellent wood-cuts that embellish them. Special thanks are due, and are hereby gratefully tendered, to the

Honourable George Brown, for his kind loan of many beautiful illustrations from the Canada Farmer, and to Mr. C. V. Riley, the accomplished State Entomologist of Missouri, for permission to obtain electrotypes of many of his admirable drawings, which are certainly the best figures of the kind as yet produced in America. An acknowledgment also must by no means be omitted of the excellent wood-cuts specially produced for these pages by Mr. Beale, a rising artist of London, Ontario, and a member of the Entomological Society. In order to relieve the limited funds of the Society from the expense incurred in procuring these illustrations, a grant of fifty dollars was kindly made by the Fruit Growers' Association of Ontario, and very recently an additional grant of more than double that amount, by the Agricultural and Arts Association.

As these Reports have been prepared by persons who are much engaged in other occupations, and who only devote to the study of Entomology what little leisure they may be able to obtain, it is trusted that due indulgence will be accorded for any imperfections or omissions that may be apparent to the reader.

C. J. S. B.

Trinity College School, Port Hope, December 12th, 1870.

# INSECTS AFFECTING THE APPLE.

### BY THE REV. C. J. S. BETHUNE, M.A.

- 1. The Apple-root Bark-louse (Eriosoma pyri, Fitch.)
  - 2. The Two-striped Borer (Saperda candida, Say.)
  - The Buprestis Applectree Borer (Chrysobothris femorata, Fabr.)
  - 4. The Oyster-shell Bark-louse (Aspidiotus conchiformis, Gmélin.)
  - 5. The Apple-tree Pruner (Stenocerus putator, Peck.)
  - 6. The Apple-twig Borer (Bostrichus bicaudatus, Say.)
  - 7. The Apple-tree Plant-louse (Aphis mali, Fabr.)
  - 8. The Rose Beetle (Macrodactylus subspinosus, Fabr.)
  - 9. Cutworms (Noctuadæ.)
- The Apple-tree Tent Caterpillar (Clisiocampa Americana, Harris.)

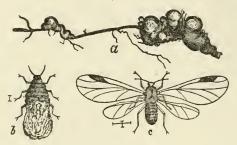
- 11. The Forest Tent Caterpillar (C. sylvatica, Harris.)
- 12. The White-marked Tussock Caterpillar (Gr-gyia leucostigma, Sm. & Abbott.)
- 13. The Yellow-necked Apple-tree Caterpillar (Datana ministra, Drury.)
- 14. The Red-humped Apple-tree Caterpillar (Notodonta concinna, Sm. & Abbott.)
- 15. The Fall Web-worm (Hyphantria textor, Harris.)
- 16. The Canker-worm (Anisopteryx vernata, Peck.)
- 17. The Cecropia Emperor Caterpillar (Samia Cecropia, Linn.)
- 18. The Rascal Leaf-crumpler (Phycita nebulo, Walsh.)
- 19. The Codling-worm (Carpocapsa pomonella, Linn.)
- 20. The Apple Curculio (Anthonomus quadrigibbus, Say.)

#### INSECTS INJURIOUS TO THE APPLE.

Of all the fruits grown in Canada, none can be compared in importance to the apple, whether we consider its almost numberless varieties, its universal distribution throughout the country, its excellence in beauty and flavour, its commercial value, or its beneficial effects upon the health of the community during our protracted winters; and yet none, probably, is more liable to suffer from the attacks of insects during every stage of its growth and in every part of its organization—root and branch, trunk, leaves and fruit, wood and bark, rind, flesh and core—in each and every part it has its peculiar insect foes. To these different enemies we purpose now to direct the reader's attention, describing briefly their several characteristics, that, with the aid of our illustrations, he may be able to identify the special pests of his own orchard, and, knowing who his enemies are, take measures for their effectual repression.

#### AFFECTING THE ROOT.

1. THE APPLE-ROOT PLANT-LOUSE (Eriosoma [Pemphigus] pyri, Fitch).—In many parts of the Western States, especially in Illinois, young apple-trees are affected by a disease in the roots, produced by the attacks of a woolly Plant-louse. This minute creature works under ground, and produces upon the roots, swellings and excrescences of all sorts of



F1G. 1.

shapes and sizes; these interfere materially with the tree's supply of nourishment, and when very numerous occasion its death. Dr. Hull, of Alton, Ill., considers it "one of the worst enemies with which our apple-trees have to contend," and states that it is much more common than is generally supposed. In 1848 it was found so abundant in Chester County, Penn., that thousands of young trees had to be thrown away; and of late years it has been very injurious in many localities. It will be well, therefore, for Canadian fruit growers, and especially nurserymen, to be on the look-out for this creature, and whenever they find their trees less vigorous than they should be, and the leaves of a sickly appearance, they should examine the roots for the presence of this insect, provided there is no trace of borer or other obvious cause of disease. Though we have never heard of its working any mischief in Canada, it is yet as well that fruit growers should be warned of its existence, and be prepared to deal with it when they find it.

The Apple-root Plant-louse is a little over a tenth of an inch in length, including the closed wings, and of an opaque colour; though so very minute it may be easily recognized by the peculiar bluish-white cottony matter which it exudes from its body, and which is never met with in the case of the common apple-tree plant-louse that inhabits the leaves and the tips of the twigs. The easiest mode of getting rid of it is to drench the infested roots with hot water, which, though hot enough to destroy the life of the insect, is not injurious to the vegetable organization. (Amer. Ent., Jan. 1869.) In the case of young trees that are being transplanted, these insects may be destroyed by dipping the roots in

strong soap suds or tobacco water.

#### AFFECTING THE TRUNK.

2. THE TWO-STRIPED BORER (Saperda bivittata, Say).—This insect and the species that follows are among the worst foes of the apple that we have in this country. their attacks are so insidious and the damage they inflict is so great; they both work in the wood of the trees, usually in the trunk, though the latter, as we have observed, occasionally in the branches also. The Two-striped Borer is only found in certain districts of the country, but it is to be feared that it will ere long spread throughout the length and breadth of it. It is very common in the Niagara district of this Province, and in many parts of the Province of Quebec, especially in the immediate neighbourhood of the Cities of Montreal and Quebec (Couper, Can. Nat, vii. 278); we have never met with it, however, on the north shore of Lake Ontario, nor has it been taken in the neighbourhood of London, Ont. It is very destructive in many parts of the United States, attacking the quince, pear, mountain-ash and hawthorn as well as the apple. Mr. Riley (First Missouri Report, p. 43) states that he has invariably found it more abundant in trees grow-

ing on high land than in those growing on low land, and that it is worse in ploughed orchards than in those which are seeded down to grass.



Fig. 2

The accompanying figure represents the insect in its larva or grub state, and in its perfect condition as a winged beetle. The larva when full grown is about an inch in length, and less than a quarter of an inch in thickness. It is of a pale yellow or whitish colour, with a brownish polished head, and deep black jaws; it is destitute of legs, but is enabled to move in its burrows by the contraction and expansion of its segments. The perfect insect is a pale brown beetle with two chalky-white longitudinal stripes running from the head to the apex of the wing-covers; the underside, legs and antennæ are also white. It makes its appearance in June and July, but is seldom seen, as it usually remains in concealment during the day, and flies only at night. The females deposit their eggs upon the bark of the tree near the base of the trunk, or collar as it is termed. From the eggs are soon hatched out tiny whitish grubs, which penetrate the bark and leave a hole so soon eleges up. For the first year the grub feeds only upon the

minute that it soon closes up. For the first year the grub feeds only upon the sap-wood, in which it excavates a round smooth cavity immediately beneath the bark, generally nearly filled, when opened, with the sawdust-like castings of the worm. These castings may very frequently be observed extruded from the burrow and on the ground at the base of the tree; whenever they are noticed search should at once be made for the borer within. As this borer does not occur in any part of Canada in which we have resided, we have had but little opportunity of investigating its habits, we therefore quote the following excellent account from our friend Mr. Beadle's Prize Essay on the Apple (Fruit Growers' Report 1868, p. 172): "When the grub has become about half-grown it ceases to cast the dust out of its cavity, and proceeds to fill it up, at the same time boring a passage or gallery upwards into the heart of the tree. This gallery is continued upwards, of varying length, sometimes not more than two inches, and sometimes twelve inches, and is gradually brought outwards again to the bark of the tree, but not through it. When the grub has completed this gallery, it turns round and returns to that part which is nearest to the heart of the tree; this part it now enlarges by tearing off the fibre from the walls, and with this fibre carefully and securely closes the entrance, so that if some insect enemy should find its way through the hole in the bark at the collar into the chamber where it passed the first part of its life, that enemy could not enter the gallery to its present abode. Meanwhile it crowds its sawdust-like castings into the upper extremity of the gallery against the bark, thus, at the same time, diminishing the danger of attack from that quarter, and keeping its chamber tidy. Having thus perfected its arrangements, it again turns round so as to have its head upward, passes the winter in a torpid state, and in the spring casts off its skin and becomes a pupa, from which in June the perfect insect hatches, climbs to the upper end of the gallery, tears away the fine sawdust, gnaws a hole through the bark and creeps forth." When several of these borers are at work in the same tree, their excavations approach each other so closely as often to girdle the tree and cause its destruction.

Many modes have been proposed for the destruction of this noxious insect, some of them essentially absurd, such as plugging up the holes in the trees which are made by the beetle when taking his departure from the scene of his early life, after he has finished his work of mischief. The simplest and most effectual remedies are: (1) the application of soap (cold made soft soap is especially recommended) to the trunk of the tree early in June and again in July; rub it well over, especially near the base of the trunk, and place a portion in the fork of the tree that it may be washed down into the crevices of the bark by the rains. (2) If the Borer has already taken up his abode in the tree, cut into his burrows with a sharp knife and get him out; his presence may generally be detected near the collar of the tree by the discoloration of the bark and by the saw-dust castings. This is the most effectual, and by no means difficult remedy; much benefit, however, may also be derived from washing this part of the tree with lye, or any strong alkaline solution, which will penetrate the interstices of the bark and kill any young grubs that may be commencing to make their way inwards. The trees should be carefully examined—

especially if young and not long planted out—at different times during the year, as well as in the spring.

3. The Buprestis Apple-Tree Borer (Chrysobothris femorata, Fabr.)—Though the apple-trees in many portions of Canada possess an immunity from the attacks of the Two-striped Borer, there are few, if any, localities where more or less damage is not inflicted by the Buprestis Borer, whose habits are very similar, and equally destructive. Like the preceding, it is the larva of a beetle, but of a totally different family; the former belongs to the long-horned beetles (Cerambycidæ), distinguished by their long-jointed antennæ, while this is a Buprestian, belonging to a family (Buprestidæ) whose members have very small and inconspicuous antennæ, and are remarkable for their



brilliant metallic colours. As may be seen in the accompanying illustrations, the grub of the former (Fig. 2) is thick and cylindrical, while that of the latter (Fig. 3) is flattened, and especially distinguished by the broadness of the fore part of its body. The parent insect is represented at the right hand side of the illustration (Fig. 3). By bearing these figures in mind, the reader will find no difficulty in distinguishing the one pest from the other, should he be unfor-

tunate enough to be troubled with either of them.

The natural history of the Buprestis Borer may be briefly related as follows:-The egg is deposited by the female beetle in the chinks and crevices of the bark some time during the early part of summer; from this the young grub soon hatches, and works his way into the soft sap-wood immediately beneath. Here he eats away, while the cavity inside becomes larger and larger, and he increases in size himself, gradually working upwards until he becomes pretty well grown, when he bores into the solid heart of the wood, and forms a flattish burrow, corresponding to his own flat form. Some assert that this borer never leaves the sap-wood, to go into the harder interior; but we have several times cut them out of the very centre of the trunk of a young apple-tree, while others were at work nearer the surface. When several attack the same tree, as they generally do, their burrows, of course, approach very near each other, and oftentimes so practically girdle it as to cause its speedy death; in any case, they very much injure its vitality, and bring on decay. We know, indeed, of two young orchards, where more than half of the trees have been greatly injured by this insect, while some were killed outright; and we have heard of a number of others that were similarly affected. In the spring of the year the grub assumes its pupa or quiescent state, and comes out as a perfect beetle in the end of June, or during July, when—unlike the previous species, which loves concealment—it may be found basking on the tree-trunks in the hot sunshine. It is very lively when danger threatens, and will take wing in an instant if an attempt be made to catch it. Its blackish-brown colour, and rough surface above, so much resemble the bark of the tree, that it would easily escape the notice of ordinary observers; but beneath it is of a beautifully burnished dark copper colour, looking as if made of metal, and under the wing-covers it is bluish green. The Two-striped Borer attacks the trees, as a rule, only near the root, though occasionally at the fork above; the Buprestis Borer is not so particular as to his locality, but attacks the whole trunk, and sometimes the limbs. They both prefer young trees, probably because the bark is thinner, and more easily penetrated by the young grub.

The presence of the grub in the tree may be detected by the discoloration of the bark, and its flattened, dried appearance. All such spots should be opened with a knife, and the inmate ruthlessly butchered on the spot. In young orchards all the trees should be carefully examined two or three times during the year, especially in early spring, and in the autumn, and all affected ones be promptly treated with an application of the knife. This, however, is a somewhat slow and tedious process: it is much easier to prevent the attacks of the insect than to get rid of him when he has once affected a lodgment. An excellent mode of doing this is by the application of soap, as recommended above in the case of the Two-striped Borer, only remembering that the whole trunk is liable to attack, and must therefore be soaped, and not merely the portion above the collar. Mr. Riley states (1st Missouri Report, p. 47) that "it attacks not only the apple, but the soft maple, oak, peach, and is said to attack a variety of other forest trees; though, since the larvæ of the family to which it belongs, all bear a striking resemblance to each other, it

is possible that this particular species has been accused of more than it deserves." Dr. Fitch states that the natural food-plant of this borer is the white oak, and that the destruction of the forests caused it to make use of the apple and peach; this, however, is probably a mistake arising from the similarity of the larvæ of different species.

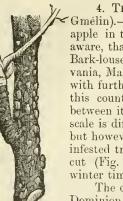
Man's efforts for the extermination of this borer are greatly aided by the labours of several species of Woodpeckers, which tap over the surface of the trees, and, detecting the presence of the grub by the hollow sound, soon open out his burrow, and draw out the rascal with their long, sharp-pointed tongue. The vulgar name of Sap-suckers applied to these birds should be discountenanced as much as possible, for they are physically incapable of sucking out the sap of trees, the structure of their beak and tongue being especially adapted for the procurement of their natural food, borers and other insects, as

may be seen from the accompanying illustration. On this subject we cannot refrain from quoting the remarks of the celebrated Ornithologist, Wilson, the truth of which we have frequently verified:—" Of all our Woodpeckers, none rid the apple trees of so many vermin as this (the Downy



Woodpecker, Picus pubescens, Linn.), digging off the moss which the negligence of the proprietor had suffered to accumulate, and probing every crevice. In fact, the orchard is his favourite resort in all seasons, and his industry is unequalled and almost incessant. In the fall he is particularly fond of boring the apple trees for insects, digging a circular hole through the bark, just sufficient to admit his bill; after that a second, third, &c., in pretty regular horizontal circles round the body of the tree; these parallel circles of holes are often not more than an inch or an inch and a half apart. From nearly the surface of the ground up to the first fork, and sometimes far beyond it, the whole bark of many apple trees is perforated in this way, so as to appear as if made by successive discharges of buck-shot, and our little Woodpecker is the principal perpetrator of this supposed mischief; I say supposed, for, so far from these perforations of the bark being ruinous, they are not only harmless, but, I have good reason to believe, really beneficial to the health and fertility of the tree. In more than fifty orchards which I have myself carefully examined, those trees which were marked by the Woodpecker (for some trees they never touch, perhaps because not penetrated by insects) were uniformily the most thriving, and seemingly the most productive. Many of these were upwards of sixty years old, their trunks completely covered with holes, while the branches were broad, luxuriant, and loaded with fruit. The most common opinion is, that they bore the tree to suck the sap, and so destroy its vegetation, though pine and other resinous trees, on the juices of which it is not pretended they feed, are often found equally perforated. Besides, the early part of spring is the season when the sap flows most abundantly, whereas, it is only during the months of September, October and November that Woodpeckers are seen so indefatigably engaged in orchards, probing every crack and crevice, boring through the bark, and, what is worth remarking, chiefly on the south and south-west sides of the tree, for the eggs and larvæ deposited there by the countless swarms of summer insects. Here, then, is a whole species, I may say genus, of birds, which Providence seems to have formed for the protection of our fruit and forest trees from the ravages of vermin, which every day destroy millions of those noxious insects that would otherwise blast the hopes of the husbandman; and yet they are proscribed by those who ought to have been their protectors, and incitements and rewards are held out for their destruction." In some parts of the Western States, it is said that great damage is done to orchards by the Yellow-bellied Woodpecker (S. varius, Baird), but Dr. Bryant (Pro. Boston, Soc. Nat. His., x, 91) states that he examined the stomachs of six specimens forwarded from Wisconsin, in all of which were found portions of the inner bark of the apple tree, but they also contained a much greater quantity of insects; "in one bird there were two larvæ of a boring beetle, so large that there was not room for both in the stomach at once, and one remained in the lower part of the cosophagus. If these were the larvæ of the Saperda, as is probable, they would do more damage than twenty Woodpeckers, and I sincerely hope that these birds are not to be exterminated, unless it is clearly demonstrated that the injury caused by the destruction of the bark is not more than compensated by their destruction of noxious insects."

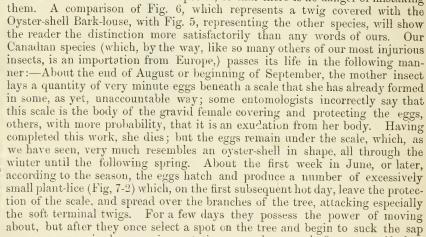
## AFFECTING THE BRANCHES.



4. The Oyster-shell Bark-Louse (Aspidiotus conchiformis Gmelin).—Although there are two species of Bark-lice that affect the apple in the northern United States, there is only one, so far as we are aware, that is injurious in Canada. The other, which is called Harris' Bark-louse (A. Harrisii, Walsh), is often very destructive in Pennsylvania, Maryland, South Illinois and Missouri, and is occasionally met with further north. We are not very likely to be troubled with it in this country, but yet it is well that we should know the difference between it and the other more common species. "The colour of the scale is dirty white, and its form is irregular, being usually egg-shaped; but however variable in outline, it is always quite flat and causes the infested tree to wear the appearance shown in the accompanying woodcut (Fig. 5); while the minute eggs which are found under it in winter time are invariably blood-red or lake-red."—(Riley)

The other species, which infests our apple-trees in all parts of the Dominion, is named the Oyster-shell Bark-louse (A. conchiformis, Gmélin), from the shape of the scale, which is always like that of the oyster-shell; it is of an ashen-gray colour, the same hue as that of

the bark, and in winter and early spring covers a number of white eggs—not red as in the preceding species. The shape of the scale and the colour of the eggs form ready and apparent distinctions between the two species, so that there is no danger of mistaking



there, they never move again, but remain as stationary and as much fixtures as if they were twigs themselves. After a time each one becomes covered with a white waxy secretion, that issues from the body in the shape of very fine delicate threads (Fig. 7-3). This

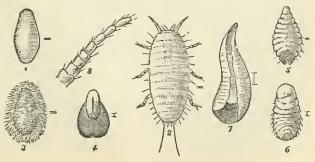


Fig. 7.

secretion disappears after a few days, and leaves the creature covered with a pale brown scale; in about a week's time a fresh secretion arises from the posterior end, and assumes an oval form, giving the creature the form represented in Fig. 7-4.* After another ten days or a fortnight another plate is secreted, larger than the two others together; and at the end of July or beginning of August, its whole growth appears to be completed; and on lifting up the scale, thus formed in three successive portions, but now united into one (Fig. 7-7), the louse may be seen snugly ensconced and protected from the world without. Here in due time it lays its eggs, and finally dies; leaving the seed of another generation to take its place. We have thus far been describing the female insect, but we have no description to give of the male, for the simple reason that no male has as yet been ever discovered. Judging from analogy, he is probably furnished with wings, but his intervention, as in the case of the Aphides, is perhaps not required for many successive generations, if, indeed, the whole race be not hermaphrodite, that is, consisting of but one sex which unites the functions of both.

Such being the history of this insect, it is plain, and it has been proved by experiment, that the only time to successfully apply remedies for it is during the short period that intervenes between the emergence of the young insect and the formation of its new scale. It can then be destroyed by rubbing the affected branches with a stiff brush, or by washing them with a strong solution of soap; but these remedies are of but little use except at that particular time, namely, early in June, as it is difficult to make a solution penetrate the scale, and so destroy the creature beneath. Much, however, can be done by scraping off the scales from the limbs of the trees in spring, or indeed, at any time of the year. In setting out a new orchard great care should be exercised in the inspection of the young trees; by then getting rid of all the scales that may be found attached to a tree, its future immunity from this pest may be, as a rule, relied upon. Mr. Beadle, in his Prize Essay already referred to (p. 173), states that "the best remedy for these insects seems to be a sort of paint, made by boiling leaf tobacco in strong lye, until it becomes an impalpable pulp, and then mixing it with cold-made soft-soap (which is ropy, not the jelly-like soap), until it is about as thick as paint is usually applied; with a paint-brush apply it to all parts of the tree where these Bark-lice are found, before the buds swell in the spring. If this be carefully and thoroughly done, the bark-lice will be surely killed, and the tree will make a thrifty growth." In the Canada Furmer for August, 1869, (p. 296), Mr. J. Glover, of St. Thomas, relates how he saved two apple-trees from destruction by bark-lice by dashing over them early in the winter, a quantity of lye that remained after soap-making. We may quote our remarks upon his letter:- "Strong alkaline solutions are always considered the best remedy for these and similar pests, but a difficulty in applying them is that, when strong enough to destroy insect life, they are apt to destroy vegetable life as well. By using lye, however, when there are no leaves or opening buds to be injured, good appears to be effected. The reason we limit the application of a solution of soap to the short period during which the bark-lice are unprotected by their usual scale, is because it is so difficult to get any solution that will penetrate the hard scale, and reach the eggs that are under it in winter, and the louse

Although artificial remedies are thus few in number, and not very satisfactory in application, nature—happily for the fruit-grower—furnishes us with much better ones, that require no trouble on our part, except the performance of the negative duty of letting them alone. One of these is a very minute mite (Acarus), that devours immense quantities of the eggs and young of the Bark-louse. Another consists of the many varieties of Lady-birds (or Lady-bugs, as they are often improperly and unpleasantly termed), especially one called the Twice-wounded Lady-bird (Chilocerus bivulnerus, Muls). This useful insect is of a deep, shining, black colour, with a blood-red spot (whence its name) on each wing-cover,

304

^{*} These figures (from Riley's 1st Rep. Miss.) are highly magnified, the hair lines at the sides show the natural sizes. 1. Egg; its natural size is scarcely the one-hundredth part of an inch. 2. Larva, as it appears when running over the twigs; natural size 1-100 inch. 3. Its appearance after becoming stationary. 4. Appearance of the scale after the second secretion takes place. 5. Form of the louse (ventral view) after losing its members. 6. Form of the louse (ventral view) when full grown, and just about to deposit. 7. Fully formed louse, as it appears from the under side, when raised. 8. Highly-magnified antenna of larva, showing the joints.



and is about the size and shape of a split pea. It is represented, magnified, in Fig. 8, the hair-line at the side showing the natural size. Fig. 9 represents its larva, which is a dark grey prickly creature, extremely active and voracious in its habits. Its pupa may often be found on the trunks of all sorts of trees, partly covered and surrounded by the prickly larva-skin. This fruit-growers' friend, and all the



other species of Lady-birds (*Coccinellidæ*), should never be destroyed, but always cherished and protected to the utmost.

5. The Apple-tree Pruner (Stenocerus putator, Peck; S. villosus, Fab.).—At a meeting of the Fruit Growers' Association of Ontario, held at St. Catharines in July, 1866, a portion of an apple-tree branch, that had been cut off by some insect, was exhibited by Mr. Charles Arnold, of Paris, Ont. After the meeting, the specimen was forwarded to us for examination. We found, upon cutting into the branch, which had been neatly severed by some insect, that the culprit was a long, cylindrical grub, who was quietly concealed in his burrow, from which he had evidently no expectation of emerging into daylight till ready to issue forth as a perfect beetle. From the appearance of the grub, as well as of the burrow, we were led to believe the insect to be a specimen of the Pruner Stag-beetle (Stenocerus putator, Peck), which has for some time been known to attack oak trees, and which, Dr. Fitch (3rd Rep., N. Y., p. 12,) states, occasionally affects apple trees also.

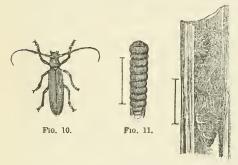


Fig. 12.

The larva, or grub (Fig. 11), of the apple-tree Pruner is a little over half an inch in length when full grown, and about a seventh of an inch in breadth across the neck, which is its thickest part, and from which it tapers gradually backwards. The head is small and black, the neck and remaining segments of the body, yellowish white, with some slight blackish markings. The segments, or rings, are thirteen in number (including the head), as is usual amongst all larvæ, but the last two are frequently concealed in the one before them, the insect apparently assisting its progression by drawing them in and out. It has six very minute legs, attached to the anterior

segments. From this larval state, it turns into a somewhat active pupa (Fig. 12) in the spring of the year, and completes its final transformation into a beetle in the month of June. It is then a cylindrical beetle (Fig. 10), of a dull black colour, with brownish wingcovers; the antennæ in the male are longer than the body, and in the female, equal to it. The whole body is covered with short, close gray hairs, which, from being denser in some places than in others, form spots on the thorax and elytra; its total length varies from half an inch to three-fifths. The above illustrations represent the female beetle (Fig. 10); the larva, magnified (Fig. 11); and the pupa, enclosed in its burrow, also magnified (Fig. 12).

The peculiar habits and instincts of this insect render it one of the most curious and interesting that we have. The following is an account of them, that we gave in the Canada Farmer at the time above referred to: The parent beetle, with a view to provide soft and easily masticated food for the tender jaws of the infant grub, lays its eggs in the green, fresh growth of a twig proceeding from a moderate sized limb. The young worm, immediately upon its exit from the egg, burrows down into the centre of the twig, and consumes all the soft, pulpy matter of which it is composed. By the time it reaches the main branch, it has become sufficiently matured to be able to feed upon the strong meat of the hardwood, and accordingly makes its way into the branch, leaving the hollowed twig to gradually wither and drop off. It now eats its way downwards a short distance (half an inch in the specimen before us), through the middle of the branch, and proceeds deliberately to cut off its connection with the tree, and make its way to the earth by the shortest pos-

20 305

sible route. This, however, is a rather delicate operation, and requires the exertion of all the insect's wonderful instinctive skill; for were it to gnaw too much of the wood away, the branch would break during the proceeding, and probably crush the workman to death. But with admirable forethought and precision, it leaves the bark and just enough woody fibres untouched to sustain the branch until it has time to make good its retreat into its burrow, the opening of which it carefully stops up with gnawed fragments of wood. "But," as Dr. Fitch relates, "the most astonishing part of this feat remains to be noticed. The limb which he cuts off is sometimes only a foot in length, and is consequently quite light; sometimes ten feet long, laden with leaves, and quite heavy, A man, by carefully inspecting the length of the limb, the size of the branches, and the amount of the foliage growing upon them, could judge how far it should be severed to insure its being afterwards broken by the winds. But this worm is imprisoned in a dark cell, only an inch or two long, in the interior of the limb. How is it possible for this creature, therefore, to know the weight and length of the limb, and how far it should be cut asunder ? A man. moreover, on cutting a number of limbs of different lengths so far that they will be broken by the winds, will find that he has often miscalculated, and that several of the limbs do not break off as he designed they should. This little worm, however, never makes a mistake of this kind. If the limb be short, it severs all the woody fibres, leaving it hanging only by the bark; if it be longer, a few of the woody fibres on the upper side are left uncut, in addition to the bark. If it be very long and heavy, not more than three-fourths of the wood will be severed. With such consummate skill does this philosophical little carpenter vary his proceedings to meet the circumstances of his situation in each particular case !"

Having performed this operation successfully, and closed its hole, that the jarring of the branch when it falls to the ground may not shake it out, the grub retreats to where it first entered the limb, and goes on eating up through the heart for about six inches or a foot, and this it does both before and after the branch reaches the ground. The object of this amputating process it is difficult for us to understand fully, but we may imagine that it is for two purposes: first, as regards the insect itself, that it may the more effectually escape the attacks of woodpeckers and other foes, and be less exposed to the winter frosts; secondly, that the tree may receive the benefit of a pruning of its growth, which in its natural state might be too exuberant. Thus wonderful and varied are the checks and counter-checks that the Almighty imposes upon his works; to each one there is laid down the law, "Thus far shalt thou go, and no further!"

The obvious remedy for these singular insects, when they attack fruit or other valuable trees, is to gather up the fallen limbs and burn them, before the grub has time to

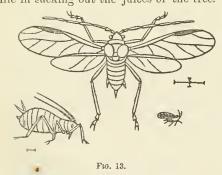
complete his transformations into the perfect state.

6. THE APPLE TWIG-BORER (Bostrichus bicaudatus, Say).—Besides the above mentioned insects, the branches, or rather twigs, of the apple-tree have as a foe a small cylindrical beetle called the Twig-borer. It is frequently injurious in Illinois, Missouri and other States, but has not yet made its appearance in Canada; we shall therefore dismiss it in a few words. "It preys upon the twigs of good sized trees, boring in just above a bud, and working downwards through the pith in a cylindrical burrow for the space of one or two inches. The male is distinguished from the female by having two little thorns projecting from the hind end of its body, and both males and females are found in these burrows, and always with their heads downwards, showing that they bore the hole, not in the larva state like other borers, but in the perfect beetle state. Neither can they bore these holes as a breeding place for their future larvæ; for no larvæ have ever been found therein. Evidently, therefore, they must bore them as a means of supplying themselves with food."—(Am. Ent., 1, 206.) Dr. Fitch states that this insect occurs from Pennsylvania to Mississippi, and has been common of late years in the orchards of Michigan and Illinois; we must not be surprised, then, to find it some day in the western parts of Ontario. Mr. Zimmerman, of Cameron, Mo., states that they work during the months of August, September and October, on both pear, cherry and apple-trees; and that he has found sometimes as many as ten twig-borers on a single two or three year old tree. The twigs thus injured usually break off with the wind.

#### AFFECTING THE LEAVES.

7. THE APPLE-TREE PLANT-LOUSE (Aphis Mali, Fabr.).—Every one who cultivates a single foot of land, or even grows a house-plant in a pot, must know what a Plant-louse is like, for they are to be found at one time or another, we may safely say, upon every kind of ordinary plant that exists in this country. The good wife who tends with anxious care her geranium or fuchsia in the cottage window, knows full well how mysteriously the little green pests come back on her plants, in spite of frequent washings with soap-suds or smokings with the old man's pipe; the gardener knows how the same minute creatures suck the juices of the majority of his vegetables and plants, and what a very plague they oftentimes are in the conservatory; and the fruit grower must assuredly have noticed the curled up leaves of his currant-bushes all alive beneath with a loathsome mass of these insects, or the blackened tips of the young shoots of his apple-trees, whose shrivelled leaves swarm on the underside with myriads of tiny greenish lice. But few, perhaps, can tell why it is that they are so numerous, and appear in such thousands on a plant that a few days before seemed perfectly free from their attack. The reason is because they are so astonishingly productive. From a single female plant-louse, of an ordinary species, Mr. Curtis has calculated that there may be produced in seven generations the tremendous number of 720 millions of descendants, each one of whom possesses a similar fecundity. In the case of the grain-louse, Dr. Fitch states that "a single one produces four daily, and these become equally prolific when they are three days old; thus her descendants in twenty days will number upwards of two millions, and will increase at the rate of a million daily!" No wonder, then, that they appear as if by magic where none were noticed before.

The aphis or plant-louse of the apple belongs to the same order of insects (Homoptera) as the bark-louse that we have already considered. Early in the spring, as soon as the buds begin to expand, this tiny insect, with multitudes of its fellows, emerges from the almost microscopically minute egg that has remained all winter in some crevice of the bark. It at once attaches itself to some tender leaf, bud or stem, and there employs its life in sucking out the juices of the tree. It is of a pale greenish colour, and somewhat

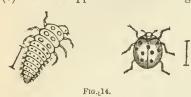


less than a tenth of an inch in length. The accompanying illustration (fig. 13) of a greatly magnified winged male and wingless female, shows the structure and shape of the insect; its beak, which proceeds from the under side of the head, is here hidden from the view in the male, but can be seen in the female. Strange as it may appear, all the plant-lice hatched from the eggs are females, and these in less than a fortnight arrive at maturity, and commence giving birth to living young, which are also females. Every day, during its brief life of about a month, it produces two or three young ones, which in their turn arrive at maturity and in-

crease the population in the same ratio. As long as the summer lasts no males are produced, the original fecundation of the females in the eggs apparently sufficing for the numerous generations that follow; late in the autumn, however, winged males are born, and these, uniting with the females, become the parents of the eggs for the following year. Their natural history is thus most strange, and contrary to all experience in other orders of insects.

Almost all the different species of plant-lice secrete a sweetish fluid called honey-dew, which is ejected from the two projecting horns, or nectaries, on each side of the abdomen behind. This fluid, when it falls upon the leaves and branches beneath a colony of these insects, evaporates and forms a sweet glutinous substance upon which many insects are fond of feeding. The ants particularly are fond of this sweetness, and not content with obtaining it as it is discharged by the aphis, they actually perform an operation upon the plant-louse, very much resembling the process of milking a cow, and cause it to discharge its sweetness for their own particular benefit.

The enormous number of these plant-lice upon the apple, and their wonderful powers of re-production, cause them oftentimes to inflict very great damage upon an orchard. In such cases it is desirable to apply a remedy if practicable. The most highly recommended remedies are: (1) Dusting the affected leaves with lime or sulphur; (2) watering them from beneath with strong soap-suds by means of a syringe or garden engine; and (3) a similar application of a strong decoction of tobacco, one pound of stems and rough



leaf being boiled in a gallon of water. The best of all remedies are, however, provided by the good Providence of the Creator, and consist of small parasitic insects which prey upon the plant-lice. most common of these are the various species of lady-birds, both in their larval and beetle states [fig. 14 represents these two conditions of a common species, the nine-dotted lady-bird (Coccinella Novem-

Notata.).

Fig. 15.

The lace-winged or golden-eyed flies (Chrysopa), fig. 15, so called from some of their most striking characteristics. These flies have four delicate, transparent, white wings, like bits of fine lace, bright golden eyes, and a lovely green body; but though so pretty to look at, most horrible to handle, the odour they emit being of the most sickening and offensive character. Their larva (fig. 16) is equally destructive to aphides with the fly itself; the eggs curiously placed upon stalks are represented on the

Yet another friend to man and enemy to plant-lice is depicted in fig. 17; the larva of the Syrphus fly, which is a tworight in fig. 16.



winged insect of varied colours, oftentimes resembling a wasp or hornet. Other enemies to the Aphides that may be mentioned, are dragon flies, ichneumons, &c. But for the assistance rendered by these useful insects, the plant-lice would speedily increase to such an extent as to sweep away all vege-



Frg. 17.

tation from the face of the earth.

8. The Rose Beetle (Macrodactylus subspinosus, Fabr).—Among the insects injurious to the apple in this country, Mr. Beadle includes the Rose-beetle (or "bug" as it is commonly termed); Dr. Fitch also enumerates it amongst apple-tree insects in his New York Reports. Our own acquaintance with it has, happily, been so slight, and its tastes are so omnivorous where it does occur, that we should have been inclined to place it in some other category, as for instance, under the grape insects, and leave it to our friend Mr. Saunders to deal with in his portion of this report. As it is, however, oftentimes very destructive to the leaves of the apple where it does occur, it will be well for us to

give a short description of it here.

The Rose-beetle is slender in form, tapering a little towards each end, and about twofifths of an inch in length. Its general colour is yellowish, fresh specimens being covered with a dull ochre-yellow down or bloom; when this is rubbed off, the head, thorax and under side of the body appear shining black, the wing-covers brownish-yellow, and the legs reddish-yellow. These last mentioned appendages are long and slender, and furnished with excessively long spinous feet or claws, from which peculiarity the insect derives its scientific name. Towards the end of June these beetles appear, where they occur at all, in vast numbers and continue to devour almost everything of a vegetable character that comes before them for about a month or six weeks, and then they entirely disappear till another summer comes round with a fresh horde. Before their disappearance, the females lay about thirty eggs an inch or so below the surface of the earth and these hatch out in about three weeks. The young grubs feed upon any tender roots within reach, and attain their full size before winter sets in, when they are about three-fourths of an inch long and an eighth broad, of a yellowish-white colour, with a darker head. When the autumnal frosts set in, they descend some distance into the earth to escape the danger of freezing and thawing in the winter, but on the arrival of spring they come towards the surface again, and there form an earthen cell in which to pass the pupa state. This lasts about a month, and then they come forth as perfect beetles to do all the mischief they can during their short existence. Their whole life, in all its stages, thus lasts but a year—a period far too long, however, in the opinion of those who are so unfortunate as to be afflicted by them.

The only locality, where we have seen these creatures at work, is the garden at the Parsonage, Oakville; there they came in vast numbers and devoured everything—nothing appeared to come amiss to them; they were especially destructive, however, to the grapevines. As they seem to be proof against all the ordinary remedies for injurious insects, the only method is to set to work and catch and kill them. This is easily done, as their habits are rather slnggish; a few children could soon gather thousands and speedily diminish their numbers. Much might also be effected by jarring the trees that they are on, in the cool of the morning or evening, when they are less active, and adopting the same measures that are so efficacious in the instance of the Plum Curculio.

## CATERPILLARS AFFECTING THE LEAVES.

9. Cut-worms (Noctuadoc.)—Fruit-growers have long observed that the buds of their trees in early spring are oftentimes eaten off and destroyed by they know not what. The mischief was attributed sometimes to birds, sometimes to winged insects or slugs, and even to late frosts; but it was not until a few years ago that the discovery was made that it was all to be ascribed to the depredations of cut-worms. As Mr. Riley has demonstrated, many species of cut-worms are very destructive to fruit trees, especially the dwarf varieties. In the spring before the leaves are expanded, these worms climb the trees at night and eat off the fruit buds, devouring the ordinary leaf buds when there are no more of the others left. At break of day they drop from the trees, and conceal themselves in the earth till night comes round again. They are more injurious on sandy soil than on clay, as the former is softer to drop upon, and more easily penetrated for concealment.

In the Prairie Farmer (June 1866), Mr. Cochran, on whose farm these facts were first observed, gives the following interesting account of the proceedings of these cutworms:—

"They destroy low branched fruit trees of all kinds except the peach, feeding on the fruit buds first, the wood buds as a second choice, and preferring them to all other things, tender grape-buds and shoots (to which they are also partial) not excepted—the miller always preferring to lay her eggs near the hill or mound over the roots of the trees in the orchard; and if, as is many times the case, the trees have a spring dressing of lime or ashes with the view of preventing the May beetle's operations this will be selected with unerring instinct by the miller, thus giving her larvæ a fine warm bed to cover themselves up in during the day from the observation of their enemies. They will leave potatoes, peas, and all other young green things for the buds of the apple and the pear. The long, naked young trees of the orchard are almost exempt from their voracious attacks, but I have found them about midnight, of a dark and damp night well up in the limbs of these. The habit of the dwarf apple and pear tree however just suits their nature, and much of the complaint of those people who cannot make these tree thrive on a sandy soil has its source and foundation here, though apparently utterly unknown to the orchardist. There is no known remedy; salt has no properties repulsive to them, they burrow in it equally as quick as in lime or ashes. Tobacco, soap and other diluted washes do not even provoke them: but a tin tube 6 inches in length opened on one side and closed around the base of the tree, fitting close and entering at the lower end an inch into the earth, is what the lawyers would term an effectual esstopper to further proceedings.

If the dwarf tree branches so low from the ground as not to leave 6 inches clear of trunk between the limbs and ground, the limbs must be sacrificed to save the tree—as in two nights four or five of these pests will fully and effectually strip a four or five year old dwarf of every fruit and wood bud, and often when the tree is green utterly denude it of its foliage. I look upon them as an enemy to the orchard more fatal than the

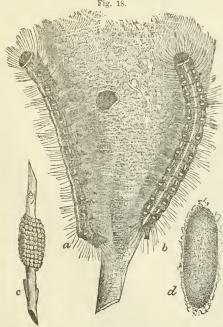
canker-worm when left to themselves, but, fortunately for mankind, more easily headed off."

Cut-worms, as most of our readers are, no doubt, well aware, are those dirty, greasy-looking caterpillars that are such a plague to gardeners in spring and early summer, from their habit of cutting off at night close to the surface of the ground, the young eauliflower, cabbage and tomato plants, early peas, many flowers, such as stocks, balsams, &c., and, in fact almost any tender young plant. There are a large number of species of these insects, all pretty much alike in their larval or caterpillar state. They turn into those common, dull brown and greyish moths that are so numerous in summer evenings about one's lamp or candle, and which may often be found hiding in the morning about the shutters or in crevices of the windows. The plan recommended above, in Mr. Cochran's observations, is probably the simplest and most efficacious for keeping them off our apple and other fruit trees; much might be done also by jarring off and destroying the worms at night. Any one desiring full particulars, with descriptions, of these insects and the moths into which they turn, will find an elaborate account in Mr. Riley's First Report on the Noxious Insects of Missouri.

10 and 11. Tent Caterpillars.—(Clisicampa Americana, Harris, and C. Sylvatica, Harris.) Though we are enumerating a large number of insects injurious to the apple-tree in their respective ways, there are four kinds that stand out above all the rest in the extent of their ravages and in the wideness of their distribution. These are the two borers in the trunk; the bark-lice on the branches; the tent-caterpillars, which we have now come to, on the leaves; and the codling-worms in the fruit. Of these four kinds of insects, the Tent-caterpillars are the most conspicuous in their work of destruction, and probably the best known to people in general. They belong to two different species, called the American and the Forest Tent-caterpillars; the former especially attacks the apple, though occasionally it is found upon plum, cherry, and pear trees, and more frequently upon the wild cherry; the latter, as its name implies, is more addicted to the foliage of forest trees,

but of late years it has proved very injurious to that of the apple as well.

The accompanying illustrations will enable the reader to distinguish between these two caterpillars whenever he meets with them.



Colors—(a & b) black, white, blue and rufous, (c) yellowish gray, (d) yellow.

Fig 18, represents the American Tent-caterpillar, (a) side view, (b) back view, (c) bracelet of eggs, (d) cocoon: Fig 19, the Forest Tent-caterpillar. The most conspicuous difference, is that the former has a white stripe extending along the back from head to tail, while the latter has a series of white spots instead. The eggs from which these caterpillars proceed (Fig. 18, c) are laid by the parent moth in the end of June, or early in July, upon the smaller twigs of the tree, usually beautifully arranged in the form of a broad bracelet, containing about two hundred and fifty eggs. These eggs are

always protected from the heat in summer and the cold in winter, by a thick leathery varnish, which serves also to keep out the wet and prevent the ingress of moisture, which in frosty weather, would soon destroy the eggs. The same degree of warmth that causes the apple buds to swell and open out, hatches the little larvæ in the eggs; and they are thus enabled at once to find a supply of soft food suited to their tender powers of mastication and diges-

tion. Should the supply of food, however, prove insufficient for the broad of larvæ, or not be conveniently at hand, they feed upon the varnish-like substance for some time, and thus escape any danger of perishing by hunger. Next to satisfying their appetites, their chief occupation consists in constructing a shelter for themselves, by stretching masses of web across some fork of the tree near their place of birth. As they increase in size, they keep adding to this web, until it forms a large and conspicuous "tent," capable of containing the whole broad, and with room enough to permit of passage through from one part to another. Here they retire in bad weather and when not feeding; whenever they go out, they always proceed along the upper side of the branches and emit a silken thread as they go, which serves as a clue to guide them back to their abode. The principal thoroughfares to and from the "tent," soon become covered with a mass of these threads which thus form smooth silken roads for the creatures to travel upon.

They continue in the caterpillar state for five or six weeks, feeding voraciously all the time, and very often stripping entire boughs of their foliage; indeed, where they have been suffered to go on without molestation, they have been known to strip whole orchards of their leaves, rendering them as bare as in mid winter. After arriving at maturity, they leave the trees and crawl about in all directions to find secluded spots in which to form their cocoons; the crevices of fences, sheltered angles of buildings, loose bark of old trees, and neglected rubbish on the ground are favourite localities. The cocoon (Fig. 18, d) is formed of a double web, the outer one loosely woven, and of very slight texture, and the inner tough and thick; between the two webs is usually a quantity of yellowish dust, resembling powdered sulphur in appearance. In this state the insect continues for about three weeks, and then comes forth as a pale brownish, thick-bodied, and by no means handsome, moth, whose wings are crossed by two oblique, parallel, whitish lines, as seen







Fig. 20.

in the accompanying illustrations (Fig. 20 represents the male and cocoon, and Fig. 21 the female moth and pupa). The month of July

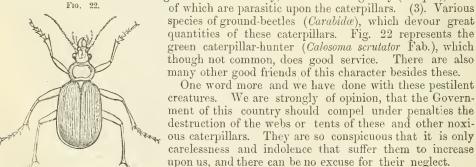
is the period when these moths are most abundant; they then swarm about our lamps at night, and with a little trouble might be very much diminished in number, when they thus come to us to be killed. Their individual life in the moth state is very short, not lasting more than a few days, during which they pair and provide for the continuance of their race, the female laying her bracelet of eggs, from which the next year's brood is to come. Thus far we have been treating of the American Tent caterpillar (Clisiocampa Americana, Harr.); the other species, the Forest Tent caterpillar (C. sylvatica, Harr.) resembles it so much in general appearance and mode of life, that we need say but little respecting it. The larva, as we have already pointed out, has a series of white spots along its back instead of a white stripe, and differs also from the other species in not constructing a large "tent," under which to live with its fellows, but merely making a sort of web on the side of the trunk or large branches, on and about which it lives more or less in community, but with nothing like the same social tastes as the other species. The moths differ a good deal from, though they bear a general resemblance to C. Americana; the chief variation is in the colour, which is paler, and more of a reddish-yellow hue, and in the stripes, which are dark instead of whitish, and not nearly so conspicuous. C. sylvatica also very frequently forms its cocoon amongst the leaves of the tree upon which it has been feeding, a practice which we have never observed in the case of the other. The natural food of the Forest Tent caterpillar is evidently the leaves of most of our common forest trees, but of late years it has been most destructive to apple and other cultivated trees. In June, 1866, the editor of the Canada Farmer (p. 311

217) relates that in the course of a short journey from Toronto (in which direction he does not tell us) he came upon a large orchard, which was almost as bare and leafless as in mid-winter, having been stripped of its foliage by the Tent caterpillar. Passing on a little further he came to another, and yet another, in the same plight; "they were utterly leafless, fruitless, and apparently dying, all from the same cause." It is difficult to say which species produced all this damage, but from his account of their ravages, and his mention of the wandering propensities of the caterpillars, we should judge that it was the Forest and not the American species. In July, 1867, we drew attention in the same publication (Canada Farmer, p. 221), to a case of abominable negligence, in the neighbourhood of Port Talbot, which permitted thirty acres of orchard to be completely devastated by these caterpillars. In June, 1868, Mr. Beadle mentions (Prize Essay, p. 174) that innumerable legions of this caterpillar swept over the orchards in the neighbourhood of St. Thomas, and that they were very abundant throughout all the country between that place and London, Ontario. Mr. Saunders has informed us that they have almost taken the place of the C. Americana in the neighbourhood of London, the latter species being not nearly so numerous as in former years. East of Toronto, however, we have not found this caterpillar particularly numerous, while the other is universally abundant.

The remedies for both these pests may be divided into two classes:—artificial and natural. The former are, in few words, (1) to search the orchard carefully in early Spring, before the buds are swollen, or indeed at any time during the winter, and cut off all the bracelets of eggs and burn them. They will be found near the ends of the shoots, seldom more than a foot distant from the tip, and sometimes not an inch. A little practice will soon enable one to detect them instantly. A cloudy day should be chosen for the work in order to avoid the inconvenience of too much glare from the sky. (2). Go through the orchard or garden regularly twice a week, from the time the buds begin to open till the trees are in full blossom, and remove all the tents with their nests of caterpillars. When the nests are small they may be crushed in the gloved hand without difficulty. When they are high up and out of reach, they may be brought down by means of a pole, with a bunch of rags attached to the extremity. (3). Search for and destroy the cocoons about the end of June, in the positions that we have mentioned above. (4). Kill all the moths of these two species, that are attracted by light.

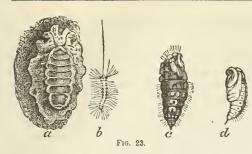
The natural remedies, which we have only to let alone to do their work, are (1) a very minute fly (*Platygaster*) the larvæ of which live in the eggs of the tent-caterpillars, and destroy

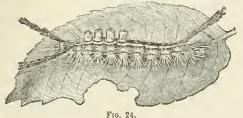
great numbers (see Canada Farmer 1866, p. 135). (2). A two-winged fly (Tachina) about the size of and much resembling a common house-fly, and a four-winged fly (Pimpla), both



Colors, Metallic-Green, Purple, and Copper.

12. The White Marked Tussock Caterpillar (*Orgyia leucostigma*, Sm. and Abbott).—During the winter when our apple-trees ought to be destitute of leaves, we occasionally see a single leaf or cluster of leaves attached to a twig. If these are examined they will in almost all cases be found to contain an old grey cocoon, and the greater number to have a mass of eggs, covered with a white, glistening, froth-like substance, attached





little coral red knobs or warts.

to them as well. These eggs, two or three hundred of which may be found upon a leaf at once, are the first stage of the White-marked Tussock-Caterpillar, or as Dr. Fitch styles the insect, the American Vapourer Moth (Orgyia leucostigma S. and A.). Each egg has a deep hollow on the top giving it the appearance of a tiny opaque white bead. The caterpillars which come out of these eggs in the early part of summer (fig. 23, b. a young caterpillar)—

the end of May or beginning of June—are remarkably pretty creatures. When full grown (fig. 24) they are over an inch long, of a bright yellow colour, with thin yellow hairs along the sides of the body; the head is bright coral red, the next segment has two long pencils of black hairs projecting forwards; and the last segment but one, a single similar pencil pointing backwards; on the fourth and three following segments there are short thick brush-like tufts of vellowish hairs; and on the ninth and tenth two

These caterpillars feed singly on the leaves of apple, plum, and a large number of other trees; sometimes, when they are numerous, doing a good deal of damage. When full fed they spin their thin silken cocoons on twigs of the trees which they frequent, or on fences; in the former case they draw down a leaf as a covering, and firmly attach it to their cocoon. The male cocoon is white, or yellowish, and so thin as to shew the insect through it (fig. 23 d, the male chrysalis); but the female cocoon is twice as large and much more firmly constructed, and contains also a different shaped and much larger chrysalis (fig. 23 c). The insect remains about a fortnight in the chrysalis state,



and then comes forth in the form of a moth. The male (fig. 25) has broad ashen-grey wings, which expand about an inch and a quarter; the fore-wings have a few indistinct black lines across them, and a white crescent-shaped dot near the lower corner, the antennæ are broadly and beautifully feathered, the tips of the plumes bending forward and approaching each other. The female, on the other hand, is extraordinarily different, and would never be suspected of laying claim to the title of moth; she has the merest rudiments of wings, which are not observable except on close inspection, and thin simple antennæ; in fact she is more like an animated bag of eggs than anything else. (Fig. 23 a represents her attached to her cocoon.) Being unable to fly, she remains on her cocoon,

where she is found by her mate, whose boastful ostentatious flight is the origin of the English name "Vapourer." After pairing, the female lays her eggs upon the cocoon, covers them with the curious frothy matter, which becomes hard and brittle and protects them from the weather, and then—her work accomplished—drops down and dies.

The best remedy for these insects, when sufficiently numerous to be troublesome, as they often are, is to go round the orchard during the winter, and take off all the cocoons that have eggs attached to them. They can be at once discovered by their attendant withered leaf. Those that have no egg masses on them should be left, Mr. Riley recommends, as they either contain the empty male chrysalis, which is harmless, or some friendly parasite. This work can be accomplished at the same time as the search for the eggbracelets of the Tent-Caterpillars is carried on.

13. The Yellow-Necked Apple-Tree Caterpillar (Datana ministra, Drury).—In the summer of 1865, many fruit-growers in the neighbourhood of Toronto, and in other parts of the Province, were alarmed by the appearance upon their apple-trees of masses of strange-looking and very voracious caterpillars. The first intimation usually given of the

presence of these creatures was the complete denudation of some branches of the trees, and on making a close inspection, the owner would find a community of caterpillars busily

engaged in the work of destruction.

These noxious insects, though formerly rare and seldom noticed in Canada, have been long observed in the United States. So early as the year 1773, Mr. Drury, a distinguished English entomologist, described and figured the moth into which these caterpillars turn, specimens having been collected for him in the State of New York. He named it the Phalæna ministra, the Handmaiden Moth; it is now known by the appellation of Datana ministra, or the Yellow-necked Apple-tree Caterpillar. Dr. Fitch relates its occurrence in great numbers in the State of New York in 1853 and 1856; in 1868 we noticed it in several localities, as well as in 1865, but it is not abundant every year. It belongs to the family Notodontidæ, of the order Lepidoptera, most of the members of which are very destructive in their habits. The great peculiarity of this family, and one which is eminently characteristic of the species before us, is the extraordinary posture often assumed by the caterpillars. When at rest after eating, they are usually crowded together as closely as possible upon the twigs where they have been feeding, clinging to them with the four intermediate pairs of pro-legs, and with the extremities of their bodies raised up-



Fig. 26.

wards. If touched, or otherwise disturbed, they throw their tails upward with a jerk, and at the same time bend their heads backward semicircularly, till the two extremities almost meet. In this position they will remain for a considerable time, presenting, as may be imagined, a very odd and grotesque appearance. The accompanying illustration (Fig. 26) will enable the reader to form some idea of this peculiarity, as well as of the ordinary appearance of the caterpillar.

The eggs from which these caterpillars come forth are laid in patches of about a hundred together, on the under side of the terminal leaves of a limb, and the young are hatched out about the end of July, or beginning of August; sometimes there are other broods later in the season. At first they eat only the green substance (parenchyma) of the under side of the leaves, the upper side and veins remaining untouched; but as they gradually increase in size and powers of digestion, and consequently of appetite also, they consume all but the stem, and a portion of the mid rib. Beginning, thus, with the fresh and tender leaves at the end of the branch, they descend by degrees, devouring all before them, till the limb is perfectly bare.

When first hatched from the egg, these caterpillars are less than a quarter of an inch in length, tawny yellow, with black heads and feet, and four narrow, pale yellow stripes along each side of the body, the whole being thinly clothed with fine whitish hairs. When fully-grown, the ground colour of the caterpillar is black, with the pale yellow stripes as at first; the head is black, the second segment, or neck, as it may be termed, is yellow and wax-like (whence its common English name); the fore-legs and claws are black, while the four pair of intermediate pro-legs are waxy yellow, spotted with black. Its greatest

length is about two inches.

The caterpillar state lasts five or six weeks, at the end of which time they descend to the earth, and become transformed into chrysalids, a few inches below the surface; there they remain till the following summer, the perfect insect or moth not appearing till the

following June or July.

These moths are of a light brown colour; the head and a large rectangular spot on the thorax are deep chestnut brown; the fore wings are crossed by four nearly parallel lines, of a rusty brown colour; the hind wings are pale yellow, without markings. They measure from an inch and three-quarters to two inches and a half across the wings. The moths themselves are not very often met with, but are sometimes attracted indoors by lights at night.

The best mode of staying the ravages of the caterpillars is to go round all the trees in the garden or orchard, and examine closely wherever the end of a branch appears to be stripped of its leaves. Should this insect be the cause of the denudation, it will be readily found, and the caterpillars can be easily destroyed by simply cutting off the twig on

which they are clustered, and throwing it into the fire. An orchard can in this way be effectually cleared of the pest in a very short space of time, and without any great amount of labour. This summer (1870) we found a number of these caterpillars on one of our apple-trees, but we had no difficulty in getting rid of them. One specimen we found swarming with maggots of a minute Ichneumon, which have since gone through their stages of cocoon and perfect flies; but we have not yet determined the particular genus or species to which they belong. They no doubt serve to keep these insects very much in check, and probably are one of the causes of their irregular appearance from year to year.

14. THE RED-HUMPED APPLE-TREE CATERPILLAR (Notodonta concinna, Sm. and Abbott,).—This insect belongs to the same family as the preceding species, and resembles it very much in its habits and mode of life—so much so, that we need give but a very brief description of it. It usually makes its appearance in July or August, and reveals its presence by stripping the leaves from whole branches, commencing at the top, just as the Yellow-necked Caterpillar described above. When full grown, they are about an inch and a quarter in length; their general colour is yellowish red above and below, and white on the sides, with thirteen narrow black stripes extending from the head to the tenth segment, interrupted only on the fourth segment by a prominent hump, of an orange-red colour (whence the insect's name). There are two rows of black prickles along the back,



and a number of shorter ones on the sides, each of which terminates in a fine hair; on the second, third and fourth segments, these prickles are lengthened into spines; the eleventh and twelfth segments are entirely yellow, without any black lines, and the last segment is black. The head is bright, shining red, with black jaws. Towards the end of summer, the caterpillar forms its chrysalis in the earth, and the moth appears the following year. It is a common-looking light-brown insect, with dark-brown and greyish markings. Fig. 27, (1) represents the caterpillar, and (2) the moth. "There is one peculiarity about this caterpillar which we have not noticed in any other. When handled, it discharges a clear liquid, having a strong acid

smell and taste. This is probably given as a means of defence against birds, since their feeding in flocks, and so openly, would render them particularly liable to attacks from these active foes." (Canada Farmer, 1869, p. 339.)

These caterpillars, when numerous, may be treated as the foregoing species; or they may be dislodged by a quick, jarring blow upon the limb, and received on a cloth or sheets of newspaper spread below. An end may then be put to their existence by beating with a spade, or trampling under foot.

15. The Fall Web-Worm (Hyphantria textor, Harris).—After all the Tent-Caterpillars' webs have been carefully and effectually removed from the trees in the spring, the fruit-grower may be surprised and mortified to find his trees again beset with webs towards the end of summer, and be inclined to give up fighting the worms as a hopeless case. If, however, he examines the autumn webs, he will find that the caterpillar that has produced them is different from any that we have so far described, and not at all like the Tent-Caterpillars of the spring. These webs are very large and thin, and are generally formed all over the end of a branch, and not in a fork. The caterpillars vary in their general colour from black to blue and greenish; they have a broad, blackish stripe on the back, in which, when nearly full grown, a blue line appears. On each segment (except the two at each extremity, which have fewer,) there are twelve little warts, from which bundles of whitish hairs proceed, viz.: four rust-yellow or orange on each side, two black ones in a line with them on the back, and a little in front and between these two smaller ones, also black at first, but becoming rust-yellow when the caterpillar is older. In feeding, they at first only eat the softer parts of the leaves, the stalks and net-work of veins being left; but afterwards, they consume pretty nearly everything that comes within their fatal net. When full grown, they disperse, and spin their cocoons in crevices of the bark, and other sheltered places. The moth appears the following summer, and is of a milk-white colour, without any spots or other markings upon the wings.

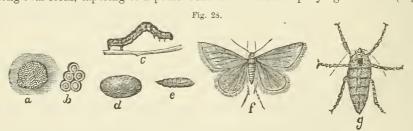
Though these webs are very common upon the apple, they are even yet more numer-

ous on the wild-cherry, which appears to be their original food plant. They also attack the hickory, ash, elm, willow, oak, birch, button wood and some other trees.

The best remedy, probably, is to cut off the infested boughs and burn them.

16. The Canker-worm (Anisopteryx vernata, Peck).—This insect, though very common in many parts of the United States, and exceedingly destructive where it occurs, is not often met with in Canada. The only native specimens we have seen, were sent us in April, 1867, by our friend Mr. J. Pettit, of Grimsby, who stated that he first noticed them late in November of the previous year, but that he found the females at different times during the winter under the bark of trees. We gave an account of the insect at the time in the Canada Farmer, (May 1st, 1867, p. 133,) from which we extract the following:-"The Canker-worm belongs to a family of moths, called Geometers, or "Measuring-worms," or "Span-worms," from the mode of locomotion employed by the caterpillars in consequence of the absence of legs under the middle portion of their bodies. They have three pairs of legs near the head, and two pairs at the other extremity, and when walking, they draw up the hind legs close to the fore ones, doubling up the body in the form of an inverted letter —, then they stretch out the fore legs as far as possible, draw the hind ones up to them again, and so on, looking just as if they were spanning or measuring the surface they are on. The moths from which they are produced, are called the Anisopteryx vernata, Peck; the former name meaning "unequal-wing," because the sexes differ so much in the dimensions of their wings,—in this case the female has no wings at all, and (like the female of Orgyia leucostigma), would never be taken for a moth by one unacquainted with entomology; the latter name means "spring," because the moth is most commonly seen in the spring of the year.

The male moth has very delicate silky wings, broad in proportion to their length, which overlap each other when the insect is at rest; the fore pair are ash-coloured, with a whitish spot near the tip on the front margin, and two indistinct zigzag whitish bands across them, which are sometimes wanting; the hind pair are paler and have a blackish dot near the middle; all the wings have rather long, pale fringes; they expand about an inch and a quarter. The wingless female is ash-coloured above and greyish beneath; of an oblong-oval form, tapering to a point behind. The accompanying wood-cut (Fig. 28,)



exhibits the insect in its various stages. (Fig. 28, (a) eggs, natural size; (b) do. magni-

fied; (c) caterpillar; (d) cocoon; (e) chrysalis; (f) male moth; (g) female.)

Late in the autumn, after the first hard frosts are over, and mild genial days come on, these moths issue from their pupa cases in the ground and continue to come forth, whenever the weather is mild, all through the winter, appearing in the greatest numbers early in the spring. The sluggish females at once crawl up the trunk of the nearest tree, where they are soon joined by the more active flying males; after pairing has taken place, the female proceeds to the branches of the tree, where she lays her eggs, placing them in clusters of from sixty to upwards of a hundred. From these the infant caterpillars hatch out as soon as the young leaves of the tree begin to expand and afford them a supply of suitable food. At first, from their small size, they attract but little notice, but during the latter part of their larval existence, they grow rapidly and eat so voraciously as to divest the tree of all appearance of greenness. "When very young,"—according to Harris— "they have two minute warts on the top of the last ring, and they are then generally of a blackish or dusky-brown colour, with a yellowish stripe on each side of the body; there are two whitish bands across the head, and the belly is also whitish. When fully grown, these individuals become ash-coloured on the back, and black on the sides, below which the pale yellowish line remains. Some are found of a dull greenish-yellow, and others of a clay colour, with slender interrupted blackish lines on the sides, and small spots of the same colour on the back. Some are green, with two white stripes on the back. The head and feet partake of the general colour of the body; the belly is paler. When not eating, they remain stretched out at full length, and resting on their fore and hind legs beneath the leaves. When full grown and well fed, they measure nearly or quite one inch in length. They leave off eating when about four weeks old, and begin to quit the trees; some creep down by the trunk, but great numbers let themselves down by their threads from the branches, their instincts prompting them to get to the ground by the most direct and easiest course. After reaching the ground, they immediately burrow in the earth to the depth of from two to six inches, where they make little cavities or cells in the ground, by turning round repeatedly and fastening the loose grains of earth about them with a few silken threads. Within twenty-four hours afterwards, they are changed to chrysalids in their cells."

The trees most commonly frequented by these worms, are the elm and basswood of the forest, and the apple, pear, cherry and plum, of the garden or orchard. When they appear in large numbers, as indeed they commonly do, they completely strip the trees of their foliage, and, though they make an effort to put forth a fresh crop of leaves the same season, and occasionally produce a few blossoms and immature fruit, if the defoliation is

repeated, the effect is certain death to the afflicted trees.

Remedies.—As the female moth is wingless, and is obliged to crawl up the trunk of the tree in order to deposit her eggs, from which the destructive caterpillars are produced, it is evident that the simplest and most effectual remedy will be to prevent her from gaining access to the required positions by placing some obstacle around the trunk of the tree. The cheapest and readiest plan is to fasten bandages, three or four inches wide, of old sacking or rags, tightly around the trunk of the tree, say two and a half or three feet from the ground; smear them well with a thick clay wash, and on this, when dry, spread as much tar as will cling to the bandage without running over the bark and thus injuring the tree. The tar should be applied shortly before sun-down, as the moth is nocturnal in its habits, and should be renewed every warm and mild evening, as long as the moths are about. This may appear a troublesome operation, but where canker worms are prevalent it is far preferable to losing one's choicest fruit-trees. To prevent the tar from becoming

dry and hard, any common oil may be mixed with it to advantage.

As this pest is so very destructive and so well known to our ingenious neighbours, it is not at all surprising to find that they have invented and patented various "tree protectors," and other apparatus for circumventing these insects. One kind consists of a strip of india-rubber cloth, an inch wide, which surrounds the trunk of the tree, and has projecting from it, "at an angle of forty-five degrees," a strip of tin or zinc about three inches wide. The smooth sloping surface of the metal is calculated to interfere with the climbing propensities of the moth. Another—"Foster's tree-protector"—consists of a narrow trough of tin, suspended to the trunk of the tree by a strip of cotton, and intended to be filled with oil. A third—"Merrit's Patent tree-protector"—is much more elaborate and expensive, though possibly not more effective. It is composed of a grooved circle of glass surrounded with iron, and hung to a tent-like piece of cloth, which keeps the glass some inches distant from the tree-trunk. The moths are expected to be all captured within this tent, being unable to ascend any higher; unfortunately, however, the young caterpillars are able to crawl over the smoothest glass by means of the glutinous silken thread they spin.

A belt of sheepskin saturated with kerosene oil, and with the woolly side out, is said to be, and if carefully applied and kept constantly saturated probably is, a useful protector; but we should strongly advise our readers who are in search of a remedy, to have nothing to do with many Yankee nostrums as useless as they are absurd. Such, for instance, is the often recommended plan of boring holes in the tree, and inserting lumps of sulphur, in order to poison the worms! This remedy cannot possibly hurt the worms, as the sulphur will remain unchanged in the tree for years, but may possibly be as injurious as the insect itself. Some, again, drive nails into the tree with the same object; another has recommended quicksilver as infallible; while yet another speculator sells

what he calls "muriate of lime," that is, burnt oyster shells and salt, and declares that a moderate application of this to the base of the tree is a sure preventative! Such are some of the modes in which the unprincipled try to dupe their ignorant or simple-minded fellow creatures, who learn too late that they have bought the nostrum or recipe only to be "sold" themselves.

17. The Cecropia Emperor Caterpillar (Samia [Saturnia] Cecropia, Linn).—Until recently we regarded this gigantic insect as too rare to be classed amongst our foes, but it has lately become so common in many quarters that we fear fruit growers must begin to consider it as an occasional enemy. Few who see for the first time specimens of this and other large native insects are willing to believe that they are really indigenous to Canada, and not importations from some tropical country. Our Emperor Moths, four species of which we have in Canada, are certainly so large in size and so splendid in ornamentation, that every beholder must regard them with admiration, and be willing to spare them for their beauty's sake, even if they should prove destructive. They all belong to the same family (Bombycidæ) as the noted silk worm, whose productions afford employment to thousands of our fellow-creatures, and subserve the comfort and luxury of a large proportion of the human race. From one of our species, the Polyphemus Moth, that feeds upon oak leaves, excellent silk has been obtained by Mr. Trouvelot, of Medford, Mass.; and a coarse but strong fabric has occasionally been manufactured from the cocoons of the species before us.

The Cecropia Emperor Caterpillar is hatched from a little round egg, flattened above, of a whitish colour shaded with brown. The young larva is very tiny at first, but speedily grows until it becomes a perfect giant among caterpillars. When of full size it is about four inches long, and presents the appearance of the accompanying illustration (fig. 29). The general colour of the body is a beautiful pale-green; the tubercles or

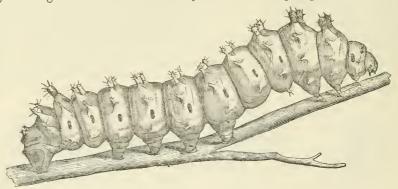


Fig. 29. Colours—Green, Blue, Yellow and Red.

warts on the top of the first and last two segments are blue, those on the second and third coral-red, and those on the remaining segments yellow; the smaller tubercles on the sides are blue. As may easily be imagined, the insect presents a very handsome appearance being thus adorned with so many bright colours. When it has completed its growth it proceeds to spin a large pod-shaped silken cocoon (fig. 30), attaching it on its flat side to



Fig. 30. Colour—Pale-Brownish.

a twig of some tree. This cocoon consists of two envelopes of silken fibres agglutinated 318

together; the outer is loose and wrinkled, and somewhat resembles a coarse pale-brown paper; the inner is much more closely woven and is separated from the outer by a quantity of soft loose silken fibres. Snugly ensconced within these two wrappers lies the chrysalis, safely protected from the fnost, and unaffected by the variations of temperature during the winter. About the end of May or beginning of June the moth comes forth, a magnificent, soft brownish creature, with dull red and white ornamentation. The accomanying wood-cut (fig. 31), exhibiting a male of this splendid species, will render any detailed description unnecessary. Every reader who captures one of these moths will have no difficulty in at once recognizing the species.

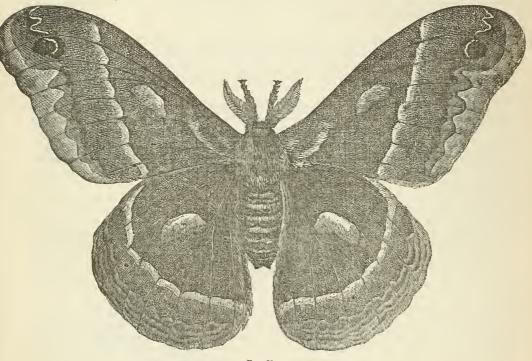


Fig. 31. Colours—Brownish, Dull Red and White.

Until we saw a young plum tree at Collingwood this summer being ravaged by a brood of these caterpillars, we did not think that they were ever sufficiently numerous to require the application of a remedy; but in such a case, of course, it was death to the tree to allow them to remain. Their large size and gay colours render their detection easy in the caterpillar state, and they can be killed by coal oil, boiling water, or stamping under foot. The most effective remedy, however, would be to go round the orchard or garden in the winter and cut off the cocoons, which are so large and conspicuous as to be at once seen. Search should be made for them not only on apple trees, but on a large number of others, such as the cherry, plum, hickory, birch, elm, maple, willow, honeylocust, lilac, barberry, hawthorn, currant, elder, hazel, &c. The caterpillar is so very subject to the attacks of parasitic insects, especially a Tachina fly, that we do not think it is ever likely to become a grievous plague to fruit growers, as are so many of the insects that we are now describing.

18. The Rascal Leaf-Crumpler (Phycita nebulo, Walsh).—Yet another insect has lately been observed to affect the leaves of the apple to an injurious extent; we must not, therefore, allow it to pass unnoticed. It was first described by Mr. Walsh, the late State Entomologist of Illinois, in 1860. We have not met with it ourselves, and consequently cannot give any account of our own respecting it; we take pleasure, however, in tran-

scribing from the pages of the Canadian Entomologist (vol. ii., p. 126), the following excel-

lent account furnished by our esteemed co-adjutor, Mr. Saunders :-

"While looking over some apple trees, on the 23rd of May, I observed the work of a small case-making larva, which I had never noticed before. Its case resembled a long miniature horn, wide at one end, tapering almost to a point at the other, and frequently twisted in a very odd manner. There were generally portions of dead leaves fastened around the case, so as to partially conceal it, and a firm base of attachment was made for it by gnawing off the young bark from the twig on which it rested, and then firmly glueing it with some glutinous secretion to the spot thus laid bare. The case was curiously constructed of silk, interwoven very cleverly with the excrement of the artificer, and had a smooth, whitish surface internally, with an exterior also smooth, but of a yellowish brown colour.

The larva lives inside this curious structure, coming out only when it wants food, and quickly retreating when danger threatens. Its length, when full grown, is about six-tenths of an inch, with a body tapering slightly towards the hinder extremity. Its head is medium sized, rather flat, dark reddish brown, with a dull roughened surface, mandibles or

jaws dark shining brown.

The body above is dark, dull brown, with a slight greenish tint, the second segment being nearly covered above with a horny-looking plate, similar in appearance to the head, but a little paler, and edged behind and at the sides with a darker shade—on each side below this plate is a flattened, blackish prominence—on each side of third segment is also placed a small, shining, black tubercle. On each segment from the third to terminal inclusive, are several very minute blackish dots, from each one of which arises a single pale brown hair.

The under surface is a little paler than the upper, with a more decided greenish tint,

feet green banded, and tipped with brownish black, pro-legs dull greenish brown.

It changes to a chrysalis sometimes, and I think usually within the case. I found them thus changed in some cases on the trees, but one or two of the specimens among those brought home and fed, came out of the case, and changed to a pupa on the outside. The chrysalis was about four-tenths of an inch long, and of a reddish brown colour. One specimen was observed to effect its change on the 8th of June, and produced the winged moth on the 21st of the same month, showing the duration of the pupa stage to be about thir-

teen days.

On examination, the moth proved to be the *Phycita nebulo* (Walsh), to which he has given the significant common name of "The rascal leaf crumpler." In Mr. Walsh's excellent Report on the noxious insects of Illinois, he states that this larva affects the plum and wild crab, as well as the cultivated apple. The young larvæ appear late in the summer, and construct their little cases, surrounded with portions of dried leaves, in which they pass the winter in a torpid state, awakening to activity and resuming their depredations as soon as the young foliage expands in spring. He was of opinion that this insect was confined exclusively to the North-Western States; its occurrence in Canada shows that in this his views were incorrect. Although he had bred a number of specimens, he had never found them preyed on by any species of ichneumon fly, whereas in my own case, although I only bred seven or eight, one of them produced an interesting ichneumon, the name of which has not yet been determined.

The moth is a pretty little thing; its wings measure, when expanded, about seventenths of an inch. Its fore-wings are pale brown, with patches and streaks of silvery white; the hind wings are plain brownish white; the under side of both wings is pale whitish brown, the hind wings paler than the fore-wings. It is figured and described by Mr. Walsh, in the Proceedings of the Boston Society of Natural History, vol. 9, p. 312-3.

The amount of damage done by this insect in my own case was not great; their numbers were not sufficient to cause much alarm; but when they are very numerous, one can easily imagine that their destructive powers would be very considerable, for besides consuming the foliage, their pernicious habit of gnawing away all the young bark from and about the spot to which the case is attached, would, in all probability, lead sometimes to the girdling of the young branches, and their consequent death. The little bunch of dead and dried leaves around their cases gives a ready means of detecting the presence of these

little rascals, and no better remedy for them than hunting them up, and crushing the case

with the hand, has yet been suggested."

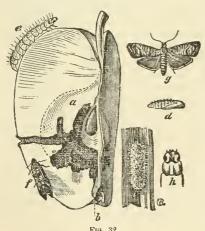
The patient reader must assuredly think by this time that the catalogue of caterpillars infesting the leaves of the apple tree is quite long enough. We shall refrain, then, from wearying him with descriptions of any more, but shall content ourselves with simply enumerating the names of some other Canadian species that feed wholly or in part upon this favorite tree. They are the following: The caterpillars of the Tiger Swallow-tail Butterfly (Papilio turnus, Linn.); the Blind-eyed Sphinx (S. excaecatus, Sm. & Abbott); the Apple Sphinx (S. gordius, Cramer); the American Lappet Moth (Gastropacha Americana, Harris); and the Rose Tortrix (Lozotænia rosaceana, Harris).

## AFFECTING THE FRUIT.

19. The Codling-worm (Carpocapsa pomonella, Linn.)—In 1868 the apple crop throughout this province was very materially diminished by the depredations of this little worm; in some parts of the country fully one-half of the fruit was either completely destroyed or rendered unmarketable. Last year and this year, however,

we are thankful to say, its ravages have been very considerably diminished.

The Codling-worm is an European insect that, like so many other importations, has flourished and increased enormously in this Western world. It proceeds from an egg laid by the parent moth, within the eye or blossom end of the apple, in the month of July. As a rule, only one egg is laid on each apple, but a few rare instances are recorded of two. In a few days the egg is hatched, and the worm at once proceeds to burrow into the fruit; it directs its course towards the core, eating as it goes, and thrusting out its excrement, in the form of a fine powder, through the hole by which it entered.



When it reaches the heart of the apple it eats a cavity about the core, and destroys some of the seeds; after a time it eats a tunnel through to the side of the apple, and makes use of it for the discharge of its castings and refuse; it also avails itself of this aperture to make its escape when full grown. The accompanying illustration (Fig. 32, from Riley's Report) shows this insect in all its stages; a represents a section of an apple which has been attacked by the worm, showing the burrowings and channel of exit to the left: b, the point at which the egg was laid and at which the young worm entered; e, the full-grown caterpillar; h, its head and next segment magnified; i, the cocoon which it spins; d, the chrysalis into which it changes; f, the moth which escapes from the chrysalis, as it appears when at rest; g, the same with its wings expanded.

The caterpillar, when full grown, is about half an inch long, of a pale reddish or pinkish color, and with the head and succeeding segment marked with brownish, as shown in Fig. 32, h. On each segment there are a few fine hairs, scarcely discernible by the naked eye, arising from minute elevated points. It possesses the power, like many other caterpillars, of letting itself down from the tree by means of a fine silken thread which it spins. The chrysalis is yellowish brown, and is enclosed in a cocoon of white silk, disguised on the outside with fragments of the substance to which it is attached. In order to make its way partly out of the cocoon, when ready to assume the perfect state, the chrysalis is furnished with a double row of spines or teeth on its back. The moth, which appears in June, is a very pretty little creature, but is seldom seen, on account of its habit of concealing itself during the day-time and only coming forth at night. Its expanded wings measure about three-quarters of an inch; its fore wings are marked with alternate streaks of ashen grey and brown, and have, on the inner angle of each, a large tawny brown spot, with streaks of bright metallic lustre; the hind wings are pale reddish brown, and of a satiny texture.

This insect is regarded as double-brooded in Europe, and appears to be so in this country as well, though perhaps not universally. Mr. Saunders, in 1868, reared the moth early in August, from fruit gathered late in July, and found young specimens of the worm again quite late in August. Mr. Walsh stated, in his first report on the noxious insects of Illinois, that he was satisfied that there were two distinct broods in the year in that State. Mr. Riley, in his first report as State Entomologist of Missouri, is of the same opinion as regards his locality. He writes: "The female flits from blossom to blossom, deftly depositing in the calyx of each, a tiny yellow egg. As the fruit matures, the worm developes. In thirty-three days, under favorable circumstances, it has become full fed, when, leaving the apple, it spins up in some crevice, changes to chrysalis in three days, and issues two weeks afterwards as moth, ready to deposit again, though not always in the favorite cally this time, as I have found the young worm frequently entering from the side. Thus the young brood of codling moths appear at the same time as the young curculios, the difference being that instead of living on through the fall and winter, as do the latter, they deposit their eggs and die, it being the progeny from these eggs which continues the race the ensuing year."

Our own opinion is that the insect is double-brooded, because we have found fully matured larvæ in the ripe early Harvest apples in August, and others of the same size in September and October in the ripe autumn apples; the latter we should naturally infer were of a different brood from the former. This, of course, would not be sufficient in itself, but it has weight when coupled with the other testimony given above. This point is important when we come to apply remedies for the insect, for if we take it for granted

that there is only one brood, we shall be letting the earlier go scot free.

Let us now consider the remedies for this pest. The simplest remedy is to gather up all the fruit that falls before the worm has time to leave it, and destroy the enclosed larva by dipping in boiling water, or feeding to pigs. Where practicable, pigs may be suffered to roam through the orchard and gather up the wormy fruit for themselves. This remedy is very good and useful, and indeed a highly advisable one to employ, but it obviously does not affect the worms that had left the fruit before it falls to the ground. To catch these there is an excellent plan, originated by Dr. Trimble, of New Jersey; it is simply to bind hay ropes around the trunks of the trees, two to each tree, one low down, the other tolerably high up the trunk. These are taken possession of by the worms when looking about for a convenient place in which to make their cocoons, and by carefully examining the bandages every week during the season, large numbers of the insects may be found and destroyed. An improvement on this plan is to substitute rag bandages for the hay ropes—pieces of old carpet will answer very well—take them off every week, pass them through a clothes wringer, or dip them into boiling water, and the worms are all done for; then replace them on the trees for another set, and so on through the season. To be thoroughly effectual these bandages should be placed around the trees atout the first of June, and kept on as long as an apple remains upon the tree; they should be examined once a week; the trunk of the tree should be kept free from rough or loose bark, and the ground from weeds or rubbish, so as to give the worms no other place of concea ment our the bandages.

One more precaution is still necessary. When the fruit is gathered in the autumn and stored away, there are still a great many worms in the fruit, as no doubt every apple eater has noticed occasionally to his disgust. These often remain for weeks in the apples, and then they come out in the cellar or storehouse and search about for the nearest convenient hiding place in which to assume the chrysalis state. A very favorite locality is the space between the hoops and the staves of the barrels. We have found hundreds in such positions, especially in the winter of 1868-9; and Mr. Riley relates a similar experience. Where this occurs, it is by all means worth while to scald the barrels thoroughly outside as well as inside, as soon as they are emptied, or even to burn them. When boxes or bins are made use of for storing fruit, the worms are sure to find some crevices to suit them,

which should be searched for and treated as in the case of the barrels.

20. THE APPLE CURCULIO (Anthonomus quadrigibbus, Say).—The common plum Curculio (Conotrachelus nenuphar, Herbst), of which a full description is given by Mr. Reed in another part of this Report, is known to attack the apple as well as its peculiar fruit

the plum, and oftentimes to do a considerable amount of damage. But there is another curculio, the "four-humped," or apple curculio, which bids fair to become a nuisance in our gardens and orchards. Though well known for some time to entomologists in the western part of this Province, it has only recently been much observed or regarded as destructive. Its natural food is the wild crab and the hawthorn; but now it is taking kindly to the cultivated varieties of the apple. In the September, 1870, number of the Canada Farmer (p. 337), we have recorded its occurrence at Milbrook, Ont., where "it had done a good deal of damage by eating a considerable portion of the surface of several apples."

This species may be easily distinguished from the plum curculio by its much longer and more slender snout; its color, which is dull brown, shading into rusty red behind; and by the four conspicuous humps on the wing covers behind the middle, which are brownish-red, and not shining black, as in the case of the plum curculio. The accompanying illus-





FIG. 33.

tration, gives an excellent representation of the perfect insect, (Fig. 33, a, natural size; b, side view; c, back view of the beetle.) Unlike the insect affecting the plum, this creature makes round instead of crescent; shaped holes, most of them, apparently, for the purpose of eating, as but a small proportion of them have been observed to contain eggs or larvæ. It varies also in completing its transformations, as a rule, in the fruit instead of the ground.

The only known remedy for its attacks is vigorous and continued "jarring," a full account of which operation will be found under the description of the

plum curculio in a subsequent part of this Report, and therefore need not be repeated here.

# INSECTS INJURIOUS TO THE GRAPE.

By W. Saunders, London, Ontario.

- 1. The Green Grape-vine Sphinx (Cherocampa pampinatrix, Smith.
- 2. 'The beautiful Wood Nymph (Eudryas grata, Fabricius.
- 3. The Pearl Wood Nymph (Eudryas unio, Hubner.)
- 4. The Grape-vine Leaf-roller (Desmia maculalis, Westwood,)
- 5. The Grape-vine Plume moth (Pterophorus periscelidactylus, Fitch.)
- 6. The Grape Cidaria (Cidaria deversilineata, Hubner.)
- 7. The Common yellow Woolly Bear (Spilosoma virginica, Fabricius.)

- 8. The Spotted Pelidnota (Pelidnota punctata Linneus.)
- 9. The Grape-vine Flea Beetle ( $Haltica\ chn\ lyb\epsilon a,\ Illiger.$ )
- The Grape seed Insect (Isosoma vitis, Saunders.)
- 11. The Thrips (so called) (Tettigonia vitis, Harris.)
- 12. The Grape-leaf Gall Louse (Pemphigus vitifolia, Fitch.)
- 13. The Tree Cricket (*Ecanthus niveus*, Harris.)
- 14. The Honey Bee (Apis mellifica, Linn.)

#### INSECTS INJURIOUS TO THE VINE.

The grape is now being cultivated extensively throughout our country, and since it has been shown that so large a portion of our soil and climate is well adapted to the growth of many of the best varieties; the culture of this valuable fruit is being greatly stimulated. Already many large vineyards have been planted in favored localities, and their numbers and dimensions are yearly increasing. Some growers cultivate chiefly those varieties adapted for table use, while others plant for wine making. The abundance of home-grown table grapes is materially lessening the yearly imports in this direction, and we feel assured that not many seasons will elapse before the yield will be so immensely increased, that the wants of our people will be abundantly supplied with Canadian fruit at very moderate prices.

With this in view, it becomes a matter of the greatest importance, that correct information should be disseminated regarding the habits and history of the many insect foes which attack the foliage and fruit of the vine, and the best means of preventing their

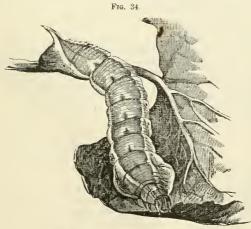
ravages.

No. 1. The Green Grape-vine Sphinx (Charocampa pampinatrix, Smith.) One of the worst foes we have to deal with is this green Sphinx caterpillar, with a horn or tail on its hinder extremity. The moth from which this larva is produced, passes the winter in the chrysalis state, on or about the surface of the ground, enclosed in a rough case made of dry leaves or any other rubbish convenient. The appear in the winged state usually

from the middle to the latter end of May, when they pair, and in a few days afterwards deposit their eggs on the underside of the leaves. These are generally placed singly, but occasionally we have seen two and even three put quite closely together. Sometimes they are attached by the parent to the larger ribs of the leaf, at other times fastened on the intermediate substance. The egg is nearly round, one-twentieth of an inch in length, and a little less in width, exact measurement, length, '005, width, '0045 inch. It appears smooth with an ordinary magnifying lens, but under a power of forty-five diameters the surface is shown covered with minute punctures. Its colour is pale yellowish-green, sometimes changing to reddish before hatching. We do not think this change of colour always takes place, but have not watched it closely enough to be positive.

The young caterpillar comes out of the egg in about five or six days. This conclusion is based on one experiment only. This summer we had a number of eggs laid by a female, confined in a small box. They were deposited on the 25th of June, some hatched on the 30th, and most of the remainder on the 1st of July. They were kept in a cool room, which would be likely, somewhat, to retard their development; probably five days would be about the usual time under the ordinary influences of the sun and heat. As soon as the larva has found its way out, it makes its first meal on part of the empty egg shell, and then begins to satisfy its further cravings with the softer foliage of the vine. When first hatched it is one-fifth of an inch long, of a pale yellowish-green colour, with a large head, and a long black horn on its posterior extremity, half as long as its body. As the larva increases in size, the horn becomes shorter and changes colour, the markings of the body also vary much, and by the time it has attained three-fourths of an inch, it has materially altered its appearance. Its head is rather small, pale green with a pale yellow stripe down each side, and with a number of raised yellow dots or granulations scattered over its surface. Its jaws are tipped with black. The body is of a slightly deeper shade of green than the head, although, in this respect, different specimens vary, and also covered with similar pale yellow granulations. Along the sides of the body these latter are arranged in lines forming a series of oblique stripes extending backwards. On the back is placed a row of seven reddish dots, more or less distinct; in some specimens they are quite a deep red, in others very pale; occasionally they are united by a faint reddish line. The horn which is placed on the twelfth segment or ring of the body, is one-fifth of an inch long, of a pale reddish colour, and thickly covered with minute black points. The under surface of the body is similar in colour to the upper, and also granulated with yellow. The feet are red, and the thick fleshy prolegs pale green.

The full grown caterpillar (Fig. 34) is about two inches in length, of a similar colour



Colour-green, lilac and yellow.

to that just described, with the yellow granulations more distinct. The oblique lines are generally edged behind with a darker green, and there is a distinct line along each side, beginning at the head where they are not far apart, diverging along the middle segments, and again approaching each other on the twelfth segment, where they terminate on each side of the caudal horn. The spots along the back vary in different specimens, from very pale lilac to red, as in the younger worm. This larva has the power of drawing its head or first segment, with the second and third, within the fourth and fifth segments, which cause these latter, at such times, to appear very much distended. The accompanying Fig. gives a very good idea of this pest, and will perhaps be better

understood than any merely verbal description.

PORTECT This insect has, until of late, been usually regarded as single-brooded, but during the last two years we have watched them very closely, and feel well assured that they are

double-brooded with us. The eggs of the first brood were found this year about the middle of June, the young larvæ appearing in considerable numbers a few days later, developing into full size, and with full powers of destruction about the middle of July. They then entered the chrysalis state and produced the moths during the last days of July or first in August. These latter paired and deposited eggs again, from the middle of August to the beginning of September, which produced the second broad of larvæ, maturing late in September. Long after this occasional eggs were found, even as late as the middle of September, and an odd specimen of the larva was also found now and then till the middle of October, at which time two full-grown specimens were taken, and one about half-grown. The former soon changed to chrysalids, but the latter died. Some examples of the larvæ, especially at this late season of the year, exhibit remarkable variations in colour, assuming a delicate reddish pink hue, with markings of darker shades of red and brown. This so materially alters the appearance of the caterpillar, that it might be readily mistaken at first glance for a different species. A more careful examination, however, would show the same arrangement of dots and spots as in the normal form. Sometimes this change of colour takes place a little before the insect enters the chrysalis state, although not always so, for we have had them transform without such change of tints, and at other times we have found larva not much more than half grown with all the dark hues before referred to, but, as already mentioned, these latter have usually been found later in the season. J. A. Lintner, Esq., of Albany, N. Y., states, in the proceedings of the Entomological Society of Philadelphia, vol. 3, p. 663, that he has noticed the caterpillar previous to this change of colour, to pass with its mouth over the entire surface of the body, even to the tip of the horn, covering it with a coating of apparently glutinous matter, the operation lasting

This larva is very destructive to the foliage of the vine, and is becoming in our neighbourhood every year more troublesome. Its appetite is enormous, one or two, when nearly full grown, will almost strip a small vine of its foliage in two or three nights. Harris in his "Insects injurious to vegetation," referring to this caterpillar, says, that "they are not content with eating the leaves alone, in their progress from leaf to leaf down the stem, they stop at every cluster of fruit, and either from stupidity or disappointment, nip off the stalks of the half grown grapes, and allow them to fall to the ground untasted. I have gathered under a single vine, above a quart of unripe grapes thus detached during the night, by these caterpillars." As far as our experience goes, we have never seen nor have we ever heard of their manifesting this evil disposition towards Canadian fruit growers—mayhap their manners have improved in this respect within late years

The most effectual way of getting rid of these creatures where their numbers are sufficient to prove troublesome, is to pick them off the vines by hand and kill them. Their destructive efforts are so painfully apparent, that their exact whereabouts is not usually difficult to determine. Sometimes where the foliage is dense, they may be more readily tracked out by observing their large dark brown castings, which strew the ground under their places of resort. But nature has provided a remedy in the shape of a minute parasite, which, tiny as it is in size, is an effectual check to the unlimited increase of this injurious insect. It is a small ichneumon fly, represented in Fig. 35. The larger drawing is a

magnified view, the smaller is of the natural size. This apparently puny insect, is a great friend to the vine grower, especially in many parts of the United States. Mr. Lintner of Albany, N. Y., thinks that nine tenths of the larvæ in his vicinity, are destroyed by it, and Mr. Riley of St. Louis, Mo., believes that the proportion there would reach three in four.

Colour—Black. This little friend punctures the skin of the caterpillar and deposits her eggs underneath where they soon hatch into young maggets, which revel on the fatty portions of the body of their victim, until they are full grown. Mr. Lintner says, "it is usually after the last moulting, while to all appearance the larva is uninjured and thriving, that numerous little heads may be seen forcing their way through the skin of its back and sides. Within an hours' time, the entire brood of grubs have emerged. With their terminal segment remaining in the opening made by the escape of their bodies, they at once commence building about themselves small firm snow-white cocoons, which standing on end, are usually so abundant as to cover the entire body in a couple of hours. In about

a week the parasite is developed—escaping from its cocoon by pushing open a nicely fitting lid." The caterpillars infested by these parasites, manifest extraordinary vitality. would think that the presence of such a host of comparatively large voracious creatures consuming the internal portions of the body, would naturally produce sickness and premature death; but such is not the case. Mr. Riley in the second of his excellent reports on the insects of Missouri, states that "while one of these caterpillars in its normal and healthy condition, may be starved to death in two or three days; another that is writhing with its body full of parasites, will live without food for as many weeks. Indeed, I have known one to rest for three weeks without food, in a semi-paralyzed condition, and after the parasite flies had all escaped from their cocoons, it would rouse itself and make a desperate effort to regain strength by nibbling at a leaf which was offered to it."

But no larva thus infested ever reached maturity—they invariably die. Fig. 36, is a



faithful representation of one of the caterpillars with its crop of cocoons of the parasite, ripening on its surface. From the shape and colour of these cocoons, they are sometimes erroneously supposed to be the eggs of the caterpillar, and hence pains is taken to destroy the very thing that should be cherished; thus showing the great necessity there is for the diffusion of more correct

ideas regarding these subjects among the people generally. This friendly parasite has, we are happy to say, established itself in the neighbourhood of London; and this summer, we have seen for the first time, one of the larva of this common grape vine sphinx, almost entirely covered with its little snowy white cocoons. We have not been able to ascertain how far it prevails in other parts of Canada.

When the caterpillar has attained its full size, and provided also it is free from ichneumons, it descends from the vine and draws loosely together a few leaves, binding them with silken threads-generally about or near the base of the vine on which it has fed, and

in this rude structure undergoes its next change.

After remaining some two or three days in a state of quiet, the body meantime growing shorter and thicker, a rent occurs in the caterpillar's skin along the back, and a pale yel lowish chrysalis appears, which works itself by wriggling motions entirely out of the skin, which contracts as it is thrown off—remaining at the close of the operation, as a small shrivelled mass attached slightly to the posterior extremity or hanging to some of the adjoining silken threads. In a day or two the chrysalis grows darker in color, becoming pale brown with numerous black dots sprinkled over its surface. Along each side is a row of prominent oval black spots, which are the breathing holes or stigmata—a good representation of this chrysalis is given in Fig. 37.



Colours-Yellowish and Brown,

The perfect insect which in due time bursts the bonds of this death like sleep, appears in a beautiful garb of green. It is a moth belonging to the family of Hawk moths, so called from their habit of hovering in the air while taking their food. The various members of this family are furnished with a slender proboscis, which when at rest, is coiled up underneath the breast, but can be extended at will, and thus when poised in the air over a flower, the slender tongue is thrust to the bottom and the sweets

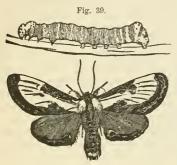
The wings of this insect, Fig. 38, when fully expanded, measure about two and a half inches—their form is long and narrow. The anterior pair are of a dark olive green colour, crossed by bands and streaks of greenish grey, and shaded on the outer margin with the same. The hind wings are dull red, with a patch of greenish grey on that part of the hinder margin nearest the body-shading gradually into the surrounding tint—on the underside, the red appears on the fore



wings, the hinder pair being greenish-grey. The antennæ or horns, are dull white above, with a rosy tint below. The head and shoulder covers are deep olive green, and the remainder of the body of a much paler shade of green—underneath the body is dull grey.

This moth remains quiet during the day time taking wing at dusk; when it is extremely active. Its flight is very swift and strong, and its muscular structure so powerful that when captured, it will almost beat itself to pieces by its perpetual fluttering. It is very generally distributed throughout Ontario more abundant in the western portion. We have not been able to hear of its occurrence in Quebec.

No. 2.—The Beautiful Wood Nymph—(Endryas grata, Fabricius.)



This species also in the larva state, is destructive to the foliage of the vine. The accompanying wood engraving so admirably delineating this lovely moth and its caterpillar, is the work of Mr. Charles J. Beale, of London, Ontario, * who has drawn and engraved it from nature. This moth when its wings are expanded, measures about one and three quarter inches. Its fore wings are creamy white, with a glossy surface, with a wide brownish purple stripe along the anterior edge, reaching from the base to a little beyond the middle of the wing. On the outer margin is a broad band of the same hue, widening posteriorly, with a wavy white line running through it, composed of minute pearly dots or scales. It is also bordered internally with Colours-Moth Creamy White and Brownish dull deep green. Besides this, there is a continuation of

the brownish purple band along the hinder edge, but much

narrower and terminating a little before it reaches the base. There are also two brown spots, one round, the other reniform, near the middle of the wing, often so suffused with pearly white scales as to be indistinct above, but clear and striking on the underside. The hind wings are reddish yellow, with a broad brownish purple band along the outer margin, extending nearly to the outer angle, and powdered here and there with a few whitish pearly scales. There is also a faint dot on the middle of the wing, which is reproduced in a more prominent way on the under side. The under surface of both wings is reddish yellow. The head is black and there is a wide black strip down the back, merging into a series of spots of the same which extend nearly the whole remaining length of body. The sides of the body are reddish yellow, with a row of blackish dots along each side close to the under surface. The shoulder covers are white, so also is the under surface of the body.

The moth appears with us on the wing early in June, when it may often be found in the day time fast asleep on the under side of the leaves of the vine. When thus at rest its closed wings form a steep roof over its back, and its fore legs, which have a curious muff-like tuft of white hairs, are protruded, giving it altogether a very singular look. Soon after their appearance they begin to deposit their eggs. We have never observed these on the vine leaves, although they must be common enough, but have seen them when deposited by one of the moths confined in a small box. They were then spread over the surface, sometimes in groups of five or six, sometimes singly. The egg is among the prettiest of the many beautiful insect eggs. It is round and very flat, about one twenty-fifth of an inch in diameter, with a thickness of about one-fiftieth. Its colour is yellowish or greenish-yellow, with an enclosed ring of black placed a little beyond the middle, and sometimes nearer to the outer margin. In the centre of the egg is a large nearly round dot, and at a little distance from this a circle of smaller dots, from which arise a series of from 24 to 27 raised striæ, diverging equally as they approach the outer edge, and crossed by many gracefully curving lines which interlace also the spaces between.

When mature, the young caterpillar escapes from the upper part of the egg, lifting the centre and rupturing the portion placed over the black ring. In some cases we have observed the egg shell consumed by the young larva, while in others it did not appear to be touched.

They are usually solitary in their habits, but occasionally two or even three may be

found on a single leaf, showing that the eggs are sometimes so deposited. At first they eat small holes in the leaf, but as they increase in size they consume all parts of it, the framework as well as the softer substance.

The full-grown larva (Fig. 39) is nearly one and a half inches long, tapering towards the head, thickening towards the posterior extremity. The head is medium sized, rounded,

of an orange colour, with a few round black dots and pale brownish hairs.

The body above is pale bluish, crossed by bands of orange and many lines of black. Each segment except the terminal one is crossed by an orange band, all of which are nearly uniform in width, excepting that on the twelfth segment, which is much wider. On the terminal segment there are two bands. All of these are more or less dotted with round black dots, from each one of which arises a single short brown hair. There are also, crossing each segment, six black lines, placed nearly at equal distance along each side, but with a wider space in the middle where the orange band occurs. The twelfth segment is much raised, and the terminal one suddenly sloped. The stigmata are oval and

The under side is very similar to the upper, marked also with orange and black. Feet and prolegs orange spotted with black.

The larva feeds on Virginia creeper (Ampelopsis quinquefolia) as well as on the vine,

so also does the preceding species.

When full-grown it descends from the vine to seek some suitable location in which to pass its chrysalis or inactive stage, when, being without power of locomotion or defence, it would be at the mercy of any enemy which might chance to cross its path. Harris says the larva burrows its way a short distance underground, and there changes to a pupa without forming a cocoon. We have frequently had them transform in a pill-box, without earth or any other covering, and they have usually survived and produced in good time the perfect insect. Mr. Riley, in his second report, states that the larvæ have a fondness for boring into old pieces of wood, and within the chamber which they excavate change to chrysalis, and Mr. Ashton, of White Creek, N. Y., has found them frequently boring into corn cobs, which, he says, they prefer to going under ground. Hence Mr. Riley advises the scattering of a few corn cobs under the vines in summer, and the raking up and burning them in winter, as one means of destroying this insect. He also suggested to the writer, during a conversation on this subject, the idea of putting a few large corks into boxes where the caterpillars were being reared, so that they might burrow into them, and thus be better protected during the pupa state, which we found to serve an admirable purpose, they availed themselves of such shelter very readily. In two small bungs about one and a half inches in diameter, and an inch thick, we found twenty-one enclosed chrysalids. The caterpillar excavates with its jaws a chamber but little larger than the chrysalis which is to rest in it. It is not lined with silk, but is made moderately smooth. This, when completed, is fastened over the top with a cap or cover, composed of minute fragments of cork formed into a sort of membrane by means of a glutinous secretion associated with threads of silk. When nicely finished its surface is slightly glossy, and the glossiness extending a little over, beyond the actual orifice, indicates that the glutinous matter has been of a thin consistence, and hence spread a little during its application. When this lid is lifted the head of the chrysalis is usually found quite close to it.

The chrysalis is about seven-tenths of an inch long, of a nearly uniform dark brown colour, roughened with small blackish points or granulations. The head case is somewhat conical; the thorax and middle segments nearly cylindrical, while the posterior segments are tapering, the terminal one having a pair of long tubercles above, and a pair of shorter

ones below.

We incline to the opinion that this moth is sometimes double-brooded; we have reared the perfect insect repeatedly from caterpillars of the current year, and we have found the larva in various stages of growth quite late in the season.

This species is also subject to the attacks of a parasite, although a very different one from that which we have referred to as infesting pampinatrux. This is a dipterous or twowinged fly, a Tachina, and we believe it to belong to the species known as the red-tailed Tachina fly, Exorista leucania, (Fig. 40.) This fly is not unlike the common house fly in



appearance, and is about one-quarter of an inch long, with a white face, large reddish eyes, a dark hairy body, with four, more or less distinct, dark lines down the thorax, and patches of a greyish shade along the sides of the abdomen. We have reared several specimens of this fly from the larva of Eudryas grata during the past season. Their mode of procedure is as follows:—The parent fly deposits her eggs on the back of the caterpillar, usually a short distance behind the head, where they are cemented firmly by means of a peculiar secretion with which the insect is furnished. Three or four of

these eggs are usually placed upon a single caterpillar, where, after a few days, they hatch, and the tiny grub eats its way through the skin into the interior of the body, where it feeds upon the fatty matters, avoiding the vital organs which are essential to the continuance of the life of its victim. When the caterpillar is about full grown it dies, and from its body proceeds these three or four full grown whitish grubs, which, soon after their escape, change to chrysalids. These are nearly one-fifth of an inch long, oval, smooth, and of a dark brown colour.

This friendly parasite materially assists in keeping down the numbers of these and several other kinds of caterpillars, which would otherwise be a source of much greater

annoyance to the fruit grower.

Eudryas grata is generally common throughout both the Provinces of Ontario and Quebec. Mr. G. J. Bowles, of Quebec, says that it is not uncommon there, and that the larva feeds on the hop, appearing in June and July. We believe this fact of its feeding on the hop has never been noticed before. Rev. L. Provancher, editor of the Le Naturalist Canadien, Quebec, also speaks of it as abundant, sometimes so numerous as to be quite destructive to the foliage of the vines. Mr. D. W. Beadle, of St. Catharines, says it may generally be found every season on his grounds, but not in sufficient quantity to do much harm. Mr. J. Petit, of Grimsby, bears similar testimony as to its presence there. On our own vines we have found them, especially during the past season, quite numerous, so much so that where they were disregarded, they soon materially disfigured and damaged the vines. As remedies, we would suggest hand-picking and syringing the vines with hellebore and water.

No. 3. The Pearl Wood Nymph (Budryas unio, Hubner.) This is a near relative of "grata," the beautiful Wood Nymph, indeed, so nearly do they resemble one another that it requires the practised eye of an Entomologist to distinguish between them. This moth, however, is a little smaller, its wings expanding about one inch and three-eighths, and also differs in the following points:—On the fore wings, the brownish purple stripe on the front margin is extended further along the wing, the bordering of the outer margin is paler and more uniform in width, the inner edge wavy instead of straight, and the bordering of the hinder margin is wider and more distinct. The edging of the hind

wings is much paler, and extends the whole length of the outer margin.

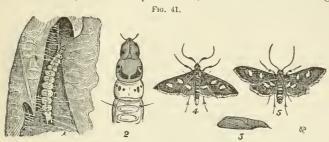
With us this insect is much less common than grata, and we have no personal acquaintance with its larval history, but it is said to resemble its relative in this state, almost as closely as in the perfect one. Mr. Riley says "it never grows to be quite as large as the other, and may be readily distinguished by its more decided bluish east, by having but four light and four dark stripes to each segment, by having no orange band across the middle segments, and by the spots, with the exception of two on the back, placed in the middle light band, being almost obsolete. The head-shield on the first segment, hump on the 11th, and a band on the 12th, are orange, spotted with black; venter orange, becoming dusky towards the head, feet and legs also orange, with blackish extremities, and with spots on their outside at base."

"The worm works for the most part in the terminal buds of the vine, drawing the leaves together by a weak silken thread, and cankering them. It forms a simple earthen cocoon, or frequently bores into a piece of old wood, and changes to chrysalis, which averages but 036 inch in length. This chrysalis is reddish brown, covered on the back with rows of very minute teeth, with the tip of the abdomen truncated, and terminating

above in a thick blunt spine each side.

This moth is very rare throughout Ontario, and we have been unable to learn of its occurrence at all in Quebec, so it is scarcely likely it will ever be the cause of much annoyance.

No. 4. The Grape-vine Leaf roller (*Desmin maculalis*, Westwood.) This species, although most abundant in the Southern States, is still very generally distributed, and will no doubt, in its caterpillar form, be familiar to all vine-growers. The accompanying



Colours-1 and 2 grass green, 3 brown, 4 and 5 black and white.

wood-cut (Fig. 41) represents the moth with its wings closed and expanded, the larva of its natural size, also a magnified view of a portion of the anterior part of its body, and the chrysalis.

The moth is a very pretty little creature. Its wings when expanded measure about nine-tenths of an inch,

its body being nearly four tenths of an inch long. Its wings are dark brown, nearly black, with a bronzed or coppery lustre, and lightly fringed with white. The fore wings have two white, nearly oval, spots, the hind wings but one white spot, which is usually larger than either of those on the anterior pair; sometimes in the female the spot is slightly divided. The under side of the wings is very similar to the upper, but of a duller shade. The body of the male is also nearly black, with one white band, while the female has two.

There are two broods of this insect during the summer. The first moths—which have passed the winter in the chrysalis state—appear early in June; the second brood in August. They deposit their eggs singly on the leaves of the vine. Soon after the young worm is hatched, it begins to manifest its leaf-folding propensities, by turning down a small portion of the leaf on which it is placed, and living within the tube thus formed. As it increases in size, a larger case is made, often the whole leaf is rolled over and over into a large cylinder, wider at one end than the other and firmly fastened with stout silken threads. In this the little active wriggling creature lives, its case affording it a tolerably safe hiding place, from whence it issues forth to feed on the surrounding foliage. It is so very rapid in its movements both backwards and forwards, that it frequently escapes detection, by suddenly slipping out of its case when disturbed and falling to the ground. The first brood of caterpillars are full grown about the last of July—the second in the beginning of September.

The length of the full grown larva is about three quarters of an inch—its body cylindrical, that is of the same thickness throughout. The head is medium sized, dull reddish yellow, with a faint streak of black on each side near the base, and a few very fine yellow hairs. The mandibles are tipped with brown.

The body is yellowish green at the sides, a little darker above, glossy and semi-transparent with a few fine yellow hairs on each segment. The second segment—that is the first behind the head—has a crescent shaped patch above, of the same colour and appearance as the head, covering nearly the whole of its upper surface and edged behind with brownish black. The third segment has three spots on each side, the two lower of which are sometimes united, forming a single reniform patch of black—the upper one which is smaller, is of a pale brown colour. The twelfth segment has also a black spot on each side, and is a little paler in colour above than the other segments are. The under surface is pale greenish yellow, with the same glossiness and semi-transparent appearance as the upper surface—the feet and prolegs partake of the general colour.

Before entering the chrysalis state, Mr. Riley says they change colour, assuming a pink shade. The chrysalis is about half an inch long and of a dark brown colour. It is usually formed within the fold of the leaf, so the last brood which passes the winter in this inactive state, may in a great measure be destroyed by carefully going over the vineyard late in the season, before the leaves fall, and picking off the folded leaves and burning them or the larva may be destroyed earlier in the season, by suddenly crushing the folded leaves

with both hands. In our own experience we have oftener found the cases empty than occupied, but whether this arises from their destruction by birds or other enemies, we have not been able to ascertain—spiders are said to kill many of them. We have never met with or heard of, any parasite attacking this species.

This insect, we learn from Messrs. Bowles and Provancher, is common about Quebec, where as the grape is not much cultivated, it probably feeds on the wild vines. It is also plentiful throughout Ontario, although nowhere as far as we can learn is it very destructive.

No. 5.—The Grape vine Plume—(Pterophorus periscelidactylus—Fitch.)

This although an extensive name is applied to quite a small insect. The moths belonging to this family, are called plume moths, from the fact of their having their wings divided into feather like lobes, and the English rendering of the above extremely formidable looking scientific name, would be "the Gartered Plume"; so designated from the circumstance of having its hind legs surrounded near the joints, with garter like tufts of brownish scales.

As soon as the young branches of the grape vine have fairly started, and just about the time when the third bunch of blossom is appearing, this enemy to its growth appears with it, in the shape of a small whitish hairy caterpillar, fastening the young terminal leaves into a ball shaped mass, and living within the hollow sphere thus formed. The caterpillars are generally found solitary, hence it is probable that the eggs are laid singly. Mr. Riley says "that the very young larva is smooth and nearly destitute of hairs, but after each moult the hairs become more perceptible, and when full grown, appear as at Fig. 42," a. We have not seen the caterpillar while very young, but have been painfully

exercised in observing its destructive work, when near its

maturity.

It is then about half an inch long and cylindrical in form. Its head is small, of a yellowish green colour, with a band of black across the front, just above the mandibles, and a few fine greenish hairs scattered over its surface. The mandibles are faintly tipped with brown.

The body above is yellowish green, with transverse rows of dull yellow tubercles, from each of which arises a small tuft of white hairs. There is a line down the back of deeper green, and the body is a little paler between the seg-

ments.

The under surface is somewhat deeper in colour than the upper, with a few whitish hairs. The feet are black, tipped with yellowish green—the prolegs which are long and thin, are of a greenish colour.

Sometimes the caterpillar assumes a pinkish hue before entering on its next stage in life, but more commonly it retains its normal colour. It may usually be found full grown from the eleventh to the fifteenth of June, but this year they were about two weeks earlier.

When matured, it spins a few silken threads on the Colours—(a) White, (b) Light brown, (d) under side of a leaf, or in some other convenient spot, and having entangled its hind legs firmly in the web of silk, it

sheds its hairy skin and becomes a chrysalis; which as it escapes from the larval covering hangs itself up by its posterior extremity—entangling the little hooks with which it is furnished, in the same silken fibres as that in which the caterpillar's legs were fastened. How it does this without hands or feet to hold on by, would take too long to explain, but it is a most marvellous feat, performed but once in the creature's life, hence without previous instruction or practice, and scarcely ever with a mishap.

The chrysalis (Fig. 42, (b), is an odd looking little thing about four tenths of an inch long, angular and rugged, and wriggles about very briskly when touched. At first it is of a pale yellowish green, but soon grows darker on the summit of the anterior extremity, and on the more prominent protuberances. The deepening in colour is gradual, finally extending over the whole surface, when it becomes reddish brown, sometimes yellowish

brown. The head case is nearly black, with a rugged surface—the anterior segments almost cylindrical, with a ventral depression or cavity, ridged on each side to about the beginning of the seventh segment, where the ridging terminates in a pair of dark protuberances. The posterior segments are tapering, and there is a slightly darker ventral line, with a row of small tubercles on each side.

Dr. Fitch, State Entomologist of New York, who was the first to describe and name this insect, says that the duration of the chrysalis state, is only from six to eight days. Mr. Riley puts it down as a week. Our own observations which have been very carefully made, point to a longer period, not less than ten days, and not usually more than thirteen,

most commonly about twelve days.

The elegant little moth (Fig. 42, d,) then makes its appearance. Its wings which are very finely and delicately constructed, measure, when expanded, about seven tenths of an inch. The fore wings are long and narrow, and cleft down the middle, about half way towards their base; the posterior half of the wing having a notch in the outer margin. Their colour is yellowish brown, with a metallic lustre, with several dull whitish streaks, and spots. The hind wings are divided into three lobes, the lower division is complete, extending to the base, the upper one only about two thirds of the distance. The colour of these is yellowish brown also, with the same burnished metallic appearance, and with a streak of dull white on the hinder lobe. The outer and hind margins of the wings as well as all the edges of their lobes, are beautifully bordered with a deep whitish fringe, sprinkled here and there with brown. Its body is long and slender, and of the same colour as the wings, but a shade darker. The antennæ are moderately long and thread like, nearly black, but beautifully and regularly dotted with white their whole length. The legs are also long, banded alternately with yellowish brown and white, and powdered with metallic scales. The hinder ones are each furnished with two pairs of diverging spines, having at their base a garter like tuft of long brown scales.

Under a low magnifying power, this moth is really a charming object, we have scarcely seen a more beautiful one. Its graceful outlines, its delicate structure and the harmonious blending of its soft shades of colour, with the light reflected from its burnished coppery like scales—all enchant the eye, and to think that such grace of form and beauty of detail, should spring from such a common looking hairy caterpillar, lends a fur-

ther interest to it.

With regard to its manner of flight, we cannot do better than quote Dr. Fitch:—
"like other species of this family, this moth is very agile, rapid, and impetuous in its motion. When disturbed, bounding from side to side of the cage in which it is confined, almost with the velocity of lightning, for a moment, and then resting; clinging with its four anterior feet to the top of the cage, its wings spread and its body hanging perpendicularly downwards, and swinging to and fro with the wind, with its long hind legs extended."

In all probability there is only one brood of this insect during the season. Where a species is double-brooded, the second brood is usually more numerous than the first, but in this case, although specimens of the early brood are only too plentiful, we have failed after close observation for two seasons, to see any indications of later offspring. May it not be that the moth which appears from the middle to the end of June, deposits its eggs on the canes of the vines, near the base of the bud from which the next year's branch will spring, and that there it remains quiescent during the remainder of summer, and following winter, hatching into the larva in spring. Further investigation here is needed.

The spinning habits of this creature, lead to its ready detection, when it may be easily crushed with the hand, consequently where ordinary care is exercised, its destruc-

tive powers, are not likely to cause serious alarm.

This species is also widely distributed. Rev. L Provancher says it is common in the neighbourhood of Quebez, and it is pretty generally scattered throughout Ontario.

No. 6.—The Grape Cidaria—(Cidaria diversilineata, Hubner.) This is a pretty yellow moth with brown lines, producing a geometric or looping caterpillar, which consumes the foliage of the vine. In the August number, 1870, of the Canadian Entomologist, we published the results of our observations on this insect during the past season, which we shall here make free use of.

In early spring, just when the grape blossoms were fairly open, while pinching in the rapidly growing branches of a vine, a blossom bunch attracted attention by its unusual appearance. A closer inspection showed that part of the bunch had been eaten away, and the remaining portions drawn together by light silken threads, and within the enclosure was a dull brown caterpillar, with its body much contracted, and just ready to assume the chrysalis state. The bunch was removed from the vine and enclosed in a small box, when in a day or two afterwards the change of form took place. The chrysalis was sixtenths of an inch long, and of a pale reddish brown colour. In about ten days afterwards it produced the perfect insect which proved to be Cidaria diversilineata. These observations disclose an interesting fact regarding the history of this insect, which is that it passes the winter, sometimes if not invariably in the caterpillar state, hybernating in some secure retreat, where it sleeps peacefully till called again into activity by the genial warmth of spring, when in a few days it finishes its growth and effects its changes as already described. The accompanying figure illustrating this insect, is also the work of Mr. Charles J.



Beale, of London, Ontario, who has drawn and engraved the moth from nature—the larva is copied from Packard's Guide to the Study of Insect:

This moth (Fig. 43), measur s, when its wings are expanded, about one and a half inches. Its colour is pale ochre yellow, crossed by many greyish brown lines, and clouded also with patches of the same, particularly along the margin of the wings. The under side is a little paler than the upper, with fewer and fainter lines, but bordered along the outer edges, much the same as above. The body and legs Colour-Larva Yellowish green-Moth are similar in colour to the wings, the legs being marked with black about the joints.

On the 7th of June a number of reddish geometric caterpillars were found on the vine leaves, in which they had eaten innumerable holes of various shapes and sizes; these proved to belong to the same insect. At this time (see Fig. 43), they were about an inch The head was rather small, flattened in front, and bilobed, each lobe projecting above and terminating in a point. Its colour was dull brownish green, and the mandibles were tipped with reddish brown.

The body above was dull yellowish green, with a reddish or pink tinge, the second segment pale yellowish green, smooth, and very similar in appearance to the head, but The third, fourth, eleventh, twelfth and thirteenth segments were also pale yellowish green, but the middle segments had a decided pinkish tinge. The surface of the body was wrinkled, and the terminal segment furnished with two short greenish spines, which extended backwards over the anal lid.

The under surface was similar in colour to the upper, with a double whitish line

down the middle. The feet were pinkish, and the thick fleshy prolegs green.

Many variations in colour were observed in different specimens of this larva. which answered the description given above, on the seventh, changed its skin on the morning of the 8th, and appeared in a garb of very dark brown, nearly black, with longitudinal lines of a paler brown. A younger specimen was yellowish green, with the head very large and prominent. Another, older one, was bright deep red above, with a wide broken band of dull green down the middle of the under surface, without any appearance of the double whitish line so prominent in most of the others. A fourth, about the same size, was dull whitish green, with the whitish lines below, also wanting.

A full-grown caterpillar, found on the 10th of June, measured one and a quarter inches. Its head was dull reddish brown, the body above yellowish green, as in the former description, but with a few very small whitish dots on each segment. On each side of the second segment was a small reddish spot, and on the third a larger one of a darker shade, and on this latter segment the folds of the skin protruded, making the spot appear like a brown prominence. The spaces between the middle segments were yellowish white, excepting one or two of the terminal ones, which were dull brown. In

other respects it answered to the previous description.

The under surface had a reddish hue, and a central dull reddish line, bordered on

each side by a faint white stripe, edged again without by dull red. The feet were reddish, with the spaces between them yellowish green. On the 11th of June the larva fastened itself up in a leaf, preparing for its next change.

During the middle of August fresh looking specimens of the moth were taken again

on the wing.

From the preceding facts the following summary of the history of this insect may be given:-The larva, which had hybernated during the winter, entered the chrysalis state in early spring, which produced the moth about ten days afterwards. The moths, during the next few days, pair and deposit their eggs on the foliage of the vine, which hatch into small caterpillars early in June. During this month they attain their full size, pass through the chrysalis state, and appear as moths again in August. These latter deposit the second crop of eggs, from which the larvæ are again produced, which attain nearly full growth before winter, and pass that inclement season in a state of torpidity.

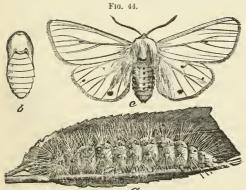
Where their numbers are sufficient to prove troublesome, we can only suggest as remedies the measures already so often adverted to, viz., syringing with hellebore and water, and hand-picking. This insect is also found on the Virginia creeper (Ampelopsis

quinquefolia.)

Although, very generally distributed, the Grape Cidaria seldom appears in sufficient numbers to cause alarm; like most other insects, they are much more plentiful some seasons than others. Mr. Bowles, of Quebec, informs us that they were very common in his vicinity several years ago, but have been comparatively rare since. D. W. Beadle says they are seldom seen about St. Catharines. In our own neighbourhood we rarely pass a season without seeing a good number of them.

No. 7. THE COMMON YELLOW WOOLLY BEAR (Spilosoma virginica, Fabricius.) This insect is so well known in the caterpillar state, that it scarcely needs any description; any one who has had a garden in which fruits or flowers of any sort have been grown, must have become familiar with the yellow Woolly Bear, for, of all caterpillars, none are so common or so uniformly troublesome. They seem to have an especial liking for the grape, but are not at all particular, for if they cannot get vine leaves, they will take almost anything else green, and thrive on it.

The moth from which the larva is produced is shown in Figure 44, where the cater-



Colour—(a) yellow or brown, (b) shiny brown, (c) white, black and orange.

pillar and chrysalis are also figured. The moth is commonly known as the "White Miller." It passes the winter in the chrysalis state, and appears on the wing early in May, depositing its round yellow eggs on the under side of the leaves in large clusters. These, in a few days, hatch into young hairy caterpillars, which feed for a time in company, devouring, at this tender age, the under side of the leaf only, which is less tough than the upper; the skin over the eaten parts soon becoming yellow. It is not for long that their powers for injury are so limited. When they have a little more growth, they part company with their fellows, each one choosing his own course, and living to himself,

and by this time their appetites and digestive powers have become so good, that they can,

and do, eat freely all parts of the leaf.

The full-grown caterpillar, Fig. 44 (a), is nearly two inches long, and usually of a yellowish colour, but not always so, for they vary greatly in the tint of their Lairy covering. From the same brood may be found some yellow, some straw colour, others light brown, and some even very dark brown, but the yellow is by far the most common colour. The head and feet are usually yellow, and the hairs arise in little tufts from small yellow tubercles, arranged nearly in rows across the body. In the spaces between the segments or rings there are darker lines, sometimes brown, at others dark brown, nearly black;

there is a line of the same along each side, and the under surface of the body is dark also.

When the caterpillar is full grown, it seeks some sheltered nook in which to change to chrysalis. Some hole in a fence post, or other hole and corner place in fence, house, or wood pile, wherever it is dry and secluded. We once found one snugly hid in the middle of a cluster of grapes. After a little wandering about and consideration, they fix on a suitable locality, and proceed to divest their bodies of their covering of hairs, and with these woven together with silken threads, they construct the slight enclosure which is to shelter the chrysalis. Here the change takes place, the chrysalis (Fig. 44, b) being of the usual brown colour, and after a week or two, the perfect moth makes its appearance, to deposit fresh patches of eggs, from which in a few days is hatched the second brood of larvæ, which pass through the different stages of their growth, and enter the chrysalis state before the time of winter.

The moth (Fig. 44, c) measures, when its wings are extended, from one inch and a half to two inches. The males are smaller than the females—it is a female which is fignred. Both sexes have the wings white with a few black dots, which vary very much in number in different specimens; in some there are two on each of the front, and three on each of the hind wings as in the figure; in others again the spots are almost entirely wanting, and there is every degree of macular gradation between the two extremes. We believe, however, that the dot near the middle of the front wings, is always present, but sometimes very faint. The under side usually has the spots more distinct than the upper one, and sometimes there is a slight tinge of yellow over its white surface. The antennæ are white above, dark brown below, the head and thorax white, while the abdomen is orange coloured, sometimes streaked across with white, and having three rows of black spots, one above and one on each side. The under side of the abdomen is white, sometimes tinged with orange.

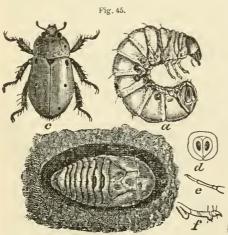
This species is subject to the attack of several kinds of parasites, which destroy immense numbers every year, were it not for this, we should soon be overrun with them. With al! these checks they are at times very numerous and destructive, and we have to resort to hand picking to destroy them. The process is tedious enough, but it is sure,

and we do not know of a better.

With regard to their geographical distribution, we think we are safe in saying as far

as Canada is concerned, that they may be found every summer every where.

Having now gone through with the history and habits of the most prominent of the moths injurious to the vine, we shall devote some space to the destructive insects belonging to other families.



Colour—(a) glossy white; (b) yellowish; (c) reddish yellow, with black spots.

No. S.—The Spotted Pelidnota—(Pelidnota punctata, Linnæus.) The accompanying excellent figure, represents this insect in its three stages of larva (a), chrysalis (b), and beetle (c). It is in the latter state only that it is injurious to the vine—consuming the foliage. It eats numerous holes in the leaves, sometimes where the beetles are very numerous, completely riddling them.

The beetle is a large one, measuring about an inch in length, and at its widest part, half an inch in width, and nearly oval in form. Its colour is dull reddish yellow, or nearly leather colour, with a polished surface. The thorax which is very slightly darker than the wing covers, have a small black spot on each side; and there are three larger ones on each wing case. The jaws and posterior part of the head are both black, and so also is the scutellum, which is a small nearly triangular piece, placed near the centre above, and just where the two anterior edges of the wing cases join the thorax. The gauze-like wings concealed under the 336

wing cases are dark brown. The under surface is of a dark green shade, with a metallic lustre, and somewhat downy about the middle with fine brownish hairs; its legs are of

the same dark shining green.

It appears in July, August, and sometimes in September, and is active in the day time flying about from vine to vine, with a loud buzzing noise. After the insects have paired, the female deposits her eggs in rotten wood, which, when the young grub is hatched, furnishes it with suitable food for its development. Mr. Riley who was the first to find the larva and rear it, gives in the American Eutomologist, vol. 2, p. 295, the following description :—" It is a large clumsy grub, bearing a close resemblance to the common 'white grub' of our meadows, and differs from that species principally in being less wrinkled, and in having the skin more polished and of a purer white colour, and in the distinct heart-shaped swelling above the anus, (Fig. 45, (d). Towards the latter part of June, we have found this larva, (Fig. 45, (a), in company with the pupa, (Fig. 45, (b), in rotten stumps and roots of the pear. In preparing for the pupa state, the larva forms a rather unsubstantial cocoon of its own excrement, mixed with the surrounding wood. The pupa state lasts but from eight to ten days, and the beetle (Fig. 45, (c), is found on our vines during the months of July, August and September. It is not yet known how long a time is required for the development of the larva, but from analogy, we may infer that the insect lives in that state upwards of three years."

Fig. 45 (e) shows the antennae of the larva, and (f) one of the legs—both magnified. This foe, as far as we can learn, is confined in Canada to the Province of Ontario, and prevails chiefly in its western section. According to Messrs. Provancher and Bowles. it is never found about Quebec. Even in the places in which it most delights to dwell. it is not generally a very troublesome enemy. Should they at any time be present in sufficient number to create alarm, they may be materially lessened by hand picking and crushing under the foot. They are heavy and clumsy in their movements, and not diffi-cult to capture. They feed on both wild and cultivated vines, and also on the allied

Virginia creeper, Ampelopsis quinquefolia.

No. 9.—The Grape Vine Flea Beetle—(Haltica chalybea, Illiger.) The common name of this insect suggests activity, and it is equally active in mischief as in movement. hopping from leaf to leaf, and from branch to branch, with a celerity scarcely surpassed by its smaller namesake.

This beetle survives the winter in the perfect state, lying dormant and torpid under leaves, pieces of bark, or other suitable shelter, until called into activity by the reviving

warmth of spring. It is a pretty little beetle (Fig. 46), of a polished steel blue or green color, sometimes shading into purplish, with a transverse depression across the hinder part of the thorax. The under side is dark green, the antennæ and feet brownish black. Its length is about three-twentieths of an inch, and it has stout, robust thighs, by means of which it is able to jump about very briskly; these are well shown in the figure. It is more destructive in spring than at any other time; for then, before the buds have burst, color, steel blue this creature is astir, with appetite the keener for its long winter fast; and while the tender growth is swelling, and displaying its lovely roseate tints,

this little mischief-maker pounces on it, and hollows it out to its centre, thus consuming,

in a short time, two or three embryo bunches of grapes.

Its first appearance, as a destructive agent, is noted by Mr. Thomas, of Cayuga Co., N. Y., in 1831, in a communication to Silliman's "American Journal of Science and Art." "These brilliant insects," Harris says, "were observed by him in Cayuga Co., N. Y., "creeping on the vine and destroying the buds, by eating out the central succulent parts. "Some had burrowed even half their length into the buds. When disturbed, they jump, "rather than fly, and remain where they fall for a time without motion. During the "same season, these beetles appeared in unusually great numbers in New Haven, Conn., "and its vicinity, and the injury done by them was wholly unexampled. Some vines "were entirely despoiled of their fruit buds, so as to be rendered, for that season, barren." Mr. Thomas found the vine leaves infested in the years 1830 and 1831, by small, chestnutcolored, smooth worms, and suspecting them to be the larva of the beetle, he fed them in

a tumbler containing some moist earth, until they were fully grown, when they buried themselves in the earth. After a fortnight or so, some of the beetles were found in the tumbler. Hence there is no doubt that the former were the larvæ of the beetles, and that

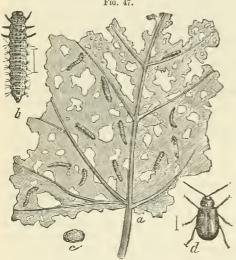
they undergo their transformations in the ground.

Previous to the time when this communication was made, they were confined chiefly to the wild vine and the Virginia creeper, both of which they fed on, but since, they have spread nearly all over the United States and Canada, and in many places have proved very destructive. Mr. J. Kirkpatrick, in "Field Notes," says, that in 1865, the crops of several vineyards in the northern part of Ohio were entirely destroyed by it, and that the same painful experience fell to the lot of some of the vine-growers on the shore of Lake Erie.

The beetles appear on the vines in the latter part of April, and continue to be destructive till late in May, after which they gradually disappear. Before leaving, however, they deposit orange coloured eggs in clusters on the under side of the young vine leaves, which hatch in a few days into small dark brown worms, which feed on the upper side of the

leaves, eating numberless holes in the softer

parts (Fig. 47, a).



Colours—(b) Shining brown and black; (d) steel blue, or metallic green and purple.

It is stated by Mr. Riley, that "when "numerous, they devour all but the very "largest leaf ribs, and we have seen the wild "vines, throughout whole strips of country, "rendered most unsightly by the utter de-"nudation which these insects had wrought." In three or four weeks the larva is full grown, when it presents the appearance of Fig. 47 (b), which is a magnified view, the hair line at the side showing the correct size. It is then about three-tenths of an inch long. It is usually light brown above, sometimes yellowish, at other times of a darker shade; paler on the under surface. The head is black, and there are six or eight shining black dots on each of the other segments of the body, each dot emitting a single brownish hair. Its feet, six in number, are black, and there is a fleshy, orange coloured pro-leg on the terminal segment. When progressing, it does not move its body regularly, but

raises it suddenly behind, as do some of the geometers or loopers.

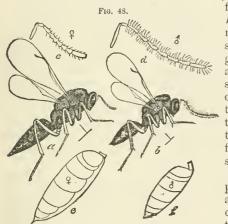
In the early part of June, the larvæ leave the vines, and descend to the ground, where they burrow under the earth, and forming a little smooth, oval cell, change to a dark yellowish chrysalis (Fig. 47 c). After remaining about two or three weeks in this state, the perfect beetles issue from them, and the work of destruction goes on again; but as they live altogether on leaves during the fall, of which there is usually an abundance, the amount of injury done is much less than in spring. Mr. Kirkpatrick states that there are several broods during the season, but Mr. Riley thinks there is only one, and that the beetles which appear early in July remain over till the next spring. Some further investigations are needed to clear this matter up.

To destroy the beetles, it is recommended to strew, in the fall, air slacked lime, or a good quantity of unleached ashes, around the vines infested. Mr. Riley says the larvæ may be destroyed by blowing on them, from a bellows, fresh air-slacked lime; they are very tenacious of life, and would no doubt require a thorough application to ensure their destruction. We should also advise the use of powdered hellebore and water, mixed in the proportion of an ounce to the gallon, and applied to the foliage by means of a syringe. Strong soap suds have also been recommended, and are perhaps worthy of trial, although not likely to be so effective as the other measures referred to. During the early spring,

in chilly mornings, the beetles are comparatively sluggish and inactive, and some chance is then afforded of hand-picking and destroying them. A good quantity of fowls, allowed, at this time, the run of the vineyard, has also been tried with success. We have not

heard of their being affected by any parasite.

They are much more abundant some seasons than others, which may probably be due to some atmospheric influences favourable or otherwise to the continuance of their lives. Mr. James Dougall, of Windsor, says that a few years ago they were very destructive to his vines, but within the last two or three years he has only noticed a stray one now and then. Mr. J. Petit, of Grimsby, Ontario, states that in the spring of 1869, he saw the flea beetle in the vineyard of Mr. W. W. Kitchen, eating the buds of his vines, they were numerous, but Mr. Kitchen afterwards said they did but little harm. Mr. D. W. Beadle. of St. Catherines, says: —"I have seen it on my grounds in the perfect and larvæ state. but only to search it out and kill it, and now it is two years since I have seen it here. In our own locality it has never proved very troublesome, but with Mr. Chas. Arnold, of Paris, it has been very destructive, not so much, however, of late, as it was some two or three years since. Mr. Arnold had a quantity of the Virginia creeper growing on his grounds, which he thought afforded it a convenient and undisturbed harbor. This he destroyed, and since then has not found the beetle so troublesome. We have not been able to learn of its occurrence in Quebec.



No. 10. The Grape Seed Insect (Isosoma Vitis, Saunders.) The accompanying figure 48, although not belonging to Isosoma Vitis, belongs to a species of Isosoma so closely resembling it, that it would require careful scrutiny to distinguish between them, and will give a very good idea of its general appearance, as seen under a magnifying power. (a) represents the female, (b) the male, (c) the antennæ of the female, (d) the antennæ of the male, (e) the abdomen of the female enlarged, showing the segments or rings of the body, (f) that of the male. The short hair lines under the figures of the perfect insects show their natural size.

When we first observed this insect in 1868, it promised, judging from what we then saw, to be a very destructive and troublesome foe to grape culture, and had it increased in the proportion that many other insects do, its efforts would by

this time have occasioned great alarm. But it has wisely been ordered otherwise. Either climatic influences, or some other unseen and unknown power has been unfavourable to its continuance and propagation, so that it has almost disappeared at present from our midst; possibly the cold and wet season of 1869 has had something to do with bringing about this result. Although diligent search was made last year, we failed to find any traces of its presence; and this year our efforts in this direction have happily been equally fruitless, but we learn from our esteemed friend, Rev. R. Burnett, of Hamilton, that it has occurred in that neighbourhood this summer. He says "in some bunches there would be two or three, and as high as eight or ten berries affected. I noticed the damage first by the apparent early ripening of the berries, while the others were green, with no visible appearance of maturity. The exposure these vines had was altogether in favour of the propagation of the insect, due south, under shelter from the north of an eight feet board fence. The place was warm as an oven. Nor was this the only place where the seed insect was found. I examined the vines of several of my neighbours, and found them less or more affected."

Having been unable to accumulate any new facts or details regarding its history or habits, and seeing we want to present here a complete account as far as we can of the insects found injuring the grape with us, we cannot do better than quote from our former

report to the Fruit Growers' Association of Ontario, and also from papers relating to the

same subject in the Canadian Entomologist.

On the 20th of August, 1868, we observed that many of the berries in the bunches of a Clinton vine, under our care, were shrivelling up. On opening the grapes we observed that most of the smaller berries—that is those which had shrivelled earliest—contained only one seed, and that of an unusually large size; but some of the larger withered grapes contained two seeds, also swollen, each having a dark spot somewhere on its surface. On cutting the seeds carefully open the kernel was found almost entirely consumed, and the cavity occupied by a small, milk white, footless grub, with a pair of brown hooked mandibles, a smooth and glossy skin, with a few very fine short white hairs. When at rest it was nearly oval in form, but when in motion its body became elongated, varying in length from one-fifteenth to one-twelfth of an inch.

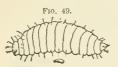


Figure 49 is a correct representation of this grub as it appears when magnified. The small figure underneath shows its natural size.

The parent insect probably deposits the egg on the skin of the grape, and the young larvæ as soon as hatched puncture the skin and work their way at once to the middle of the fruit, and there enter

the seed while young and soft. Many of the grapes affected had a small scar, indicating

probably where the insects had entered.

The Clinton vine, on which this pest was first discovered, suffered considerably; fully ten per cent. of the crop was lost from the shrivelling of the infected berries. At first we supposed that the work of the insect was confined to fruit with this appearance, and that by destroying this the destruction of the crop of insects for the season would be nearly complete; but further examination showed that many of the ripe berries contained affected seeds. The proportion thus infected on the vine referred to, was about ten or eleven per cent. Within a few feet of this an Isabella vine was fruiting, on which there were no shrivelled berries, but about three per cent of those which had ripened contained grubs. About the same distance in another direction was a Hartford Prolific, and ten feet further off a Concord, both of which fruited well; on neither of these were there any withered berries, nor could we find any affected seeds among those which had ripened. The fruit of a Delaware, about fifty feet distant from the Clinton, was also examined without discerning any traces of the insect.

About the middle of September we visited the grounds of Mr. Chas. Arnold, of Paris, Ont., and there we found that this insect had prevailed to a greater extent than it had with ourselves, affecting the Clinton, Delaware, one of Rogers' Hybrids, and also Mr. Arnold's new seedlings. In Hamilton, in the garden of Mr W. H. Mills, we found an affected seed in a berry of Rogers' No. 4. On the 24th September we visited the vine-yard of the "Vine Growers' Association," at Cooksville, Ont., but could not find any traces of the insect there. Thus far its depredations have been chiefly apparent about London, Paris and Hamilton, but further observations may show that it is widely dis-

tributed.

Where any shrivelled berries are found, their seeds should be examined, as it is important to know how wide spread this evil is. The affected seeds are usually swollen, somewhat soft, and have a dark spot somewhere on their surface; any with these char-

acteristics noticed among the ripe berries should also be examined.

In the case of the shrivelled berries, where one seed only was affected, the others were dwarfed and imperfect, and where two large seeds were found they were both occupied. When one seed only was affected and the other remained healthy, the one normal seed carried the berry through, in an apparently healthy state, to ripeness. As far as our experience teaches, the Clinton and its allies with thin skins are more liable to attack than berries with thicker skins, such as Hartford Prolific and Concord.

In October of the same year, we found the larvæ still unchanged within the seed, so we detached one and placed it in a small glass cell between two plates of glass, so that it might not dry up from exposure to the air, and give us at the same sime an opportunity of watching its progress. It remained in this state until early in January, 1869, when it

became a pupa, having first attached itself to the sides of the cell by a few short silky threads. It had now contracted in length, become nearly oval, and assumed a yellowish tint, with a few short, loose, silky threads adhering to different parts of the surface. On the 11th of February we examined some more seeds, and found the larvæ within still alive and active, just as they had appeared in the fall. On the 7th of July further specimens were opened, and the inmates still found soft but motionless; these appeared to be in the pupa state, but the slight inspection then given was not sufficient to enable us to be positive. During the remaining part of July we looked many times into the bottles in which the grapes were enclosed, but did not discover anything till on the 9th of August, feeling sure that the time for the appearance of the insects must be fully come, if not already past, we resolved on a thorough search for them. As soon as the contents of the bottles had been emptied on a piece of white paper, we observed a number of small four winged flies, from one-fifteenth to one-tenth of an inch long, among the dried-up grapes. These were all dead and stiff, though some were more brittle than others. From the observations made we should judge that they effected their escape from the middle to the end of July.

The following description of the insect being somewhat technical, is given more for the benefit of the scientific reader than for the general public. We thus give due notice so that all who have no taste for scientific descriptions may make a clean jump over the

next two paragraphs.

Isosoma vitis—Saunders—Female.—Head large, flattened in front, black, thickly punctured, and covered with many short whitish hairs; mandibles pale brown at base, tipped with black. Antennae (scape and eight joints) nine jointed, black, thickly covered with whitish hairs, inserted in deep sockets; the scape pale brown, slender, nearly as long as the three following joints together; the second short; third to eighth inclusive, nearly equal in length; the terminal joint longer, tapering slightly towards the tip. Thorax black, punctured, and covered with whitish hairs. Legs—front pair pale brown, trochanters nearly black; second and third pairs, trochanters black, femora and tibia nearly black along the middle, pale brown at tips, tarsi pale brown. Abdomen long, black, straight and smooth, with a polished surface placed on a short pedicel; a little contracted at base, thickest on third joint, tapering gradually to fifth, and then suddenly to extremity; the basal joint very short, second and third each somewhat longer, fourth as long as the three preceeding, fifth less than half as long as the fourth, sixth a little shorter, terminal joint rather longer.

The male differs from the female in having the antennæ longer and more thickly covered with hairs. The abdomen is short, thick and blunt, and placed on a moderately stout pedicel nearly its own length. The abdominal rings have about the same relative size as in the female, but the posterior edge of the third overhangs the fourth, the latter appearing as if partially drawn within the projecting edge of the third ring.

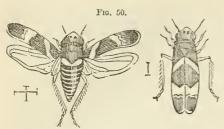
Length—Female 0.10, male 0.06 inch.

Having kept the grapes in bottles only occasionally opened for ventilation, in a dry room, they became hard, dry and shrivelled. In consequence of this many of the flies were unable to make their way out, the seed having become too hard for their jaws to eat through. On opening some of these the flies were found dead, with wings fully developed, and surrounded by small fragments of the interior coating of the seed, which they had gnawed off in their efforts to escape. Those which had found their way out had eaten a small, nearly round, irregular hole through seed and skin. In many similar cases, where the larvæ feed within a hard substance, they provide for the escape of the perfect insect by eating away the hard enclosure until it is reduced so thin as to appear almost transparent, when a very little effort is sufficient to remove the obstruction to the outward passage of the perfect insects. In this instance we have been unable to discover any evidence of such preparation, and believe that the whole work of escape is accomplished by the perfect fly.

Should it prove sufficiently troublesome to necessitate man's agency to keep it within proper bounds, we can advise nothing better as a remedy than carefully gathering and

destroying the shrivelled fruit.

No. 11. The Thrips (so called) (Tettigonia vitis, Harris.) The accompanying figure



represents, faithfully, the insect commonly known among vine-growers as "the Thrip." The figures are magnified, the small hair lines adjoining, showing the natural size. The figure to the left shows the perfect insect, with its wings expanded; the other, the same, with its wings closed. These so called "Thrips," which are widely distributed, and exceedingly numerous and destructive to the vine, do not belong to the family of true Thrips at all, and the fact of their

being mis-named by the fruit-growers has occasioned, in times past, much confusion and uncertainty as to what was really meant when this term was used. The true "Thrips" is a smaller insect than this, and, as Mr. Walsh, of Rock Island, Ill., has proved, is an insect feeder, and hence a friend rather than an enemy to the vine-grower, while the vine-growers' Thrips, as figured above, is a species of Tettigonia, the figure being that of Tettigonia vitis. This "vitis" is only one member of a family. Mr. J. Petit, of Grimsby, has found six distinct species in his neighbourhood, and we have noted four, while examining about a dozen specimens taken at random from a vine. They are all much alike in size and general appearance, the points of distinction being found in the varied markings of the wings. Besides vitis, we have tricincta and vulnerata, comes, and obliqua, and probably not

less than two species undescribed. In vitis the colours are pale yellow and red.

Now for its history:—The "Thrips" is supposed to pass the winter in the perfect state, hybernating under decaying leaves or other rubbish. Those which survive appear early in spring, and deposit their eggs on the young leaves of the vine. The young progeny make their appearance during the month of June, when they are quite small, and while resembling the perfect insect in everything. excepting wings, of which they are destitute; they are in that condition and period of growth corresponding with the caterpillar or larva in other insects. As they increase in size they several times shed their skins, which are nearly white, and although exceedingly delicate and gossamer-like, remain for some time attached to the under side of the leaves. They live and feed together on the under surface, and are very quick in their movements, hopping almost as briskly as a flea. Their hind legs are constructed somewhat after the model of the grasshopper, elongated, and armed with rows of spines, by means of which they jump with great force. Mr. Walsh well remarks that "they have a peculiar habit of running sideways, like a crab, and when they see you looking at them upon one side of a leaf, they will often dodge round quickly to the other side, as a squirrel dodges round to the opposite side of the trunk of a tree, when he sees that he is noticed. Insects are more wide-awake than people generally suppose."

These little creatures are furnished with a sharp beak or proboscis, with which they puncture the skin of the vine, and through which they suck up the sap. Wherever they thrust their beaks and absorb the juices of the leaf, just there, on the upper surface, appears a dull yellowish or brownish spot. While they are yet young and small, the spots produced are also of small size, and scarcely attract attention, but as they increase in size their abundant labours become very manifest, even to the most careless observer, for the whole leaf assumes a sickly aspect, paled with yellowish spots, and as if scorched, drying up, and prematurely dropping from the vine. Sometimes the vines are thus so defoliated that the fruit fails to ripen for want of proper nourishment. Though small in size, their immense numbers make up for any lack in this way, so that they really are a formidable

enemy, probably the most serious the vine-grower has to encounter.

As it enters the second stage of its existence, corresponding to the chrysalis state of moths and butterflies, it continues increasingly active. Diminutive wings now begin to appear, which gradually grow until fully matured, when the insect is in its perfect con dition. This happens about August. The addition of wings increases its activity, and its power of spreading itself. It continues active and mischievous till late in the serson, when it is supposed to seek shelter, and spend the winter in a state of torpidity, as already stated.

The Clinton, Delaware, and other thin-leaved varieties, suffer more from the attacks

of these insects, than the thick, leathery-leaved sorts. Concord is almost exempt, but we have known the Isabella to be much damaged. The Thrips are widely distributed, but vary much in numbers from year to year. If abundant in a particular locality one season, we cannot be at all certain that they will be equally or more plentiful the following year. Their natural increase is so interfered with by various unfavourable climatic and other influences, that we cannot prognosticate in this matter with any degree of certainty. Mr. J. Petit informs us that, three years ago, he saw many vines in the vineyard of Mr. W. W. Kitchen, of Grimsby, completely stript of their leaves by this pest, but they do not appear to have occurred in such numbers since. Mr. W. H. Mills, of Hamilton, has found them very common and troublesome in his garden for years past, and the Rev. R. Burnett, of the same place, says they are the only determined enemy the grape has in his locality. This season they prevailed in some vineyards to such an extent, that the injury done the leaves, seriously affected the growth of the fruit; as far as his memory serves him, he has always had more or less Thrips.

Mr. James Dougall, of Windsor, states that the Thrips were formerly much more troublesome than they have been during the past season; this year there were very few. Mr. D. W. Beadle, of St. Catharines, bears similar testimony. He says, "the Thrips were very plenty in 1868, and injured the foliage of the Delaware and Clinton badly, the more downy-leaved grapes less, the Concord not at all. Since then they have not been sufficiently abundant to do any harm." Mr. A. B. Bennett, of Brantford, remarks, "the Thrips has made its first appearance with me this fall, but not to do any perceptible damage. I am fearful for the future." Mr. Chas. Arnold, of Paris, has suffered much from Thrips in years past, and still finds them very troublesome. Two years ago, while looking over the extensive vineyards of the Vine Growers' Association, at Cooksville, we observed their Clinton vines swarming with Thrips, the foliage appearing half bleached and scorched. We believe they have not suffered so much from them since. These insects do not appear to be known about Quebec. In our own locality they seem to have

permanently established themselves, and annoy and perplex us every season.

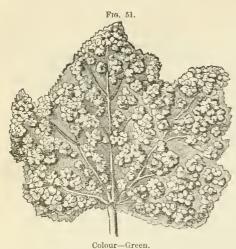
Various remedies have been suggested, but no universal panacea has yet been devised. Syringing with strong tobacco water or soap suds, dusting with sulphur and lime, or lime alone, hellebore, Cayenne pepper, or fumigating with tobacco under a moveable tent, all have their advocates. It is also said that carrying a lighted torch through the vineyard at night, has been found very efficient in destroying them, they fly to the light and are burnt. This remedy would require repeating several times at short intervals. Rev. R. Burnett, in a recent letter, says: - "I know of several parties who have practised the torch light for the destruction of the thrips, accompanied with less or more success. Mr. Haskins, of the City Water Works, one of the most intelligent and best informed of our grape culturists, prefers the constant stirring of the earth in the immediate vicinity of the vines in spring and fall." This latter remedy probably operates by disturbing the perfect insects about the commencement or termination of their winter's sleep, and exposing them to the killing influence of frost.

They are not confined to the vine, but affect also the Virginia creeper.

No. 12. THE GRAPE LEAF GALL LOUSE (Pemphigus vitifolia, Fitch.) The gall on the leaf of which we are now about to treat, is the work of a small orange coloured louse, which has been named by Dr. Fitch, State Entomologist of New York, Pemphigus vitifoliæ. Subsequent observations have shown that it does not belong to the family of Pemphigus, and some difference of opinion exists among leading Entomologists as to what family it should be placed in, but wherever it may be eventually located the specific name vitifoliae

will hold good.

Figure 51 represents a leaf covered with the galls above alluded to. They affect only the Clinton, and other derivatives of the Wild Frost Grape. They appear as green excrescences of various sizes and shapes, but generally rounded, and not much larger than a pea. In the second volume of the American Entomologist, p. 61, is an excellent account of their origin and growth from the pen of Mr. Riley, which we shall quote :- "In each freshly formed gall you will find from one to four orange coloured mother lice, a number of shining oval whitish eggs, of very minute size, and often a number of young six legged larvæ, scarcely bigger than the eggs, and of the same whitish colour. Almost as soon as the larvæ



hatch, they stray off through the partly open mouth of the gall on the upper surface of the leaf, and found new galls either on the same or on a younger leaf. After a time, and when their stock of eggs is exhausted, the mother lice die, and the galls inhabited by them gape widely open at their mouths, and become gradually flattened and obliterated. Thus upon a grape cane the galls upon the oldest leaves will be empty, while those on the young thrifty ones will be swarming with inhabitants, and as fresh leaves put out these are successively 'occupied and possessed' by the enemy. The gall is formed as with all those constructed by plant lice, by bark lice, or by mites, by one or more young larvæ stationing themselves on the upper surface of the leaf, and irritating it with their pointed beaks until it bulges out in an unnatural hollow, inside which the larvæ re-

main. Finally, as the larvæ grow to maturity the hollow becomes a fleshy green sack, the routh of which is almost closed up. The mother lice then lay eggs, and the same

old cycle of phenonema is repeated again and again till winter sets in.

We do not apprehend that this is likely to become here a very formidable foe to vineculture, but its aspect is unsightly, and it may easily be checked on its first appearance by picking off the infected leaves and burning them. Mr. D. W. Beadle, of St. Catharines, informs us that he has seen it occasionally on his vines, but found no difficulty in staying its progress by the method above referred to. It has also been seen occasionally in the vineyards at Cooksville, but it has never spread much; possibly this may be due in part to the fact that it is preyed upon by a number of rapacious insects, such as the larvæ of Scymnus, a small dull coloured lady-bird; larvæ of lace-wing fly, and those also of several species of two winged flies.

Since the above was in type a valuable paper on this insect has appeared in the "American Entomologist," vol. 2, No. 12, written by the editor, C. V. Riley, Esq., containing many new and interesting facts, some of which are so very important that we feel it a duty we owe to vine-growers to give them as much publicity as possible. The follow-

ing we have condensed from Mr. Riley's paper:

For many years past a very serious disease has affected the roots of the vines grown in many parts of France, and which was known under the name of pourridie or rotting. So grievous and alarming had this disease finally become that the French Minister of Agriculture and Commerce offered a reward of 20,000 francs to any one who should discover an efficaceous and practical remedy, and appointed a special commission, including same of the most eminent men in natural science, to test the proposed remedies and make the award.

The disease appears in the form of little cankercus spots which cut off the supply of nourishment and cause the roots to rot. These were ascertained by M. M. Planchon, one of the members of the commission, and M. J. Lichtenstein, of Montpellier, to be caused by a small louse called by M. Planchon *Phylloxera vastatrix*, which bears a close resemblance to the insect which forms our leaf gall. Besides this, a leaf gall occurs there identical in appearance with ours, and after much observation it was discovered that the root-inhabiting and gall-inhabiting insects were identical, and finally it was concluded by M. J. Lichtenstein that their European species was in all respects the same as our American one, and had been imported from this country.

The expression of this view by so eminent a savan added much interest to the study of the American Gall Louse, and induced Mr. Riley to devote much time to working out the facts connected with its history, so as to definitely decide this question of identity. He opened a correspondence with M. Lichtenstein and M. Signoret, of Paris, on this subject, and forwarded specimens of the American insect in its various stages to be compared with theirs. The war has interfered sadly with the progress of all departments of science in

France, but from a letter received from M. Signoret, despatched just before the investment of Paris, in which place he is now shut in, he expresses himself as convinced of the

identity of the two species.

In the meantime Mr. Riley has discovered that our gall insect also attacks the roots of vines here in the same manner as does the insect in Europe, and Dr. Shimer, another careful and painstaking entomologist in the U. S., has shown that the winged females have the same characteristic markings as the European species, hence there is little doubt as to the correctness of the conclusions arrived at regarding their common origin.

Since it has been decided by eminent French eutomologists, who have made a special study of plant-lice, that the insect in Europe belongs to the genus *Phylloxera*, our species

will hereafter be known as Phylloxera vitifolia.

In continuation of that part of the history of the species already given, Mr. Riley says: "In August the insects generally become so prodigiously multiplied that they often settle on the tendrils, leaf-stalks and tender branches, where they form excrescences and gall-like growths, differing only from those on the leaves in such manner as one would naturally expect from the difference in the tissues. After the vine has finished its growth the young lice, finding no more succulent and suitable leaves, begin to wander and to seek the roots, so that by the end of September the galls are deserted, and those remaining on the vines generally become mildewy, and finally turn brown and dry up. Upon the roots the lice attach themselves singly or in little groups, and cause by their punctures little swellings or knots which eventually become rotten. Where vines have been badly affected with the gall, it is difficult to find a perfectly healthy fibrous root. Strange enough these lice not only change their residence as winter approaches, from the leaf above ground to the root below ground, but Proteus-like they change their appearance also, and after shedding their skins present themselves covered with small tubercles."

These tubercled insects pass the winter on the root, and probably produce in spring the winged males and females which pair and deposit eggs on the grape leaves, which give

birth to the wingless females who are the founders of the gall producing colonies.

From these facts it is evident that the insect can be carried from one place to another on the roots, and doubtless it was by some such mode that it was introduced into France from this country. Its natural home here is on the wild Frost Grape, from which it must have spread to the cultivated varieties, and since this wild grape is found over a wide range of our country, the insect in all probability is equally wide-spread. The knowledge of the fact of its wintering on the roots would point to the necessity in extreme cases of rooting up and burning such vines as may become very much diseased, so as to check the increase of this pest; close attention should also be paid to plucking and destroying the gall infested leaves as soon as they appear in spring. It may also be well in certain localities to avoid planting any varieties of the Frost Grape, but we scarcely think that such a precautionary measure will need to be adopted in Canada. It would appear from various information gathered, that the insect is much more likely to be troublesome in warmer latitudes than in cold ones, the length of the season being favorable to their greater increase, and the milder winters less destructive to them. Still it will be well for all our grapegrowers to keep a sharp look out for this enemy and meet it with a determined effort at its destruction wherever it may appear.

Although hitherto almost entirely confined in its attacks to the Frost Grape and its progeny, a few have of late been found occasionally on the Delaware, Iona and Concord, and since it has so readily taken to the European varieties of the *ritis vinifera*, it may also

attack hybrids of this species grown in our own country.

This gall louse has proved very injurious to the Clinton vine in many parts of Missouri, occasionally defoliating and almost destroying large portions of some vineyards.

The liberal prize offered by the French government, has not, we believe, been awarded, for no specific seems yet to have been discovered. The location of the insects on the roots, would naturally render it extremely difficult to apply any remedy—Carbolic acid and water, and sulphuret of lime and water, have both been recommended, but neither of them appear to have been tried on a sufficiently extensive scale to prove their efficacy in this case.

No. 13. The Tree Cricket (Ecanthus niveus, Harris).—This insect, although des

tructive to the vine, is not confined to it in its operations; for it is equally injurious to the raspberry and blackberry, and sometimes attacks the plum, cherry and peach. Fig. 51



represents the male, and Fig. 52 the female. Their color is of a delicate green, and they are exceedingly lively and musical, keeping up, when numerous, a perpetual sharp, chirruping noise during the warmer parts of the day. The tree

color—Pale green. the warmer parts of the day. The tree cricket is accused, on good authority, of severing grapes from the bunches, and sometimes even cutting off an entire bunch. Mr. C. V. Riley, from whose valuable observations we have drawn so largely, says that he has caught them at it; but probably such malicious acts are rare, for, though the insect is common enough with us, we have never observed any such results from its presence. The heaviest charge

brought against it is for the partial destruction of the canes, and this arises from the carrying out of its own instinctive care in providing for the safety of its progeny. The female, during the later weeks in autumn, being fully charged with fertilized eggs, proceeds to prepare a place for their reception; settling itself comfortably down on a grape, raspberry or other cane, and elevating the posterior parts of its body, it thrusts its long ovipositor, with which it is furnished, straight into the stem, about half way through its thickness. Into the orifice thus formed it forces a long yellow egg, and then proceeds to deposit another along side, and so on, until from five to fifteen eggs have been placed in a row. In this manner, the stem on which it operates is very much weakened, and is liable to break off on slight occasion; or where this does not occur, the branch often dies beyond the punctured part. Each female will deposit from twelve to sixteen eggs, which remain thus during winter, safely lodged.

Early in spring the eggs begin to swell, and about midsummer, or a little before this, the young insects appear. An Ohio correspondent of the *Practical Entomologist*, vol. 2, p. 94, says, that he kept portions of infested cane in a drawer, from which the young insects appeared on the 20th of May. Possibly the additional warmth and protection thus given to the canes may have hastened the hatching of the young, for we have found the unchanged eggs in the canes, in the open air, later than this. When first hatched, they feed on plant lice, and probably continue to do so until nearly full grown. We have seen the matured insect feeding occasionally on ripe plums. Mr. Riley, in the *American Entomologist*, vol. 1, p. 247, says: "We hatched a number of them this spring; they fed entirely on plant lice at first, but when these were denied them, they fell to devouring one another,

until the strongest individual remained the conqueror."

In consequence of their destruction of plant lice, it has been urged by some that they should be regarded rather as friends than enemies; but we think that the injury they do far more than counterbalances any good that can be placed to their credit, and we would advise their destruction. First kill as many of the perfect insects as possible, which may best be done by jarring the canes, when they drop to the ground, and stamping their lives out with the foot before they have time to hop or fly away. The second, and probably the easiest method, is to cut away, late in the fall or early in spring, all those parts of the canes containing eggs, and burning them. Their regular rows of pin-hole punctures can be readily seen.

No. 14. The Honey Bee (Apis mellifica, Linn.).—Before leaving this subject, we must advert to a charge made against that very useful insect, the honey bee, of injury, which, we trust, will not be found very wide-spread. A correspondent in the American Entomologist, vol. 1, writing from Richmond, Indiana, says that he has found the honey bee very destructive to his grapes. They commenced about the last of August, on the Concords, which, to save from complete destruction, he was obliged to gather before fully ripe. The bees puncture the skin of the grape, and extract the sugar, when the fruit immediately shrinks up, and soon rots, unless used at once. The vines which suffered most were Diana, Delaware, Isabella and Rogers' Hybrids. Of Diana, he lost fully a bushel of grapes, and of Delaware, about as many.

Mr. James Dougall, of Windsor, in a recent letter, says that the greater part of his

grapes were punctured, and the juice sucked out. He has not been able to detect anything but flies at them, the same as they often attack the cherries. The flies worst, he states, are several varieties of the blue bottle, and "a large flatter fly, with a spotted greyish body and wings." Might not this have been occasioned first by the honey bee puncturing the grapes, and the flies subsequently gathering to feast on the juices which would escape through the punctured skin. Mr. Dougall says that the grapes which ripened later were scarcely touched.

In concluding this section of our report, we would express our thanks to the gentlemen who have kindly replied to our many queries, and thus sent us much valuable infor-

mation on the habits and geographical distribution of the various species.

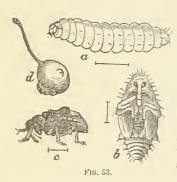
# INSECTS AFFECTING THE PLUM.

### BY E. B. REED, LONDON, ONT.

1.	The Plum Curculio	(Conotrachclus nenuphar)	-	-	-	Beetle
2.	The Grey Dagger	(Acronycta Psi) -	-	-	-	Moth.
3.	The Oblique Banded Leaf Roller	(Lozotænia Rosaceana)	-	**	-	Moth.
4.	The Eye-Spotted Bud Moth	(Grapholitha oculano)	-		-	Moth.

### 1st. THE PLUM CURCULIO (Conotrachelus nenuphar, Herbst.)

#### COLEOPTERA CURCULIONIDÆ.



There is, we suppose, no doubt but that this insect is the greatest evil with which all cultivators of the Plum, or indeed of any other stone fruit have to contend. So extensive are its destructive powers, that oftentimes whole crops of Plums are entirely ruined by the depredations of the grubs or larre of this unmitigated pest, and in many places fruit growers have almost given up in despair the cultivation of this delicious fruit. Of late years, however, thanks to the exertions of entomologists, the habits and history of this insect are becoming more generally known, and means are beginning to be devised by which we may hope to be able to somewhat check the amount of damage it occasions, and perhaps, indeed, to successfully carry on against it an unceasing and relentless

warfare. A fair start has already been made in the Province of Ontario towards attaining this desirable end. The Fruit Growers' Association of Ontario, offered last year, prizes of twenty, ten and five dollars, to persons collecting, during the season of 1870, two thousand, one thousand, and five hundred, respectively, of the Plum curculio. Fourteen persons competed for these prizes, and their joint collections contained the large number of fourteen thousand five hundred and fifty-three specimens of the genuine Plum curculio. All the competitors in detailing their experiences, appear to be well satisfied with the crop of Plums that rewarded their individual exertions, and anxious for other plum growers to follow their example; and there can be no reasonable doubt that similar efforts on the part of others throughout the country, will tend eventually to thoroughly check the operations of the enemy. For the interesting details of the efforts and work of the above competitors, we would call the attention of our readers to the admirable report on the subject, made by W. Saunders, Esq., of London, Ont., to the Fruit Growers' Association. The plum curculio is a member of an enormous group of insects known as weevils, or snout beetles. Their chief characteristic is the long snout into which the front of the head is produced, the mouth being at the end of the snout or beak. This snout is

of course immovable, except along with the head, of which it is in fact part and parcel. The antennæ are elbowed, i.e., bent at right angles, and are set on the sides of the beak. The plum curculio, or "Little Turk," as our American cousins have named it, in allusion to the crescent-shaped wounds it inflicts on the fruit, is a little rough gray or blackish beetle, about one-fifth of an inch in length; it may easily be distinguished by its having on the middle of each wing-case, a black shining hump, immediately behind which is a broad band of yellowish white; the snout is rather short, and when the insect is alarmed, it is drawn up close to the under side of its body, and in this attitude, with its legs also drawn up in a similar manner, it bears a strong resemblance to a dried bud, or piece of dirt, or bark, and is very apt to deceive the uninitiated, more especially as it will remain for a long time motionless and seemingly devoid of life, though if the observer has but the requisite patience, and the day be sufficiently warm, he will see the apparently shapeless little lump gradually put forth a leg here and a feeler there, and finally being convinced of security, expand its wings and fly away in search of other objects of attack. Dr. Harris records having frequently caught them flying in the middle of the day. curculio generally attacks the plum as soon as the fruit is fairly set, although while the tree is yet in blossom, they may often be discovered by the jarring process. C. V. Riley, the State Entomologist of Missouri, thus describes the manner of laying the egg.—"The process occupies about five minutes. Having taken a strong hold on the fruit—(see Fig. 53, d,) the female makes a minute cut with the jaws, which are at the end of her snout, just through the skin of the fruit, and then runs the snout under the skin to the depth of one-sixteenth of an inch, and moves it back and forth, until the cavity is large enough to receive the egg it is to retain; she next changes her position, and drops an egg into the mouth of the cut; then, veering round again, she pushes it by means of her snout to the end of the passage, and afterwards cuts the crescent in front of the hole, so as to undermine the egg and leave it in a sort of flap; her object apparently being to deaden this flap so as to prevent the growing fruit from crushing the egg, though Dr. Hull informs me that he has repeatedly removed the insect as soon as the egg was deposited, and before the flap was made, and the egg hatched and the young penetrated the fruit in every in-

The egg-being deposited, is in a few days hatched into a small, white, footless grub, which increases rapidly in size, eating its way almost to the centre of the fruit. After the lapse of several weeks, and before the grub is fully grown, the plum drops to the ground, its natural growth being stopped by the workings of the grub, which in a short time having reached its maturity, eats its way to the surface and penetrating the earth a little distance, makes a small cavity for itself, and there changes into a chrysalis or pupa. In this inactive state, it generally remains for some three or four weeks, when it finally appears as the perfect beetle, and continues in that state until the succeeding spring, when it proceeds to attack the plum after the manner of its forefathers. In some cases, how ever, owing perhaps to various causes of place and temperature, some few individuals may pass the entire winter in the pupa state, and not complete their transformation until the following Spring, but the better opinion seems now to be, that such is not the normal custom of the insect. As many of our readers may be unacquainted with the appearance of the different stages of this insect, we have prepared at Fig. 53, correct and magnified portraits of the full grown larva, (a), of the chrysalis, or pupa, (b), into which the larva is transformed of the perfect curculio (c) and of the crescent-shaped mark it causes (d). Dr. James Tilton, of Wilmington, Delaware, was one of the earliest observers of the plum weevil. In an article published by him in 1803, he states that this insect attacks not only nectarines, plums, apricots and cherries, but also peaches, apples, pears and quinces, and later writers have fully confirmed this statement. In 1831, Mr. Thomas Say, the chief authority on American entomology, in a note on the plum weevil, stated, "that it depredates on the plum and peach, and other stone fruit," and that his "kinsman, the late excellent William Bartram, informed him it also destroys the English walnut in this country." Dr. Harris, the late State Entomologist of Massachusetts, ascertained that the cherry worm, so called, produced at maturity the same curculio as that of the plum; though, unlike the latter, it rarely causes the stung cherry to drop prematurely to the ground; and the late Dr. Joel Burnett, the author of several articles on the plum weevil,

procured, in 1839, some specimens of the insect in the chrysalis state, which were raised from the small grubs in apples. Much as has been written on the subject of the plum curculio, there are several points in its history on which observers are unable to agree, such as the length of time it occupies in its various transformations, the manner and place in which it hybernates, or passes the winter, and whether it is single or double brooded

in each year.

Dr. Harris writes, "that the average time passed by the insect in the ground during the summer, has appeared to me to be about three weeks; but the transformation may be accelerated or retarded by temperature and situation. It has also been my impression that the late broods remained in the ground all winter, and that from them are produced the beetles which sting the fruit in the following spring. Dr. Burnett's observations coincide with this opinion. According to him the insect "undergoes transformation in about fifteen or twenty days, in the month of June or fore part of July; but all the larvæ (as far as he had observed) that go into the earth as late as the 20th July, do not ascend that season, but remain there in the pupa stage until next spring." Dr. Tilton, in his account of the curculio, stated that "it remains in the earth in the form of a grub, ready to be metamorphosed into a beetle as the spring advances." According to M. H. Simpson, Esq., of Saxonville, the larvæ, or grubs, "go through their chrysalis state in three weeks after going into the ground, and remain in a torpid state through the season, unless the ground is disturbed." Dr. E. Sanborn, of Andover, has come to entirely different conclusions, from a series of experiments made upon these insects. It is his opinion that they do not remain in the ground during the winter, either in the grub or in the beetle state, but that under all conditions of place and temperature, in "about six weeks" after they have entered the earth, they "return to the surface perfectly finished, winged and equipped for destruction." Dr. Trimble, who devoted a large portion of a very extensive and elaborately got up volume to the history of this pest, decided that it passes the winter above the ground in the perfect beetle state, and that it is single brooded. Mr. B. D. Walsh, the late talented State Entomologist of Illinois, in an able article in the Practical Entomologist, gives very strong grounds for believing that the curculio is only single brooded, although he afterwards, on what seems to us very insufficient evidence, decided that it is double brooded. Mr. Riley states that Dr. E. S. Hull, of Alton, Illinois, who has had a vast personal experience with this insect, concludes that they are single-brooded and pass the winter for the most part in the preparatory state underground.

Dr. Harris records having found these beetles as early as the 30th March—an almost conclusive proof tl at they must have wintered in the perfect state above ground. Trimble observed them hybernating under the shingles of a roof, in the chinks of a stone

wall, and under the bark of an apple tree during the fall and early spring.

The number of eggs that the female curculio deposits has been made the subject of minute investigation. Dr. Harris seemed to think that only one egg was deposited in a single fruit, but Mr. Riley states that four or five larvæ may often be found in single specimens of the larger fruits. Dr. Trimble, who dissected many of these insects, states that the greatest number of eggs ever found by him in a single curculio was twenty-five, while other writers appear to think that the actual number of eggs laid is very much larger.

Having now reviewed at some length the natural history of the "Little Turk," we will avail ourselves of the conclusions drawn by Mr. Riley, founded on his own observations as well as on those of others. In his first annual report, in an able article on this

subject, he rehearses the following articles of belief:

1. "That Plum Curculios are more numerous in timbered regions than on the prairie.

- 2. That they can fly and do fly during the heat of the day, and that cotton bandages round the trunk, and all like contrivances to prevent their ascending the trees, are worse than useless, and a result only of ignorance of their economy.
  - 3. That they prefer smooth skinned to rough skinned fruit.
- 4. That they deposit and mature alike in nectarines, plums, apricots, cherries and peaches; in black knot on plum trees and in some kinds of apples, pears and quinces,

and, according to Dr. Hull, they deposit, but do not mature, in strawberries, gooseberries, grapes, and in the vigorous shoots of the peach tree.

- 5. That it is their normal habit to transform under ground, though some few undergo their transformations in the fruit.
- 6. That all other fruits but the cherry, when containing larvæ, usually fall to the ground.
- 7. That the *greater portion* of them pass the winter in the perfect beetle state, under the old bark of both forest and fruit trees, under shingles, logs, and in rubbish of all kinds, and especially in the underbrush of the woods.
- 8. That they are always more numerous in the early part of the season on the outside of those orchards that are surrounded with timber, and that they frequently shelter in apple trees and other trees before the stone fruit forms.
- 9. That a certain portion of them also pass the winter underground, both in the larva and pupa states, at a depth frequently of from two to three feet.
- 10. That those which hybernate as beetles leave their winter quarters and commence throughout Central Missouri (Mr. Riley's State) to attack the fruit in the early part of May.
- 11. That those which hybernate underground continue to develope, and issue from the earth during the whole month of May.
- 12. That both males and females puncture the fruit for food by gouging hemispherical holes, but that the female alone makes the well-known crescent shaped mark (see fig. 53 d.), as a nidus for her egg.
- 13. That the egg is oval, of a pearly white colour, large enough to be seen with the naked eye, requires a temperature of at least 70° Fahr. to hatch it, and may be crushed with the finger nail without injuring the fruit.
- 14. That the stock of eggs of the female consists of from fifty to one hundred, and that she deposits from five to ten a day, her activity varying with the temperature.
- 15. That the last of those curculios which hybernated in the imperfect state underground have not finished depositing till the end of June and beginning of July, or about the time that the new brood developed from the first laid eggs of the season are beginning to issue from the ground, and that we thus have them in the month of June in every conceivable state of existence, from the the egg to the perfect insect.
  - 16. That the period of egg depositing extends over two months.
- 17. That all eggs deposited before the first of July generally develop and produce curculios the same season, which issue from the ground during July, August, and September, and hybernate in the perfect state.
- 18. That most of those eggs which are deposited after the first of July either fail to hatch or the young larve die soon after hatching, owing, perhaps, to the more ripe and juicy state of the fruit being less congenial to them, and that what few do mature which hatch after this date undergo their transformation more slowly than the rest, and pass the winter in the ground.
- 19. That the perfect curculio, while in the ground, is soft and of an uniform red color, and that it remains in this state an indefinite period, dependent on the weather, usually preferring to issue after a warm rain.
- 20. That in a stiff clay soil a severe drought will kill many of them while in this last-named condition, and that larvæ contained in stone fruits that fall upon naked ploughed ground where the sun can strike them generally die."

Bearing in mind that Mr. Riley, is writing of his own State of Missouri, which is about a fortnight earlier in its spring than Western Ontario, our readers must alter somewhat his dates, so as to make them applicable to their several localities.

Let us now consider what means we can best adopt for carrying on a successful and vigorous campaign against the attacks of this destructive insect:

And first let us see what allies Dame Nature will afford us.

Foremost in the ranks are two or three species of carnivorous ground beetles belonging



to the order of Carabidæ—of these, one Harpalus Pennsylvanicus, or the Pennsylvanian ground beetle, represented at Fig. 54, is by far the most common, and may be met with at all times and seasons. It is stated by Mr. Walsh that its larva is a most merciless devourer of the grub of the curculio, attacking it even underground. Below will be found a correct sketch of the larva, of the natural size (Fig. 55 A.) B represents the under side of the head, showing, at c, the upper jaw (mand ble,) at g, the lower jaw (maxil,) with its four-jointed feelers (palpi,) at f, the lower lip (labium,) with its two-jointed feelers (palpi,) and, at e, the (antenna.) The larvæ of all the species of this order of beetles are carnivorous and furnished with a most formidable pair of jaws. Mr. E. Leeming, of Cobden, Illinois, thus describes their mode of attack :-- "Four larvæ were taken out of peaches

Colors-dull black and brown, Fig. 55.



Colors-brown and whitish.

that had contained the larva of the curculio, the other two were lurking under a peach. I had the satisfaction of seeing one of them fasten his jaws upon the larva of the "little Turk:" the larva squirmed dreadfully, but in vain, for his remorseless foe held him tight, and he soon gave up the ghost."

There are many species of these ground beetles. We would call the attention of our

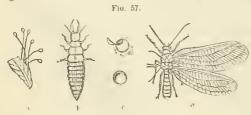
readers to the one represented at Fig. 54. It will give a good general idea of the shape of these insects, although there are several species much larger than our friend H. Pennsylvanicus. Many of them fly into our houses at night, attracted by the lights. Any beetles of this or a similar shape, with bright metallic colors or spots, that may be found under stones or chips, or running among grass or the roots of trees, may be generally set down as members of this family of Carabidæ or ground beetles; they should be carefully protected, for, with one or two exceptions, the whole family are most beneficial to the fruitgrower, both in their larval and perfect state.



The yellow beetle, with two black blotches on its wings, represented at Fig. 56, belongs to a group of soft-shelled beetles (Telephorous family), common everywhere in Ontario. This species is named Chauliognathus Pennsylvanicus, or the Pennsylvanian soldier beetle, and may be found on the flowers of the golden rod. According to Mr. Riley, its larva (Fig. 56 a,) is one of the most effectual destroyers of the curculio, Colors—a, rich reddish brown; i, yellow marked while the latter is yet above ground in the larva state; with black.

the tree, and also enters the fruit lying on the ground for the same purpose.

There is also a species of lace-wing fly (Chrysopa), which is one of our natural allies against the curculio, attacking the larva in the same way as the last described insect. We



give a representation of the larva (Fig. 57 b), with its formidable mandibles; its curious eggs a, laid by the female fly, and attached by long, delicate filaments to a leaf; its wonderfully small cocoon with its smoothly cut lid c, and at d the perfect insect, which is common throughout Ontario, and may easily be recognised by its pale green slender body, its finely-netted

wings, its brilliant golden eyes, and especially by the very disagreeable odour it emits.

The larvæ of all the lace-wing flies are carnivorous, and they attack a great variety of noxious insects. Mr. Leeming writes Mr. Walsh that he had found over one hundred of these lace-wing larvæ in the very act of devouring the curculio larvæ. Mr. Riley points out a curious fact hitherto unnoticed in the history of this insect, which is that the insect issues from the cocoon in an active sub-imago state, from which, after a few hours, the

winged-fly emerges, leaving behind it a fine silvery-white transparent skin.

The artificial remedies that have been devised against the attacks of the curculio are numerous. Many are apparently very ingenious in theory, but utterly useless in practice; others, again, are preposterous in their very conception, and appear only to be devised to delude the veriest tyros and greenhorns—we do not propose to weary our readers with discussing them. What we want to bring before their notice are those remedies which experience has shown to be really successful, and also really practicable. These remedies may be divided into two classes—1st, those directed against the insect in its egg and larval state, and 2nd, those directed against the full-grown, matured beetle. For the first class. the most obvious and practical remedy is to destroy the fruit as fast as it falls from the tree; the fruit in this stage contains, as we have seen, the growing larva, which is soon to eat its way out and descend into the earth; it is, therefore, most important to destroy the fruit as speedily as possible after its fall, and before the escape of the insect. Good, systematic hand-picking will be found to be the most certain way of destroying the larva in this stage; the fruit should be burnt or given to the pigs. Many people, indeed, especially in the Western States, turn their hogs into the plum orehard and use them for this purpose. Dr. Alton, of Illinois, who is, according to Mr. Walsh, one of the most successful plum-growers in the west, has tried this plan with success for some years; sheep and cattle have been also tried, but the objection to them is that they are very apt to bark, browse, and break down the trees, Poultry may be used with very good effect; Mr. Dougall, of Windsor, Ont., the well-known fruit-grower, has for some years kept numbers of poultry in his orchard, and he speaks most favourably of their services, to which he attributes the general success of his plum crops, Air-slacked lime is recommended by Mr. Bliss, the Secretary of the Warsaw Horticultural Society. He writes as follows: "During the season of 1856, Mr. J. B. Matthews, now of Marietta, O., had six or eight Chickasaw plum-trees growing in a cluster in his garden at Warsaw. On one-third of these he began throwing air-slacked lime as soon as the fruit set, and continued it after every rain and sometimes after a heavy dew, showering the trees until they were white with the fine dust. On one or two trees he used none at all; and on the remainder he commenced using the lime after the curculio had attacked the fruit. The lime dust was applied as often as once a week. Result—not one plum on those trees on which he did not use lime; a full crop of good fruit on those on which he commenced using lime early; and on those on which the curculios had begun their attack before he began to apply the lime, he drove them entirely away and saved a portion of the crop. I followed the same plan and saved so many plums as to break down my trees, as I was absent from home, and did not have a chance to thin out the fruit, though I had the lime applied faithfully while I was away." In the report to the Ontario Fruit-growers' Association, made by Mr. W. Saunders, of London, Ont., in 1868, that gentleman makes mention of a friend who had tried lime for several years, and had had regular crops. He also states that he had received similar evidence from various other quarters, and that his own experiments with the lime were tolerably successful. It may therefore be recommended for trial, especially in moist seasons.

Another plan that has been tried, and apparently with some success, is to pave or cement the ground underneath the trees, so that when the fruit falls the insect may be unable to penetrate the earth and may be exposed to the rays of the sun, and, where poultry are kept, may be more easily espied and captured by them. Mr. Charles Arnold, of Paris, Ont., makes the soil quite smooth around the roots of the trees and whitewashes it with a thick coating of lime, which very soon forms a hard crust; this method he considers a very efficient one against the curculio in the larve stage of its existence. It is possible to remove the egg of the curculio from the plum and thereby save the fruit. The nail of the finger will do in default of a better instrument, although it leaves an unseemly scar. The egg should be removed as soon as possible after its deposit, as all attempts to save the fruit after the larva is hatched will be useless. This process is necessarily a very tedious one, and only to be resorted to in cases where young trees are

23 350

fruiting for the first time, and it is desired to save the fruit for tasting when all has been injured by the curculio. Dr. Trimble writes: "The best instrument I have found for this delicate operation is a common quill toothpick, slightly rounded at the point and pared to a cutting edge. This must be insinuated under the concave side of the crescent shaped mark, so as to turn over the triangular portion of skin lying between the horns of the crescent and the end of the tube where the egg is deposited. The egg—a white round speck—will sometimes be exposed, and a very sharp eye will detect it without the assistance of a glass; but generally it will be so coated with a covering of the pulp of the fruit as to be invisible. Take off this speck of skin, egg and all. If properly done

the fruit will come to maturity showing scarcely a blemish.'

We now come to our second class of remedies, those which are directed against the beetle in its perfect state. The most satisfactory plan is to jar the trees regularly two or three times a day during the season, and to collect and destroy the curculios as they fall to the ground. Mere shaking the tree will do but little good; it must be a sharp sudden jar. The trouble of course is to discover the curculios after they drop. The old plan used to be to place white sheets under the trees and to pick up with the hand the insects as they fall, and destroy them at once. Dr. Trimble's method was to nail a stretcher of wood along one side of a large square sheet, and two shorter stretchers, each to one half of the opposite edge of the sheet which is slit from between the two short stretchers to its centre, to receive the trunk of the tree. In this way the sheet is more easily spread out, and the wind is not able to rough it up. The sheet should be emptied for every tree, as in the early part of the season, many buds and blossoms will fall, and these should be carefully examined, as our insect foe, as we have before explained, bears a strong resemblance to a dried bud or piece of dirt. The sheet is easily carried by holding all three stretchers in one hand, letting the folds of the sheet hang down. The tree being reached, drop the long stretcher at the requisite distance, and pass one of the short ones round each side, until the centre of the slit fits up close round the trunk, then jar the tree, and then pick up and crush, and so on from tree to tree, repeating the process over the whole orchard as long as you find curculios. For striking the tree a good sized mallet is the handiest; if the trees are middle sized, it is a very good plan to saw off a limb of two or three inches in diameter, so as to leave a stump for striking the mallet upon. Where this cannot be conveniently done, or where the trees are small, it will be necessary to pad the mallet to prevent the bark being injured. In the case of older trees, which have lost their elasticity and cannot always be jarred enough with the mallet to cause the curculio to let go its hold, Dr. Trimble recommends that a common mop stick properly padded, be applied successively to the leading limbs one after another. These methods of jarring will be found perhaps the easiest and most practicable for those persons who have only a few trees or small orchards to manage. But for extensive fruit growers, who cultivate the plum on a large scale, Dr. Hull's "curculio catcher," will be found effectual in saving both time and money, although in order to run the machine successfully, three things are

necessary.

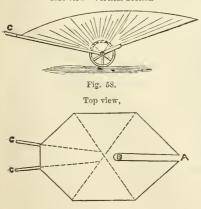
1st. That the land be decently clean and not overgrown with rank weeds.

2nd. That the orchard be sufficiently large to pay the interest on the prime cost of the machine (about \$30).

3rd. That the trees have a clean trunk of some three or four feet.

We give below a description of it in Dr. Hull's own words, as communicated to the American Entomologist: "To make a curculio catcher, we first obtain a light wheel not to exceed three feet in diameter, the axle tree of which should be about ten inches long. We next construct a pair of handles similar to those of a wheel-barrow, but much more depressed at the point designed to receive the bearings of the axle-tree, and extending forward of the wheel just far enough to admit a cross beam to connect the handles at this point;  $1\frac{1}{2}$  inches in the rear of the wheel, a second cross-beam is framed into the handles, and eighteen to twenty-four inches further back, a third. The two last named cross-beams have framed to their undersides a fourth piece, centrally, between the handles, and pointing in the direction of the wheel. To the handles and to the three last named pieces, the arms or ribs to support the canvas, are to be fastened. To the front part of the beam connecting the handles in front of the wheel, the ram is attached, this should be covered with leather stuffed with furniture moss, a dozen or more thicknesses of old

hat leather or other substance, being careful to use no more than necessary to protect the tree from bruising. Ascertain the elevation the handles should have in driving, and support them in that position. We now put in place the stretchers or arms, six for each side, which are to receive and support the canvas. We put the front arms in position. These extend back to near the centre of the wheel on each side, and in front of the wheel (for large machines), say six feet, are far enough apart to receive the largest tree between them on which it is intended to operate. The remaining arms are supported on the handles and fastened to them and to the two cross and parallel pieces in the rear of the wheel. These are so placed as to divide the space at their outer ends equally between them and the first-mentioned stretchers, and fastened to the ends of the handles. Next we have ready a strip of half-inch board, two-and-a-half wide. One end of this is secured to the forward end of one of the front arms, and in like manner to all the others on one side of the machine, and fastened to the handles. Both sides are made alike. The office of these strips is to hold the outside ends of the arms in position; they also hold the front arms from closing. These outside strips also receive the outside edge of the canvas which is fastened to them as well as to the several arms and supports. It will be seen that the wheel is nearly in the centre of the machine. To cover the opening at this point, a frame is raised over it, which is also covered with canvas. The arms or stretchers are so curved that the motion of the machine, in moving from one tree to another, should bring everything falling on the canvas to depressed points, one on each side of the wheel." A bag and broom are carried with the machine, and, as occasion requires, the contents of the stretcher are swept into the bag, which is afterwards dipped into boiling water to kill the inmates. "The whole machine should not exceed ten or eleven feet in breadth, by twelve or thirteen in length. These are for large orchard trees; smaller ones could be protected with a much smaller machine. If the frame work has been properly balanced, the machine will require but little lifting, and will be nearly propelled by its own weight. The curculio catcher or machine is run against the tree three or four times with sufficient force to impart a jarring motion to all its parts. The operator then backs far enough to bring the machine to the centre of the space between the rows, turns round, and in like manner butts the trees in the opposite row. In this way a man may operate on three hundred trees per hour. The frame covering the wheel is made of pine board, while the handles for propelling the machine are riveted above the canvas instead of being fastened below it, and the Doctor finds that this last arrangement gives him better leverage and greater control of the machine." The machine is, in fact, simply a cotton sheet stretched upon a frame, looking not unlike the wheelbarrows in use upon our public works, only much broader. The side and top views given below will, perhaps, convey a more accurate idea of the form of the catcher than any description. Figs. 58 and 59-e, handles; A, opening to receive the trunk of the tree; B, buffer.



An improvement has been made, we believe, on Dr. Hull's machine, by substituting two wheels instead of one, and thus making the draught somewhat easier. The expense, we presume, will be somewhat more, but it is claimed that the advantages secured, fully compensate the extra outlay.

There has been considerable discussion as to the best time of day for the jarring process, many persons advocating the latter part of the day, while others, again, insist that the early morning is the better time. The evidence offered on both sides is very strong, but we incline to the view that the morning is the surest time for making a good haul where the jarring can only be given once a day; the oftener, however, the operation can be repeated during the time the curculios are laying their eggs, the more certainty there will be of a good crop of plums.

There is yet another remedy against the matured insects which has been proclaimed

as a great success, and that is to clear the ground for two or three feet around the butt of the tree and lay traps for the curculio, in the shape of sticks, chips, corncobs, stones, shingles, and anything else that will afford a shelter, and then to go round at any time in the day, turn the traps over, and kill the enemy. Mr. W. B. Ransom, of St. Joseph, Michigan, who is the great advocate of this remedy, states that he killed, from seventy five trees, one thousand six hundred and forty-eight curculios in one hour, while a friend of his, from under two hundred trees, killed two thousand five hundred and fourteen curculios in about two hours. These numbers altogether put in the shade the collection of our fourteen Canadians referred to in the early part of this report. It is evident that our "Cousins" are greater sufferers than ourselves from the ravages of the "Little Turk." The method, though not quite so sure a remedy, we fancy, as Mr. Ransom and his friends appear inclined to believe, is still one that, from its very simplicity, is well worth a fair trial, and we therefore recommend it to our fruit-growers, and shall be glad to hear of any results from its adoption during the next season. In conclusion, we would advise plum-growers to carefully thin out all fruit that is known to contain the grubs of the curculio, and to destroy and burn during the late fall and winter (where practicable) all underbush and rubbish in the orchard, and by these means they will destroy a largenumber of the insects that would otherwise make their appearance in the spring. It will also be adviseable, in forming new orchards, to plant the best kinds of fruit in the centre, leaving the less valuable varieties to be first attacked on the outside, and thus, perhaps, afford better opportunities of waging a persistent war against the wretched little humpback.

### 2ND. THE GREY DAGGER MOTH (Acronycta Psi, Linn.)

#### LEPIDOPTERA NOCTUIDÆ.



Colours-Light gray with black markings.

During the past few seasons the larvæ of this moth have been the cause of much injury to plum trees in the London district, so much so that we deem it worthy of notice as the moth istolerably common in most parts of Ontario. It attacks the foliage feeding upon the leaves and young buds, and thus materially affecting the growth of the tree. We give a description of this moth in all its stages as the larvæ and pupa are not we believe described elsewhere,

and it is well that fruit growers should be able to identify their enemies. We are indebted for the following description of the larva to William Saunders, Esq., who has successfully reared the moth:—

The body is cylindrical, from one and a quarter to one and a half inches in length, and sparingly covered with whitish hairs, distributed chiefly on the sides, close to the undersurface; the head is rather large and bilobed, black with yellowish dots at the sides and rather flat in front with a few scattered whitish hairs; the body is bluish grey with a slate coloured dorsal band, having a central pale orange line from the second to the fifth segments; from the fifth to the eleventh segments inclusive, each segment is ornamented with a beautiful group of spots of which one in front and one behind are bright orange, while one at each side is of a greenish metallic hue, the whole being set in a nearly circular patch of rich black. Adjoining the dorsal band are two lateral cream coloured bands growing indistinct towards the anterior and posterior segments, down which extends on each side from each of the black dorsal spots a short black curved line, having a yellowish dot immediately behind its junction with the dorsal band. The sides are marked more or less with dull ochreous spots, some of which form a broken band close to the undersurface. On the dorsal portion of the twelfth segment is a dull black spot considerably raised. The terminal segment is flattened and blackish. The spiracles are small and black. The undersurface is of a dull greenish colour. The feet are black. This is described from several specimens. The larva feeds on thorn, pear, plum and a variety of other trees; it is generally full grown about August when it seeks shelter in the crevices 356

of the bark of a tree or some such suitable place, and there forms a tough silken cocoon interwoven with the hairs of its body, and therein changes to a chrysalis, in which state it passes the winter, and makes its appearance as a perfect moth about the early part of June. The chrysalis is of a dark shining brown colour; is about three-quarters of an inch in length, and ends in a rather obstuse point. which is provided with several hooked. bristles. The moth Fig. 60 belongs to the tribe of the Noctuidæ or Owlet moths so called because they fly only by night; they often bear a strong resemblance to each other, and in several species the only method of distinguishing them rightly is by the larvæ. The sexes of Acronycta Psi vary in size, the female being about two inches, while the male is only one and a quarter or one and a half inches. The antennæ are simple and bristleformed, rather short and of a grayish colour somewhat darker on the under side. The front wings of the female are broad and of a pale gray colour with various black linear markings; the principal one of which is an irregular cross bearing a strong resemblance to the Greek letter "Psi" placed sideways, and is situated near the anal angle—intermediate between this and the tip of the wing is a much smaller mark of exactly the same shape: the reni-form and orbicular spots are perceptible, though somewhat indistinct; a strong black line (thicker in the males than in the females) proceeds from the base of the wing almost to its middle, and which emits two or three short lateral spurs: the hind wings are glossy and of a warmer tint of gray—the edges of both front and hind wings have a whitish fringe with an inner border of black spots. The head thorax and body are gray. The male is smaller, with a narrower body and narrower wings and fringes; the front wings being also of a paler gray and more pointed at the apex.

The larvæ being of a tolerable size when full grown are easily seen and destroyed.

Search should also be made for the cocoons during the winter or early spring.

## 3RD. THE OBLIQUE BANDED LEAF ROLLER (Lozotænia Rosaceana, Harris).

#### LEPIDOPTERA TORTRICIDÆ.

This moth is a member of a very large family of very little moths that are called, scientifically, Tortrices or Twisters, and popularly, Leaf Rollers, because the larvæ roll up the leaves in which they dwell, and form them into hollow cylinders, disfiguring and destroying them at the same time. Most of these insects, when disturbed, let themselves down to the ground by a fine silken thread. The larva of Lozotænia Rosaceana is about half an inch in length; its color is a pale yellowish-green, with three or four black spots about the head and second segment. The body, which is rough to the touch, is covered with minute warts, each of which produces a short almost invisible hair. They attain their full size about June, after which they line the surface of the twisted leaf in which they live with a web of fine silk, and there change into dark brown chrysalids. After the lapse of a few weeks the chrysalis, by means of minute prickles which are placed across the rings of its hinder part, pushes itself half way out of the leaf, and bursting open at the upper end gives egress to the perfect moth.

Dr. Harris thus describes the moth: "The forewings are very much arched on their

Dr. Harris thus describes the moth: "The forewings are very much arched on their outer edge, and curve in the contrary direction at the tip like a little hook or short tail. They are of a light cinnamon-brown colour, crossed with little wavy darker brown lines, and with three broad oblique dark brown bands, whereof one covers the base of the wing and is oftentimes indistinct or wanting; the second crosses the middle of the wing, and the third, which is broad on the front edge and narrow behind, is near the outer hind margin of the wing. The hind-wings are ochreous-yellow, with the folded part next to the body blackish. It expands one inch or a little more." The larva when disturbed

escapes by its silken thread, and being very active often eludes capture.

Its depredations are sometimes very serious, more especially as the insect appears to select the terminal branches of the tree, and thus effectually checks its growth. Whenever practicable, the curled and twisted clusters of leaves should be picked and crushed; it has also been suggested to thoroughly drench the trees with a mixture consisting of a pound of whale oil soap in seven or eight gallons of water, and thus destroy the caterpillars hidden in the leaves; a weak solution of carbolic acid is also recommended.

## 4TH. THE EYE-SPOTTED BUD MOTH (Grapholitha oculana).

#### LEPIDOPTERA TORTRICIDÆ.

This moth is a member of the same family as the one last described. The chief peculiarity



of the larva consists in its selecting the opening bud for its attack. The caterpillar is a small cylindrical naked worm, about three-quarters of an inch in length, of a pale, dull, brownish colour, with small warts from which arise fine short hairs; the head and the top of the next segment being black. Its modus operandi is thus described by W. Saunders, who found it depredating his plum orchard: "Its tenement consists of a dried-up blackened leaf, portions of which are drawn

Fig. 61.

together so as to make a rude case, the centre part of which, where his highness resides, is lined with silk. It is very fond of going just where you do not want it. It is partial to the blossoms and newly formed fruit. If you have a new pear or plum fruiting with a single bunch of blossoms on it, which you are anxiously watching, by and by you find that several of the blossoms have set, and while you are flattering yourself that they are doing well, along comes this mischief-maker, pitches his tent alongside this very spot, and drawing the young fruit together with silken threads, holds high carnival among them and frustrates your hopes. Another of its tricks is to gnaw a hole into the top of the branch from which your bunch of blossoms issues, and tunnelling it down, causes the whole thing to wither and die, Often it contents itself with damaging the leaves only, and this one does not mind so much, drawing one after another around its small inside case until it forms quite a little bed of withered and blackened leaves. The moth, which expands about half an inch, is of dark ash-grey colour. The fore wings having a paler whitish-grey band across the middle; there are two small eye-like spots on each of them, one near the tip being composed of four little black marks placed close together in a row, on a light brown ground, the inner marks being longer than the others; the second eyespot is near the inner hind angle, and is formed by three minute black spots arranged in a triangle, in the middle of which there is sometimes a black dot. The hind wings are dusky-brown." Mr. Packard describes it as having been generally injurious in Essex County, Mass., in 1869, especially on the apple, cherry and pear; and during the past two seasons it has committed havoc among the plum trees in this (London) district.

Similar remedies to those described in the last-mentioned insect should be applied,

hand-picking being the most preferable.

The codling moth, and various other kinds of insects may be found occasionally to affect the plum; it is, therefore, indispensable that fruit-growers, to be successful, should keep a watchful eye over all their trees, and endeavour, by patience and perseverance, to maintain the upper hand of these destructive foes. "Eternal vigilance" is the price of success in fruit-growing, as in all other undertakings.

# FRUIT GROWERS' ASSOCIATION OF ONTARIO.—LIST OF PRIZES FOR THE YEAR 1871.

1. An honorary medal to the originator of any new fruit, which, having been tested, is found to be worthy of being placed among the fruits of its class for cultivation in Ontario.

2. The sum of fifty dollars for the best new Canadian seedling, late winter apple.

Thirty dollars for the best Canadian seedling, harvest apple. Twenty dollars for the best Canadian seedling, autumn apple.

These to be, at least, equal to the old popular varieties now in cultivation. Not less than two dozen specimens of the fruit to be sent to the President, at Hamilton, accompanied by a letter, setting forth what in the opinion of the sender are the excellencies of the fruit sent, whether for cooking or dessert, &c., &c.; also stating the origin of the tree, if known, its vigour, hardihood, productiveness and the like.

Persons who have heretofore sent samples of fruit in competition for these prizes, will please to take notice of the above requirements, and be kind enough to send again. Several who sent seedling fruits sent only one or two specimens, or so few that it was impossible to come to a satisfactory opinion on the merits of the fruit.

3. The sum of twenty-five dollars for the best essay on the cultivation of the Grape, including soil, exposure, planting, pruning, training, gathering the fruit, packing, market-

ing, varieties, &c., but not to include the making of wine.

Fifteen dollars for the second best essay thereon.
4. The sum of twenty-five dollars for the best essay on insects injurious or beneficial to the various kinds of fruits, treating as far as possible of the insects in their different stages of development.

Fifteen dollars for the second best essay thereon.

Each essay must be forwarded to the Secretary, at St. Catharines, on or before the first day of July, 1871, and bear a motto, and be accompanied with a sealed note having the motto indorsed upon the outside, and containing within, the name of the author of the essay.

5. To any person sending to Wm. Saunders, Esq., of London, transportation prepaid, five thousand of the plum Curculio (Constrachelus Nenuphur) in the beetle state, the sum of twenty dollars; or sending three thousand, the sum of ten dollars; or sending two

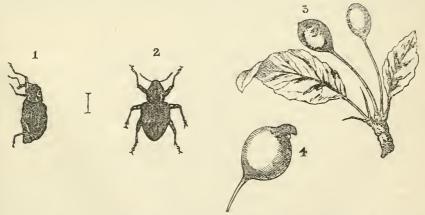
thousand, the sum of five dollars.

The Treasurer will pay these to any person furnishing him with a certificate from Mr. Saunders that the requisite number of this insect has been received by him from the

holder of the certificate, and that the transportation was prepaid.

Persons intending to send these insects to Mr. Saunders will find it very convenient to provide themselves with a strong wide mouthed vial or small bottle, two-thirds filled with sawdust wet with alcohol, brandy, or strong whisky, into which they can put the curculios alive as they catch them; and keep the vial well corked. The insects will creep into the sawdust, and be preserved by the spirits for many months, until they can be sent to Mr. Saunders. In counting them, Mr. Saunders will reject any insects sent with them that are not the curculio which injures the fruit of the plum.

In order to facilitate the detection of the criminal, we give a portrait of his person, in the first cut greatly magnified, and in the second of the natural size. Fig. 1 is a side view; fig. 2 shows the appearance from the back; fig. 4 represents the insect in the act of perforating the young plum; and fig. 3 the crescent mark left after the operation.



6. The Directors offer to give to each member not only a Beurre d'Anjou Pear tree, but with it a plant of the Early Wilson Blackberry, and of the Mammoth Cluster Raspberry,

on the usual conditions of reporting thereon.

Also, those who already have Beurre d'Anjou, have the privilege of choosing one from the following sorts, in addition to those named in the Directors' Report, viz. :—Clapp's Favourite, Beurre St. Nicholas and Josephine de Malines.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

# APPENDIX (D).

CORRESPONDENCE BETWEEN THE COMMISSIONER AND THE COUNCIL OF THE AGRICULTURAL AND ARTS ASSOCIATION.

OTTAWA, 22nd February, 1870.

SIR,—I beg to submit for your consideration whether a plan might not be adopted which would render the working of the affairs of the Agricultural and Arts Association more economical than at present, without in any degree lessening its efficiency.

A valuable library of books relating to Agriculture and Arts is in possession of my Department, and the Association also has a very good collection. These might be amalgamated and made more valuable, and of greater use to the public than in the places which they now occupy.

The working expenses of the Association also seem to be very large, the "Miscel-

laneous" items so much so as to create a general feeling of surprise.

The room formerly used for the Legislative Library is now unoccupied. It connects with the present Legislative Library. The larger portion of it might be fitted up for the united Libraries, and the other portion as a meeting room for the council and committees of the Association. The joint libraries would be available for use by the members of the Legislative Assembly during the sittings of the House, and would also be open at all times to the public for reading and reference.

The person who would act as Secretary of the Association could also take charge of the Library, whilst an officer of my Department might act as Treasurer, at a small addition to his present salary. This arrangement would be a great convenience, as both officers would then be accessible to the public at all times. The duties of Messenger could, no doubt, be performed by the staff at present employed in the Parliament Buildings without any additional expense, so that the services of the Messenger at present employed by the Association could be dispensed with.

I have no doubt that, under the proposed arrangement, the working expenses would be reduced at least one half. Besides this the present Association building, which I believe is valued at about \$20,000, could be either sold or rented, and the annual interest on the proceeds of the sale, or the annual rent could be appropriated for special prizes in Agriculture or the Industrial Arts.

Will you have the goodness to give to the foregoing, your careful consideration, and to bring it before the notice of the Council at its next meeting, which will commence tomorrow, and let me know if any action is taken in regard to it.

Your obedient Servant.

(Signed) John Carling. Commissioner.

To the President of the Council of the Association of Agriculture and Arts for Ontario.

> OFFICE OF THE AGRICULTURAL AND ARTS ASSOCIATION OF ONTARIO. TORONTO, February 28th, 1870.

SIR,-I have the honour to acknowledge the receipt of your communication of the 22nd inst., addressed to the President of the Association, in which you suggest for consideration a plan for rendering the working of the affairs of the Association more economical than at present.

I am instructed by the Council to say that this communication was received too late for the Council to take any action upon it at the late meeting, and that its consideration has been deferred to the next meeting of the Council.

I have the honour to be sir.

Your obedient Servant,

(Signed) Hugh C. Thomson.

Secretary.

HON. JOHN CARLING, Commissioner of Agriculture, &c., &c., &c.

> Office of the Agricultural and ARTS ASSOCIATION OF ONTARIO. TORONTO, May 19, 1870.

HON. JOHN CARLING,

Commissioner of Agriculture, &c., &c.

SIR,—I have the honor to transmit the subjoined copy of a Report adopted at a meeting of the Council of the Agricultural and Arts Association at Toronto, on Friday, the 13th inst.

I have the honour to be, sir,

Your obedient servant,

(Signed.) Hugh C. Thomson.

Secretary.

#### REPORT.

Your Committee to whom was referred the letter of the Hon. Minister of Agricul-

ture of the 22nd February, beg to report:

In reference to the letter of the Minister of Agriculture, addressed to to the President of this Council under date of 22nd February last, the following considerations are respectfully submitted:-

1st. The records of the Agricultural Association exhibit a constant and most gratifying evidence of progress in the increase of entries and prizes offered, from the year of the first Exhibition, 1846, when the entries were 1,150, and prizes offered \$1,600, to the Exhibition of 1869, when the entries were 7,649, and prizes offered \$13,248.

2nd. The improvement in the quantity and variety of articles exhibited, whether in the Department of Agriculture, Horticulture, Mechanics or Arts, has been quite as marked

and gratifying as has been the increase in quantity.

3rd. The observations of the members of the Council made during frequent visits to the annual Exhibitions of New York and other States, and the acknowledgements of distinguished Americans visiting our Exhibition, freely and impartially given, warrant the assertion that the annual Exhibitions of Ontario not only stand in the very first rank, but really excel any and every other of the same mixed character on the continent.

4th. The successful establishment of the Veterinary College, under the charge of Andrew Smith, V. S., of Edinburgh, and the number of qualified Veterinary Surgeons now annually sent out from the College, supplying a most important desideratum to the agricultural community, is confidently referred to as further evidence of the successful

management of the Association.

5th. The working expenses of the Association, which the Hon. Minister of Agriculture asserts "seem to be very large," have been very materially increased under the operation of the system adopted under the present Agricultural Act, increasing the number of the elective members of the Council from eight to twelve; and by the practice of electing members, residents of the respective districts they represent, while beneficial to the interests of the Association and satisfactory to the public, the travelling and incidental expenses are very considerably increased when compared with the system and practice under the former Act. For the past year, also, the working expenses were very largely increased by the large sum the Council was obliged to expend in providing the necessary accommodation at London for the annual Exhibition, amounting to about \$3,350.

6th, The expenses under the head of "Miscellaneous," specially referred to, can

6th, The expenses under the head of "Miscellaneous," specially referred to, can scarcely create surprise, when some of the items are examined; to wit, \$2,000 of the amount was a sum paid to Professor Buckland, for three years' services as Lecturer for the Association, which had been appropriated to him and should have been paid by the late Treasurer more than two years ago; \$163.65 discount paid upon silver received for entrance to the exhibition; \$135 paid for the Lieut.-Governor's bill as Visitor to the London Exhibition, are all extraordinary payments, and deducted from the miscellaneous aggregate of \$3,467.79, leaves but \$1,169.14 to be fairly charged under that head.

Circumstances connected with the former Council and Board of Agriculture, and the operations of the first year under the present Act, made it necessary to hold a larger number of meetings of the Council than ordinary, and perhaps double the number which will be required for the present year, and this will very materially reduce the working

expenses of the Council.

7th. An Agricultural Library, to be of general benefit, must be so located as to be easy of access to agricultural men; and it is submitted that there can be no comparison in this respect, as between the rooms in the Parliament Buildings, proposed by the Minister of Agriculture, and the commodious premises now owned and occupied by the Coun-

cil of the Association, the latter being the most central location in the city.

Sth. Instead, therefore, of the plan suggested by the Minister of Agriculture, it is now proposed that the Agricultural Library should be united to the "Valuable Library of Books relating to Agriculture and Arts" collected by the late Board of Arts and Manufactures, when forming an active part of the Agricultural Association, and which, in all fairness, should have been handed over to this Association; to locate the United Libraries in the Agricultural hall, which contains one of the finest rooms for a library and museum in the city; establish a Free Library, open to the public every day of the week, and at least three evenings of the week until 10 p.m.; the present messenger having charge of and being accountable for, the proper care of the Library.

This plan would involve but little extra expense, and a moderate appropriation from the annual grant would provide for continuous improvements by the addition of suitable-

works and periodicals as issued.

8th. A most important element in the successful management of of the Association is, that it has been entirely free from political influences; to the people has been left the conduct and location and control of the annual exhibition, aided and fostered by annual grants of money by the Parliament, but in no way influenced or interfered with by the Government of the day—and it is submitted that this element of success must be entirely destroyed by the plan of management suggested by the Commissioner of Agriculture, and the expense—the plea used—could be but slightly if at all diminished, except, indeed, that the Government should assume the entire control, and dispense with the services of the Council, in which case it would no longer be an Institution of the people, but a creature of the Government.

The members of the Committee are convinced, and this expression of opinion isunanimous, that it is of the utmost importance to the continued success of the Association that it should preserve its autonomy in the future as in the past, independent of and unaffected by whatever shade of politics may mark the existing Government.

So far as the Committee are aware, the change proposed by the Minister of Agriculture has not been asked for by the public. Since the proposition was submitted to the Council, the members have had some opportunity of testing public opinion, and they

have not met a single person who approved the scheme.

(Signed.)

J. BEATTY, Chairman of Committee.

Toronto, May 13, 1870.

BUREAU OF AGRICULTURE AND ARTS, TORONTO, 5TH JULY, 1870.

HUGH C. THOMSON, Esq., Toronto, Secretary of the Agricultural and Arts Association of Outario.

SIR.—I have the honour to acknowledge the receipt of your letter of the 19th of May, enclosing a copy of the report of the Special Committee of the Council, to which was submitted my proposal of the 22nd of February last, for the more economical management of the affairs of the Association, and to express my regret that the Council has declined to accede to my proposal.

I have also to express my astonishment that a proposal so simple in its character, and so desirable in its objects, should have provoked so violent a speech from the President of the Association on the occasion of his submitting it to the Council.

It is charged against me that this is not the first time I have censured the Board. If by this the President desires to recall public attention to the exposures made of the gross mismanagement which had characterized the conduct of its affairs up to the close of 1868, I am inclined to think the public will consider the "censure" to have been not undeserved. For years the Association had been practically a close corporation, expending large sums of money annually, while ignoring the terms of the statute requiring it to publish records of its transactions, including of course detailed statements of accounts. For many months the President (Mr. Christie) had been borrowing large sums of money for the use of the Association, and charging the interest, amounting to several hundred dollars, to the Association, when the books showed balances amounting to ten or twelve thousand dollars to his credit, which should have been in the hands of the Treasurer, and available for its ordinary expenditure. For years many exhibitors had been unable to obtain payment of their prizes, and a public distrust in the affairs of the Association had been excited, which demanded at the hands of the Government some action to remove it. The special occasion of the "censure" referred to, if the President prefers that term, was the neglect for ten months after the close of the year, to furnish returns of accounts as required by me, in accordance with the statute, and the plea for that neglect was want of time. As a consequence of the action then taken by me, and of which the President now complains, the public has been, for the first time since 1863, put in possession of a statutory report of the Council, accompanied by the accounts in detail, showing all the prizes of the last exhibition to have been paid within two months from the close of the financial year. With such results I have strong hopes of being able to survive the attack of the President, on account of my former action or "censure" in relation to the affairs of the Agricultural Association.

In my present proposal I am quite unconscious of having censured the Board; nothing certainly was further from my intention. My object was one in which I had a right to expect that the members of the Board would feel an equally deep interest, viz.: to reduce the expenses of the Association to the lowest sum consistent with its thorough efficiency. And I confess to some surprise that the proposal should have been rejected on grounds which were no wise raised by it. I suggested that the existing organization, by saving the rental of its present premises, and by availing itself of the rooms in the Parliament Buildings, and of the services of an officer and messenger of the Government Departments, could effect such a saving as would enable it to offer larger prizes at its annual exhibitions. I am answered that it would be a serious mistake to abolish the exist-

ing organization; a proposition not even hinted at in my communication.

I concur in most of the statements of the report of the Committee. The progress of the agricultural interest has been so marked as to be a fair subject for congratulation; and the steadily increasing success of the annual exhibitions is an undoubted fact. All this, however, may be conceded without necessarily involving the admission that this success has been due to the particular premises in which the Council of the Agricultural Association hold their meetings. That, let me repeat here, is the main point raised by my letter. I am sure that neither the other members of the Government nor myself have the slightest desire to interfere in any way with the perfect independence of the Council, or to exercise any political influence over the Association. I have in no way attacked its "autonomy," and if in the future that autonomy be attacked, and it will be only on account of the action of the Council itself, the surest way of perpetuating its existence and usefulness is by exhibiting it to the country as an economical and carefully managed body. And it is because I desire to see its autonomy preserved, that I regret the course which has been taken by the Council.

The Agricultural and Arts Association is a Provincial, not a local institution; and it occurs to me that access to its officers would be much more convenient if they were to be found in the same buildings with the general Departments of the Government. The Departments are places of constant resort by the people at all times, and during the sessions of the Legislature the advantage to its members, all of whom take a deep interest in agricultural matters, would be manifest. Thus, as a mere matter of public convenience, the centreing of all the Departments of the Government, and the Agricultural and Arts Association, with its Library and Museum, and its executive officers, in the same building, would be very advantageous. But when to these is added the fact that a very large saving could be effected in the expenses of an Association to which the Legislature grants ten thousand dollars of the public money annually, I find it difficult to appreciate the

motives which have prompted the Council to reject my proposal.

Since I have had the honour of presiding over the Department of Agriculture and Arts, I have had but one motive in view—that of promoting the success of the great agricultural and manufacturing interests of Ontario; and I think that I may claim that—by the measures I have thus far succeeded in getting passed by the Legislature, and by the Departmental arrangements which I have inaugurated—those great industries have been more extensively promoted, and the more efficient and satisfactory working and management of all the Associations and Societies receiving Legislative aid have been secured. In my present proposal I have been influenced by the same desire, and I feel confident that upon a full consideration of it, the people of Ontario will recognize it to be a wise one.

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

> JOHN CARLING, Commissioner.

OFFICE OF THE AGRICULTURAL AND ARTS ASSOCIATION OF ONTARIO. TORONTO, July 8th, 1870.

HON. JOHN CARLING,

Commissioner of Agriculture, &c., &c.

SIR,—I have the honor to acknowledge receipt of your favor of 5th instant, in answer to the Report of the Special Committee of the Council, to which was submitted your proposal of 22nd February last, "for the more economical management of the affairs of the Association," and beg to say that the consideration of your communication has been deferred till the next meeting of the Council.

I have the honor to be, Sir,

Your obedient Servant,

(Signed) HUGH C. THOMSON,

Secretary.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

# APPENDIX (E).

REPORT OF REV. W. F. CLARKE ON AGRICULTURAL EDUCATION.

To THE HONOURABLE JOHN CARLING,

Commissioner of Agriculture, &c.

DEAR SIR,—I had the honour to receive from you some months since, the following commission :—

"You are hereby commissioned to visit the leading Agricultural Colleges in the United States, and report thereon to this Department, your report to embrace, among

others, the following particulars :-

"The establishment, cost, and mode of sustaining such Colleges, with the experimental or model farms attached; their management; the course of study pursued at them; the professorships in them; the attendance of students; the estimation in which these Institutions appear to be held in the United States; their practical working; the results of their operation so far as can be ascertained; the expense of their maintenance and the extent to which by fees, manual labor or otherwise, they are self-supporting.

"You are also commissioned to visit the United States Department of Agriculture at Washington, and ascertain by what methods it aims to promote the farming interests of

the adjacent Republic.

"On your return, you will, at your earliest convenience, embody the results of your observations in a report to this Department; and also submit an economical and practical scheme for the establishment of an Agricultural College in this Province. You will also furnish this Department with any suggestions your tour may enable you to make, whereby its serviceableness to the Agriculture of this Province may be enhanced."

As you have already been apprized by me, a variety of unforeseen circumstances, ill health among the number, have prevented an earlier fulfilment of the task you were pleased to assign me, and I have now at length, the honour to report to your Department

as follows :-

In pursuance of the instructions given me, I visited several of the more prominent Agricultural Colleges in the United States. It will hardly be necessary for me to give in detail the particulars of each such visit, inasmuch as the object of this report is not historical, but practical. Among the Institutions visited by me, there are two, one at the East and the other at the West, which may be regarded as exemplary, if not model

in their character, viz.: those of Massachusetts and Michigan. Some account of these two Colleges, will probably suffice for the ends to be accomplished by this report.

It may, however, be premised, that the Agricultural Colleges of the United States, are indebted, some for their very existence, and all for their efficiency, to that Act of Congress passed in 1862, by which a munificent land grant was made to every State in the Union for the permanent endowment of such Institutions. The purpose of this donation is thus stated by the originator of the Bill: "To establish at least one College in every State, upon a sure and perpetual foundation, acceptable to all, but especially to the sons of toil; where all the needful sciences for the practical avocations of life shall be taught; where neither the higher graces of classical studies, nor that military drill our country now so highly appreciates will be ignored, and where agriculture, the foundation of all present and future prosperity, may look for troops of earnest friends, studying its familiar and recondite economies, and at last elevating it to that higher level, where it may fearlessly invite comparison with the most advanced standards of the world." Under this Act, each State became entitled to a quantity of public land, equal to 30,000 acres for each of its Senators and representatives in Congress, under the census of 1860. It was provided that this land should be sold to the best advantage under the supervision of each State, and the proceeds invested as a perpetual endowment in safe stocks, yielding at least five per cent. per annum. The Massachusetts Agricultural College owes its existence to the National Land Grant; that of Michigan was already in prosperous operation when the grant was made, but has, of course, received a considerable impetus from that wise and patriotic Act of Congressional Legislation.

#### MASSACHUSETTS AGRICULTURAL COLLEGE.

The quota of land allotted to Massachusetts was 360,000 acres. The State Legislature was prompt to accept the grant, and proceeded at once to consider the best mode of appropriating it. A most important and much debated question in regard to agricultural education, viz.:—whether the object can be best promoted by making agriculture one of many subjects taught in a general college, or by having a college specially consecrated to it, was thoroughly discussed by the ablest scholars, farmers and politicians of the State. The Governor strongly urged in his message, January, 1863, the bestowal of the land grant upon Harvard University, or rather upon those noble scientific institutions which are affiliated with that University. But, in spite of the conceded advantages of existing professorships in branches of study requiring to be taught in a course of agriculture, and of means of instruction and illustration in large libraries and costly apparatus, the Massachusetts Legislature decided to establish a separate institution as an Agricultural College, and after deducting one tenth of the avails of the land grant for the purpose of buying a farm, as empowered to do by the Congressional Act, they appropriated two-thirds of the fund to the contemplated new College, and the remaining one-third to the Institute of Technology, in Boston. The location of the proposed Agricultural College was left in the hands of the Trustees, and a proviso in the Act required that \$75,000 should be raised by voluntary subscription for the erection of buildings. This amount having been pledged by the town of Amherst, and an eligible site and farm of 383 acres having been secured in that town, at a cost of \$41,000, the Agricultural College of the State was located there, and opened for the reception of students in the autumn of 1867. At the date of my visit the Institution had received the following moneys:-from the general United States Government, \$168,000; from the town of Amherst, \$75,000; from the State of Massaachusetts, \$120,000; and from different individuals, \$25,000; amounting in all to the sum of \$388,000. This has been applied to the purchase of a model and experimental farm as above-mentioned, the erection of buildings, and various miscellaneous outlays for apparatus, &c. There is dormitory, boarding, class and lecture-room accommodation for one hundred and ten students. Two students occupy a suite of rooms, having a study in common, and a bed-room and closet for each. There are seven dwelling-houses, two brick dormitory buildings, a large edifice called "College Hall," a botanic museum, a beautiful plant house, a spacious model barn and out-buildings. A further expenditure of about \$100,000 is considered requisite to complete projected buildings, and provide furnishings, fittings, books, and apparatus. This additional outlay would increase the capacity

of the Institution so as to accommodate two hundred students. The Faculty of the College consists of a President, who is also Professor of Botany and Horticulture; a Professor of Agriculture; a Professor of Military Science; a Professor of Mathematics and Physics; a Professor of Chemistry; a Professor of Modern Languages; together with sundry Instructors and Lecturers on a variety of special branches of study. Two classes of students are contemplated in the course of instruction which is provided, viz. :- "those who wish to obtain a thorough literary, scientific and business education, qualifying them to act well their part, not only as farmers and gardeners, but also as citizens and men; and those whose circumstances or wishes induce them to seek a more limited and practical course of instruction, with particular reference to farming as a profession." The regular course of study occupies f.ur years, and those who complete it receive the degree of B.S. (Bachelor of Science). The Farm Superintendent gives daily instruction in the best methods of practical agriculture. Every student is required to labour two hours on alternate days, as a College exercise. For this no pay is given, but for all extra labour students are paid at the rate of 12½ cents per hour. Thus far more than half the students have voluntarily worked, more or less, for wages, as a means of reducing the cost of attendance at College. The expenses are as follows:-Tuition, \$12 per term; room rent, \$5 per term; incidental expenses, \$1 per term; boarding, \$3.50 per week; washing, 50 cents per dozen; expenses of chemical laboratory to students of practical chemistry, \$5 per term; public and private damages, including chemical apparatus, at cost; total expenses, inclusive of fuel and books, about \$250 per annum. The last report of the Trustees of the College, holds it out as an inducement to students that, with the manual labour facilities provided, a young man of good talents, who is healthy and willing to work, can obtain a superior education at this Institution for \$100 per annum, in addition to what he can earn on the premises. Most of the Agricultural Societies in the State have assumed the responsibility of paying the term bills of one or more students, the amount per annum of each being \$54. These Agricultural Society Scholarships are offered for competition, and the candidates passing the most creditable examination become entitled to them. By this means, and the manual labour arrangement, a Scholarship student is at an outlay of not more than about \$50 per annum. It speaks well for the reputation of this College, that it has been well filled with students ever since its opening in October, 1867, and that they have been chiefly farmers' sons who have been in attendance. No one is admitted at a younger age than fifteen, and thus far the students have averaged eighteen years of age. Nearly all have been full course students. This College is considered to have been remarkably successful. The State Legislature and wealthy agriculturists deem it worthy of liberal appropriations and benefactions; and while it is too young to point with pride and triumph to any distinct marks of moulding power and usefulness, as having been put forth, on the agriculture of the State as yet, it is confidently believed that it will be able to do so at no very distant day. The total cost of its maintenance, inclusive of the farm, is about \$20,000 per annum, of which, term bills, farm produce, &c., pay about one-half, leaving about \$10,000 per annum to be provided for out of the Endowment Fund. The course of studies pursued at the Massachusetts Agricultural College is as follows :-

### COURSE OF STUDY AND INSTRUCTION.

#### FRESHMAN YEAR.

First Term.—Algebra, Human Anatoray and Physiology, Chemical Physics.

Second Term.—Geometry, French, Chemistry. Third Term.—Geometry, French, Botany.

Lectures upon Hygiene. Chemistry, Botany, and Agriculture; and Exercises in Orthography, Elocution, and English Composition, during the year.

#### SOPHOMORE YEAR.

First Term.—German, Agriculture, Commercial Arithmetic and Bookkeeping.
Second Term.—German, Trigonometry, Analytical Chemistry with laboratory practice.

Third Term.—Mensuration, Surveying, Analytical Chemistry, Zoology, Drawing.

Lectures upon Comparative Anatomy, Diseases of Domestic Animals, Organic Chemistry, Dairy Farming, and Market Gardening; and Exercises in English Composition and Declamation, during the year.

JUNIOR YEAR.

First Term.—Physics, French or German, Agricultural Chemistry with practice in the laboratory and the field, Drawing.

Second Term.—Physics, Rhetoric, Horticulture.

Third Term.—Astronomy, Systematic Botany, History of the United States.

Lectures upon Physics, Mineralogy, the Cultivation of the Vine, of Fruit and Forest Trees, and Useful and Injurious Insects; and Exercises in English Composition and Debate, during the year.

SENIOR YEAR.

First Term.—Intellectual Philosophy, History, Physical Geography.

Second Term.—Moral Philosophy, Political Geography, the Civil Polity of Massachusetts and the United States.

Third Term.—Geology, Engineering, Political Economy.

Lectures upon Stock Farming, Architecture, Landscape Gardening, Geology, and English Literature; and Exercises in Original Declamation and Debate, during the year.

Exercises in Gymnastics, Military Tactics, and the various Operations of the Farm and Garden, through the course.

#### MICHIGAN AGRICULTURAL COLLEGE.

I proceed now to give a brief account of the Michigan Agricultural College, and without at all disparaging the institution already described, or any other, I am constrained to award the palm of superiority to it for the practical good sense, wise economy, determined energy, and encouraging success which have characterized its arrangements and history. In many respects it is especially worthy of being made a study by those who are anxious to establish on a sound basis, and without extravagant outlay, an Agricultural College in

a new and rising country.

In the year 1855, the Michigan Legislature made an appropriation of forty thousand dollars for the establishment of a state agricultural school. A tract of land, some three miles east of Lansing, the state capital, was purchased. It consisted of 676 acres of heavily timbered land, and was nearly in a state of nature at the time of purchase. A site for the necessary buildings was chosen, and a beautiful natural park formed by wisely leaving here and there suitable trees already well-grown and firmly established in the soil; an example of what every farmer in a new country might do, but for that wholesale and indiscriminate tree-slaughter which the settler appears to regard as his first and most imperative duty. Artificial planting, with fifty years of growth, would not have embellished the grounds of this College more richly than they have been by a judicious disposition of the original occupants of the soil. A college building, 100 feet by 50, and a boarding house of nearly equal size, each three stories high and of brick, were at once erected, and the institution was formally opened with appropriate services on the 13th day of May, 1857, in presence of the Governor, a goodly representation of state officials, and a large concourse of citizens from various parts of the State. A central building somewhat ornamental in style, but planned with a view to obtaining the most accommodation with the least outlay, has since been erected.

This Institution, as already stated, was in an effective condition at the time that the great National Land Grant was made. It then became possessed of 240,000 acres of land, all located within the State of Michigan, and with a minimum price of \$2.50 per acre, fixed by law. In addition to this munificent endowment, the State Legislature vested in the College the ownership of about 6,000 acres of swamp land, considered to be worth at least \$30,000, and increasing in value. As yet, the lands donated by Congress remain unsold, and thus far the support of the College has come from the State. But, the possession of these lands has inspired the friends of the Institution with great enthusiasm, and produced an important moral effect by the certain prospect of ample means to provide for the operating of the College in all time to come. From the very

outset, this Institution appears to have gone on prosperously, and without any serious drawback. During the past year the number of students was eighty-two, representing twenty-six counties of the State. Of this number, sixty-two were sons of farmers. Three hundred and fifty acres of the farm are now cleared, and in great part freed from stumps. Roads, fences and bridges have been built, and a large amount of grading and ditching done. It is a peculiarity of this College, that by legislative enactment, it is required "That three hours of each day shall be devoted by every student to labour upon the farm, and no person shall be exempt, except for physical disability." This requirement of labour is made, not only because it is remunerative to the students, but because it is educational, and calculated, at a period when tastes and habits are formed, to induce love of work, and sympathy with the working classes. It is found that, as a matter of fact, students who pursue a College course without labour, rarely engage in industrial pursuits, and it has been urged as an objection against Agricultural Colleges, that they will tend to divert their pupils from the actual work-a-day life of the farm, to professional pursuits. Special pains are taken, therefore, at the Michigan Agricultural College, to render labour honourable and attractive. The officers of the Institution work with the students, or personally superintend their work. The Professors of Agriculture and Horticulture, the Foremen of the farm and garden, and the Foremen of the green-house are always out with the students during their work, while the Professor of Chemistry and other officers often are so. It is aimed to connect the labour and studies of the students as far as possible. Lectures are sometimes given in the fields and stock-yards, and the principles learned from class-books are, as frequently and fully as can be done, illustrated in the work-shop, on the farm, and in the garden. After a thorough trial of its merits, the Trustees and Faculty of the Institution cling very tenaciously to the manual labour feature of the College, and regard it as intimately connected with its prosperity and usefulness. That the system of labour pursued here has proved a success is undeniable, while it is equally certain that in some other Institutions it has proved a failure. The reasons for this difference, as given by the friends of the Michigan Agricultural College, are these:-that requiring all students, without exception, to labour, effectually prevents the springing up of caste among them, while participation in actual work by the officers of the Institution themselves, does much to make labour appear respectable and inviting to the young men. That there is much force in these considerations no thoughtful mind can deny.

The requirements for admission to this College are thus fixed by law:—"No student shall be admitted to the Institution who is not fifteen years of age, and who does not pass a satisfactory examination in arithmetic, geography, grammar, reading, spelling and penmanship." The law also says, the College "shall be a high seminary of learning, in which the graduate of the common school can commence, pursue and finish a course of study." The chief objects contemplated by the College are these:—1st. To impart a knowledge of science, and its application to the arts of life. Especially are those sciences taught which relate to agriculture and kindred arts, such as Chemistry, Botany, Zoology, and Animal Physiology. 2nd. To prosecute experiments for the promotion of agriculture. In this important respect very valuable service has already been rendered. 3rd.

To afford the means of a general education to the farming class.

Tuition is free to all students from the State of Michigan. Outsiders are charged twenty dollars per annum. Board and washing are provided at the College Boarding Hall at cost, which was during the past year, \$3.25 per week for board, and forty-two cents per dozen for washing. A charge of \$6.50 per year is made for incidentals. Room rent is four dollars a year. The rooms are furnished with bedsteads and stoves; what else is requisite, the students must provide for themselves. The terms are so arranged as to give a long winter vacation, affording students an opportunity for teaching. What is thus carned in addition to the wages received for labour during the term, will, if he be industrious and economical, enable the student to defray a large proportion of his College expenses. The annual cost of the Institution is rather more than \$10,000, and as tuition is free, nearly all this amount must be provided either by legislative appropriation, or from the proceeds of the endowment. There is already much pleasing evidence of the usefulness of this College, and of its high and growing appreciation by the farmers of Michigan. A good proportion of its graduates are engaged in practical agriculture. Four of its

3

graduates have become Professors in Agricultural Colleges. Its influence is very perceptible upon the surrounding farm region. At present, the faculty of instruction consists of a President, who is also a Professor of mental philosophy and logic; a Professor of animal physiology, and practical agriculture, who is also a Superintendent on the farm; a Professor of chemistry; and a Professor of botany and horticulture, who is also Superintendent of the gardens; and a Professor of English literature. The Course of Instruction is as follows, occupying when fully taken four years, but suitable persons may be received for a less time to pursue a special course of study.

#### COURSE OF INSTRUCTION.

FRESHMAN CLASS.

First Half Year.

Algebra—Robinson. History—Weber. Geometry—Robinson. Book-keeping—Bryant & Stratton.

Second Half Year.

Trigonometry—Robinson. Surveying—Davies.

Practical Agriculture. Geology—Dana.

SOPHOMORE CLASS.

First Half Year.

English Literature—Chambers, Spalding.

Botany—Gray. Elementary Chemistry—Youmans.

Second Half Year.

Entomology—Packard.
Analytical Chemistry—Fresenius.

Botany—Gray, Darlington, Lindley. Horticulture.

JUNIOR CLASS.

First Half Year.

Physics—Snell's Olmstead. Agricultural Chemistry—Johnston. Inductive Logic—Herschel.

Second Half Year.

Physics—Miller.
Rhetorio—Whately, Day's Praxis.

Animal Physiology—Dalton.

SENIOR CLASS.

First Half Year.

Zoology—Carpenter.
Practical Agriculture.
Mental Philosophy—Wayland.

 $\begin{array}{ll} {\bf Astronomy-Snell's\ Olmstead}. \\ {\bf French-Fasquelle}. \end{array}$ 

Second Hulf Year.

Landscape Gardening—Downing, Kemp.

Moral Philosophy—Haven. Political Economy—Carey, Walker. French—Fasquelle, De Fivas.

Civil Engineering—Mahan.

Declamations and Compositions throughout the entire course.

Particular attention is called to the course of study as laid down above. It is believed to be sufficient to impart thorough mental discipline and such information as is required by the general student. Its peculiar feature is the prominence given to physical sciences. Botany, Chemistry and Animal Physiology are pursued from one to two years each.

Practical Agriculture, Horticulture, Stock-breeding, Entomology and Meteorology are

prominent features of the course.

It is believed that students who complete the course will be qualified to follow agricultural pursuits with intelligence and success; or should some other profession seem more congenial, they will have the discipline and scientific acquirements that will enable them

to pursue with profit the studies preparatory to entering it.

As text books are liable to be changed, students are advised not to purchase books in

in advance, without consulting officers of the College.

#### SELECT COURSE.

Persons of suitable age and acquirements, who desire to pursue one or more of the branches of study more closely related to Agriculture (such as Chemistry, Botany, Animal Physiology, etc.), may be received for a less time than is requisite for the full course.

As affording evidence of the comprehensive and exhaustive character of the teaching at this College, I subjoin the programme of topics published by the Trustees of the institution. It is an admirable synopsis of what requires to be taught at a School of Agriculture.

#### DEPARTMENTS OF INSTRUCTION.

ELEMENTARY CHEMISTRY.—The primary forces—Heat, Light, Electricity, Magnetism, etc.; Chemical affinity and laws of chemical combination; Elementary Substances—their history, properties, combinations and uses; Application of Chemistry to the arts and manufactures; Organic Chemistry. In the study of Elementary Chemistry, the facts and principles of the science are illustrated by experiments.

ANALYTICAL CHEMISTRY.—General Analysis; Analysis of Soils; Analysis of Minerals, Use of the Blow-Pipe; Analysis of Manures; Analysis of the Ashes of Plants; Alkalimetry and Acidmetry. In prosecuting Chemical Analysis, the student spends three hours a day in the Laboratory, under the direction and supervision of the Professor in Chemistry, applying with his own hands the tests required to determine the composition and properties of bodies, thus securing a practical knowledge of the methods employed in these investigations.

AGRICULTURAL CHEMISTRY.—Formation and composition of soils; the relations of air and moisture to vegetable growth; connection of heat, light and electricity with growth of plants; Nature and source of food of plants; Chemical changes attending vegetable growth; Chemistry of the various processes of the farm, as plowing, fallowing, draining, etc.; Preparation, preserving and composting of manure; artificial manures; methods of improving soils by chemical means, by mineral manures, by vegetable manures, by animal manures, by indirect methods; rotation of crops; chemical composition of the various crops; chemistry of the dairy. The instruction in Chemistry is imparted both by lectures and text books.

METEOROLOGY.—The instruction in Meteorology is imparted by lectures. Constitution and weight of the Atmosphere; Borometry; Thermometry; the variations of temperature and relations to climate; Atmospheric moisture; Hygrometers; Motions of the Atmosphere; Anemometers; Winds; Trade Winds and Anti-trades; Monsoons; Land and Sea Breezes; Precipitation of Moisture; Dew; Hoar Frost; Fog; Clouds; Rain; Snow; Hail; Theory and Laws of Storms; Electrical Phenomena; Atmospheric Electricity; Thunder Storms; Aurora Borealis.

PRACTICAL AGRICULTURE.—First Year.—Laying out of Farms; Arrangement and planning of farm buildings; Farm Implements; General principles of tillage; Principles of drainage; Laying out and construction of drains; Methods of seeding; Harvesting of crops; Principles of Stock-breeding; Breeds of domestic animals—their characteristics and adaptation to particular purposes.

Fourth Year.—General principles of farm economy; Manures—their management and mode of application; Succession of crops; Preparation of the soil for particular crops; Cultivation of crops; Management of grass lands; Stock husbandry; Care of animals and

principles of feeding; Fattening of animals; Management of sheep. In addition to the above course, instruction is given in the field in the various manual operations of the farm.

Logic and Philosophy.—Very special prominence is given to *Inductive Logic*, embracing, in particular, the methods of securing exactness in our observations of natural phenomena, and of eliminating error from experiments or comparisons of phenomena while endeavouring to ascertain natural laws. Attention is also given to the principles of classification and nomenclature. The books brought prominently to the student's notice are Herschell's Discourse, Mill's Logic, and Whewell's Novum Organon Renovatum; About the same attention is given to *Mental Philosophy*, *Moral Philosophy* and *Political* 

Economy, as is given in other Colleges.

Botany.—A course is first given in Physiological Botany; Systematic Botany is then taken up, the Natural Orders being studied as to their Botanical characteristics; their size and geographical distribution; their relative importance; the Genera and Species having agricultural value; those having commercial or medical value; those having ornamental value; and those which are obnoxious or detrimental, such as weeds or poisonous plants. The orders are illustrated by diagrams, and numerous living and dried specimens. The living specimens are dissected and examined by the student, and their genera and species determined. The indigenous plants, together with those cultivated in the gardens and grounds, afford material for the study of this department of Botany. In the study of Vegetable Physiology, structure is illustrated by means of diagrams. Several excellent microscopes are used in the study of minute structure.

HORTICULTURE.—In the course in Vegetable Physiology, the relations of that science to Horticulture are pointed out. The Sophomore class being employed during the year in the gardens and College grounds, is afforded abundant opportunities for the application of the instruction received in the class-room. It is intended that each student shall have practical experience in every cultural operation. In addition to these methods of instruction, a course of lectures is given on the history, theory and practice of Horticulture.

LANDSCAPE GARDENING.—In this study Kemp and Downing are used as text books. Each student is required to form a plan in detail of some grounds assigned him by the instructor. The several grounds assigned to the students are first examined by them in company with the Professor. Some particular uses, and limit of means are supposed to be

imposed, and the plans then made are subjected to criticism.

Animal Physiology.—In this department particular attention is given to the Anatomy and Physiology of domestic animals. The course is illustrated by anatomical preparations and diagrams, representing the comparative structure of the organs of locomotion, digestion, circulation, respiration and reproduction of each branch of the animal kingdom. Dissections of animals are made, to render the student familiar with the appearance, situation and relation of the organs of the animal system in a state of health, and the changes produced by disease. Opportunities are given for the study of the minute structure of the various tissues by means of the microscope.

Zoology.—Principles of the classification of animals, as founded on their structure and embryonic development. Descriptive Zoology, comprising the systematic arrangement of animals in accordance with their natural affinities, in classes, orders, families, etc.;

habits and geographical distribution of animals.

Entomology.—The course in Entomology is illustrated by a valuable collection of native and exotic insects. Particular attention is given to the study of species injurious to vegetation; and the best methods of checking their ravages are discussed. Students by collecting and preserving specimens of our native species, become familiar with their habits in their several stages of development. The principles of bee-keeping are explained, different hives exhibited, and pains taken to make the student practically familiar with the management of the Apiary.

MATHEMATICS AND CIVIL ENGINEERING—Algebra, Geometry, Plane Trigonometry, Spherical Trigonometry, Analytical Geometry, Surveying, Levelling, Plotting, Mechanics, Strength of Materials, Arches, Framing, Bridge and Road Building. Students have the use of Chain, Compass, and other instruments for practice; and receive instruction in the field as well as in the Lecture Room, each student being required to take charge of field surveys,

and to become practically acquainted with the use of the Level.

Physics.—The applications of Geometry and Trigonometry to the motion of bodies, laws of motion, falling bodies, composition and resolution of motion, centre of gravity, collision of bodies, the mechanical powers, the pendulum, central power, projectiles, machinery, friction, fluids, pneumatics, reflection of light, mirrors, etc.; occupying one half year. The College possesses apparatus for illustration in this department of study.

CHEMICAL PHYSICS.—Weights and measures; Specific gravity; Electricity; Cohesion; Adhesion; Diffusion of liquids and gases; Influence of light on Chemical attraction; Sources, nature and laws of light; Spectrum analysis; Heat; Measurement of heat; Thermometers and Pyrometers; Equilibrium of temperature; Specific and latent heat; Atomic relations of heat; Electricity and Magnetism; Correlation and conservation of forces.

Geology.—A course of daily recitations in Geology during the second half of the

Freshman year is illustrated by maps, diagrams and specimens.

LANGUAGE AND LITERATURE.—Instruction in this department is given by means of text books and lectures. History of English Literature. Rhetoric—Arguments, Conviction, Persuasion, Fallucies in reasoning, Style. Select portions of English Classics receive critical examination in a course of reading prescribed for each class. The Juniors read Milton, and the Seniors Shakspeare.

In English Composition the classes receive regular and systematic instruction in the art of the selection, arrangement and expression of the matter relating to their topics. Each student has an exercise in composition or declamation, every fortnight, throughout

the course, the Juniors and Seniors speaking original pieces.

The members of the Senior class deliver original declamations on the last Wednesday of each month, and the members of the Junior Class on the second Wednesday of each month.

French is taught three-fourths of a year to the Senior Class.

Lectures.—Public Lectures, by members of the Faculty in rotation, are given to the students in a body. These lectures are delivered every Wednesday afternoon not occupied by the public rhetoricals of the Juniors and Seniors. Up to this date the subject matter of these lectures has been as follows:—Pres't Abbot, on Homer, and how to use the Eye; Prof. Miles, on how to construct the farm house, and how to construct farm buildings; Prof. Kedzie, on Chemistry of projectiles and gunnery, and on the Spectroscope; Pro. Prentiss, on motion in plants; Sec. Howard, on permanent pastures; Prof. Fairchild, on the reflex influence of school-keeping; Prof. Cook, on the honey bee; and Instructor Tracy, on how to beautify the house and its surroundings.

LABOUR.—Each student, not exempt for physical disability, is required to labour three hours a day on the farm or in the garden. The number of hours may be increased to four or diminished to two and a half. Some compensation (see means of defraying expenses) is allowed; but the labour is regarded as an essential part of the educational system of the College, and is performed with special reference to illustrating and applying the instructions of the Lecture Room. Students are not employed in those kinds of work only in which they may be most proficient, but, as the work is classified, each is made acquainted with all the operations of furming and gardening. The Sophomore Class work the entire year under the direction of the Professor of Horticulture. The Juniors spend the year under the direction of the Professor of Practical Agriculture. The other classes alternate between the farm and gardens.

#### MEANS OF ILLUSTRATION.

1. A farm of 676 acres, of which about 300 are under cultivation.

2. Botanical gardens of trees, shrubs and herbaceous plants, and a commodious greenhouse.

3. Vegetable gardens, small fruit garden, apple orchard, pear orchard, general lawn

and grounds.

4. Galloway, Ayrshire, Devon and Short Horn Cattle; Essex, Berkshire, Suffolk and Chester White Swine; Southdown, Cotswold, Spanish Merino and Black-faced Highland Sheep.

5. Chemical Laboratory and Apparatus.

6. Philosophical and Mathematical Apparatus.

7. A Museum of Animals and Minerals.

- 8. The Cooley Herbarium—a very valuable collection of plants.
- 9. Museum of Vegetable Products. 10. Library and Reading Room.
- 11. Buildings, Workshops, Tools, &c.

#### AGRICULTURAL DEPARTMENT AT WASHINGTON.

In accordance with your instructions, I visited the United States Department of Agriculture at Washington. Unfortunately, the Commissioner, Hon. Horace Capron, was absent on a Tour in the Southern States at the time of my visit. The Chief Clerk, Mr. McLain, and the Entomologist, Mr. Townend Glover, did all in their power to promote the objects of my visit, and showed me much polite attention. I found that the Department had but recently become established in a spacious and beautiful five-story edifice, newly built for its occupancy, and that the grounds and surroundings were under process of laying-out and being improved. Additional buildings were under construction, especially a most extensive glass conservatory, in which it is intended to test and propagate every

description of new plant, whether useful or ornamental.

The chief business of the Department as at present conducted, appears to be to collect and diffuse useful information in regard to agriculture and horticulture. Correspondence is had with all parts of the country, and investigation kept up of European records of experimental science, the transactions of societies, and official bulletins and publications. The matter thus collected is condensed, arranged, tabulated, and the gist of it embodied in a monthly report. There is not as I had been led to suppose, a net-work of remunerated agencies all over the country, for supplying crop statistics and reports, but the Department depends upon unpaid correspondents who furnish information voluntarily and gratuitously. As might be expected, the work is done irregularly and imperfectly; so that only approximate returns can at any time be given. As with ourselves, the need is felt of some systematic and trust worthy mode of collecting facts, especially during the seeding, growing, and harvest seasons. A yearly volume of great value is published by the Department, which embodies in permanent form, the results of the enquiries and investigations pursued from time to time, and is particularly useful from its furnishing information as to the best methods of cultivation and the newest improvements in the manipulation and management of matters pertaining to the farm and garden. These volumes as thus far issued, are in themselves a most varied, comprehensive, and instructive library of agriculture and horticulture.

The Department has under its supervision a chemical division which is constantly engaged in the examination of minerals, ores, earths, products from various manufactures, special investigations in technical branches of industry, and analyses of field products. A recent work undertaken by this division, has been the chemical analysis of average samples of the cereal crops collected from all parts of the United States and Territories, with a view of determining their relative richness in food elements. A thoroughly furnished laboratory and every appliance of modern art and science, enables the Department to pursue investigations and try experiments which no individual society or institution could successfully prosecute. A mineralogical cabinet has been commenced in connection

with this division, which already contains a large number of choice specimens.

The Entomological division, under the care of Professor Glover, is in a state of great efficiency. I know of no insect collection comparable with that which has been brought together by the labours of the gentleman just named, who unites with high competency as an Entomologist, rare skill as an artist, and can not only set up the actual insect specimen in the very best manner, but produce life-like illustrations of it, doing with his own hand the work of both draughtsman and engraver. The ravages of insects have of late years entailed immense losses upon agriculturists and horticulturists, and it is imposisible to over-estimate the importance of the service rendered by this division of the Department to the interest of the farm and garden. Professor Glover carries on an extensive scientific correspondence with Entomologists in various parts of the world, and it was with no small pride and pleasure that I learned from him, that his most valued and useful correspondent was a Canadian amateur, Mr. William Saunders of London, Ontario. A

museum of natural history, native and foreign vegetable and flower specimens, and seeds;

is an adjunct of this division.

The distribution of seeds and plants is another method by which the Department seeks to promote the farming interests under its supervision. During the year 1868, no fewer than 592,398 packages and papers were distributed, including 32,127 sacks of winter wheat specially imported to furnish the country with a change of seed. This extensive distribution was made through the following channels. Members of Congress, 223,672; Agricultural and Horticultural Societies, 98,861; Statistical correspondents, 86,391; individuals on applications, 183,474; total, 592,398.

The investigation of diseases among farm stock has been by no means the least important service rendered by the Department to American agriculture. On the breaking out of the Texan fever among cattle, the Commissioner promptly engaged the services of Professor John Gamgee of the Albert Veterinary College of London, England, to investigate its character, causes, and means of prevention and cure. The speedy and effectual check put upon that virulent malady, is largely to be attributed to the energetic and

thorough manner in which it was dealt with by the Department.

Lastly, I may mention the experimental garden, under the care of Mr. Saunders, which although only five acres in extent, is marvellously comprehensive and varied in its contents. Here new vegetables, flowers, ornamental plants, shrubs, and fruits, are carefully grown and thoroughly tested, under the eye of one of the most intelligent, skilful, and experienced horticulturists of the age. Among many other new aspirants to favour in the world of horticulture, I was pleased to find here specimen plants of the new hybrid grapes and raspberries orginated by Mr. Charles Arnold of Paris, Ontario, and to hear from Mr. Saunders very flattering and hopeful opinions in regard to them.

The Department finds itself cramped in every direction by want of means to render itself widely and thoroughly useful. In the United States, as here, the farming interest is not sufficiently represented in the halls of legislation to secure that attention to the great foundation source of a nation's strength and wealth, which its intrinsic importance demands and deserves. There is reason to hope, however, that this evil, is, all the world

over, in process of cure.

#### SUGGESTIONS FOR ESTABLISHING AN AGRICULTURAL COLLEGE FOR ONTARIO.

In fulfilling that part of my commission which enjoins it upon me to "submit an economical and practical scheme for the establishment of an Agricultural College in this Province,,' I feel no small degree of hesitation and diffidence, in view of the magnitude of such an undertaking, and the difficulties which beset it. Beside personally visiting and inspecting several of these institutions, I have, since I had the honour to receive a commission from you to report on this subject, made it my business to read up in regard to it, and attentively consider the various discussions, plans, and experiments which may be said to form the literature and history of agricultural education. I find remarkable unanimity of opinion among leading agriculturists of the world, as to the importance of special training for the business of farming, and the duty of the State to provide the means of such training for its young men. I find also a very decided preponderance of opinion that such training to be thoroughly efficient, must be provided by the establishment of Agricultural Colleges distinct from Colleges and Universities of a general literary, and scientific charac-I do not know of an instance in which a Chair of Agriculture connected with a general institution of learning has been successful in drawing around it any large body of students, or exerting any appreciable influence upon the agricultural interests of a community or country. As with the Professorship of Agriculture in our own Provincial University, though filled by one of the ablest agriculturists of the age, the one word failure gives the history of all such arrangements. Agriculture is overshadowed by other studies; farming elbowed out by other professions; agricultural students feel themselves of an inferior grade to those who are studying for the legal, medical, or clerical professions; and operated on by a variety of unfavourable influences, the agricultural class in a general College or University, is invariably a dwindling and unsuccessful affair. It would seem as a matter of theory, that a school of agriculture affiliated with our noble Provincial University and profiting by its existing facilities for pursuing such studies as though pertain-375

ing to a general literary course, are also cognate and necessary to an agricultural course, ought to prosper and be widely useful, but stubborn facts refuse to sustain the theory, and prove beyond successful dispute that to teach agriculture effectively, there must be a separate College for the purpose, with a model or an experimental farm attached, where the students can be taught practice as well as principles, and where without sacrifice of respectability or loss of caste, they can doff the gown and trencher, put on the smock-frock and handle the dung-fork or the hoe, in the actual manipulations of farm-work. This is just as needful in a process of agricultural training, as it is that medical students should have hospital practice, or that students of law and divinity should have exercise in elocution and public speaking. I would therefore very strongly urge, that if any thing be attempted in the way of an Agricultural College for Ontario, as I fervently trust there will, no design be entertained to connect it in any way with the University of Toronto or any other existing institution of learning, or indeed to locate it in Toronto or any other leading city of the Province, but that choice be made of some country town of sufficient size to furnish society, market, and business facilities; that the place chosen be the centre of some such wealthy agricultural region as there is no lack of in our magnificent Province; and that there, where it can exert an influence peculiarly its own, would the surrounding public sentiment to respect for the dignity of labour, and be strong in the affections of an advanced agricultural population, it pursue that beneficent and useful career, which I feel sure, were it established wisely and well under such circumstances, would be predestinated for it. An "economical" scheme cannot, I fear, be outlined for such an institution, if by "economical" I am to understand that its cost is to be small. It would no doubt be practicable to start a so-called agricultural school at very trifling outlay, but no great success could be augured for a cheap and easy affair. What is really valuable usually costs considerable, either in money or labour, or both. To do anything in the line of an Agricultural College worthy our noble Province, would require a grant of at least Fifty Thousand Dollars for the purchase of a farm and the erection of buildings, and an appropriation of Ten That this outlay wisely expended would be one of the best Thousand Dollars per annum. investments Ontario could make, I do not for a moment doubt; neither do I doubt, that averse as farmers in general are, to increased taxation, there would be any difficulty in obtaining a very decided vote for such an outlay from them, were the nature and advantages of the undertaking thoroughly set before them.

In regard to a "practical" scheme, I would say, that, without servile copying, an approximation to the Michigan Agricultural College, would, I believe, best meet the wants of this Province, and I would urge in the strongest manner, that the wise example of the Legislature of that State, in making manual labour an organic law of the College, be imitated by our own Legislature, in any measure that may be passed for the establishment of

such an institution for the benefit of our own country,

Pehaps it may be well for me to mention another scheme, which though in my opinion, of inferior merit to the one just sketched, is nevertheless "economical" and "practical," and may possibly secure more public favour than that already stated. It is the selection of a locality for an Agricultural College at some point of ready access by water or projected railway communication in the Free Grant region of unsettled public lands; to appropriate to the purposes of such College, a grant of say, Twenty Thousand Acres of land; appoint a board of Trustees for the College, who shall cause a town site to be surveyed, and from the sale of Town and adjacent farm lots and such other aid as may be supplied by Legislative grant, erect buildings, clear and stock the model or experimental farm, and so set going an institution of the kind contemplated. Dilettante agriculturists will doubtless ridicule such a plan, but home-bred farmers who have been through the rough and tumble of bush life will not fail to see many advantages about it. Not a few experienced old settlers who have sons they would like to educate for the farm, would help to colonize a College town; the prospective advantages of such a location would put value on the wild land and make it command a good price from the outset; a community like-minded and with common sympathies as to agricultural education, would cluster about the spot; it would soon have an influential public sentiment of its own and be a mighty educator, while it would give a great impetus to the settlement of the Free Grant region of country, and so repay to the Province far more than its cost.

I cannot do justice to my own convictions in regard to Agricultural Education without

stating that it is not simply a College our Province wants, but more prominence given to agriculture in our educational arrangements generally, especially in connection with our Common School system. I have a profound impression that to do this thing thoroughly, we must have agricultural text books and training in all our institutions of learning from the very humblest upwards. Important agricultural principles can be taught by object lessons and otherwise, to children that are yet unable to read, and if we are ever to have an agricultural population thoroughly taught and trained for farm life, we must begin with our young people at the earliest and most plastic period of their history. I am glad to learn that our able Superintendent of Education has a text-book of first lessons in agriculture in preparation for use in our Common Schools, and though I have had no consultation or communication with that respected official in relation to the matter, I take pleasure in expressing the very highest appreciation of such an endeavour to get the elementary principles of agriculture inculcated upon our youth. It is manifest, however, that if agriculture is to be taught well in our schools generally, the teachers must be qualified to do it, and I would, therefore, urge the establishment of an agricultural lectureship and classes in the Normal School, and the devotion of a considerable share of time and attention to this important subject.

With even more of hesitation and diffidence than I feel in propounding an Agricultural College scheme, do I approach the final duty assigned me in the commission entrusted to me; viz.: to "furnish this Department with suggestions whereby its serviceableness to the Agriculture of this Province may be enhanced." I entertain the conviction that some sweeping changes are needed in the management of our agricultural affairs, but they could hardly be accomplished without considerably widening the powers of the Commissioner, and perhaps it would be premature, if not presumptuous on my part, to outline in full such a Government scheme as in my view would be required thoroughly to meet the necessities of the case. I do not, however, hesitate to express the opinion that the functions of the Department ought without delay to be so far enlarged as to take in the active prosecution of those methods of promoting agriculture described in an earlier part of this report as characteristic of the United States Department of Agriculture at Washington, which certainly does none too much for the farming interests of the adjacent Republic. I would lay especial stress upon the recommendation that something be done to render Entomology of practical service in this Province, after the example set us in this respect by our American neighbours.

It is almost needless to repeat here what has been already so explicitly urged in the foregoing Report, with regard to the desirableness and importance of establishing a Provincial Agricultural College, and making it part of a graded system of public instruction in the various branches of knowledge essential to scientific farm management. I sincerely hope that some well-considered scheme of this sort may speedily commend itself

to the Government and Legislature of Ontario.

Finally, among other methods of rendering service to the agricultural interest, I think your Department would do well to employ an able lecturer to visit all parts of the country, address meetings of farmers, promote the organization of Farmers' Clubs, rouse attention to the necessity of improved methods of agriculture, and urge the importance of a higher standard of mental culture, and a general uplifting of that noblest and yet most despised of human pursuits, LIFE ON A FARM. I do not at this time enter into argument in support of the suggestions I venture to throw out; to do so would unreasonably protract this report; but I hold myself in readiness to supplement this report by way of appendix, evidence, quotation of authorities, and array of facts, as may hereafter be found needful or expedient. I regret that this commission did not fall into abler hands, but "if I have done slenderly or meanly it is that which I could attain unto"; if I have appeared on any point presumptuous or dogmatic I beg that it may be attributed to warmth of interest in a favourite pursuit; and respectfully submitting all to your official consideration and judgment.

I am,

Your most obedient servant,

WM. F. CLARKE. ·

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

### APPENDIX (F).

REPORT OF ANDREW SMITH, V.S., ON THE CATTLE DISEASE.

BUREAU OF AGRICULTURE AND ARTS, ONTARIO, TORONTO, August 23rd, 1870.

SIR,—My attention having been called to reports in the public press of the appearance of what is represented as a new and serious type of disease, supposed to be contagious among farm animals in different parts of the Province. I beg to request that you will investigate such cases as you can readily reach, with a view of ascertaining the cause or causes of the malady, and make such suggestions for arresting its progress as may appear in your judgment to be requisite and practicable.

Will you, therefore, have the goodness to take such measures for the attainment of this object, as the case may seem to require, and to report the result of your investigations

to my Department as early as possible.

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

JOHN CARLING.

Commissioner.

Principal Smith, Ontario Veterinary College.

#### REPORT.

VETERINARY COLLEGE,
TEMPERANCE STREET,
TORONTO, SEPT. 3rd., 1870.

Hon. John Carling, Commissiomer of Agriculture.

SIR,—In compliance with your request I have during the past ten days, investigated a great many cases of what is called the "Cattle Disease," prevailing to a considerable extent throughout the Province. I have examined cases in the County of York, and in the neighbourhood of St. Mary's, and in London, and in every instance that came undermy notice, the exciting cause of the irritation I believe is produced by the attack of flies, that at this season torment both cattle and horses, and during the present season they have appeared in unprecedented numbers, and from their persistent attacks have inflicted an irritation and suffering more than common.

The symptoms are generally confined to the limbs, and the fore legs are usually first attacked, behind the fetlock and knee, and from the animal continually stamping and kicking to relieve itself of these pests, the irritation is greatly increased, and frequently acute inflammatory action takes place, extending upwards along the absorbent vessels, and terminating in the formation of abscesses, causing pain and difficulty in progression, and at

the same time producing considerable constitutional derangement which, occasionally, may terminate fatally. These severe cases are usually a result of carelessness and neglect, or

from the application of irritant and poisonous dressings injudiciously applied.

I am glad to be able to report that the great majority of cases, although very annoying to the animal, are not attended with any serious consequences, and the symptoms are so mild in their nature that all that is noticed is merely a slight excoriation of the skin of the parts already mentioned. The flies are found to be most numerous in low, wet, pastures, and in districts where there has been an unusual fall of rain. There are many simple remedies and readily procured, that will tend to allay the irritation, and also prevent the bite of the fly. As to the curative treatment of cases where there is much inflamation, the parts affected should be carefully fomented with warm water, then dry thoroughly, and dress with carbolic acid lotion, in the proportions of one part of carbolic acid to sixteen parts of water, or an application of equal parts of tincture of benzoin, oil of tar and linseed oil, to be daily applied. The affected animals should be kept in clean and somewhat darkened stables during the day. In mild cases dressing the parts daily with the last mentioned application will suffice, (without resorting to fomentations) or washing the parts with carbolic acid soap, or the use of impure carbolic acid diluted with six parts of water to one of acid. The fly that has proved such a source of annoyance is somewhat similar in appearance to the common house fly, and is called the Stomorys Calcitrans, described by Harris in his work on "Insects," as follows: - "The flies that abound in stables "in August and September, and sometimes enter houses on the approach of rain, might "be mistaken for house flies were it not for the severity of their bites, which are often "felt through our clothing, and are generally followed by blood. Upon examination they "will be found to differ essentially from house flies in their proboscis, which is very long "and slender, and projects horozontally beyond the head. The bristles on their antennæ "are feathered above. Cattle suffer severely from the piercing bite of these flies, and "horses are sometimes so much tormented by them as to become entirely ungovernable in "harness. This fly lays its eggs in dung, where its young are hatched, and pass through their transformations." In my investigations I have been materially assisted by Mr. Saunders, the well known Entomologist of London.

In conclusion I have to state that I feel confident there is no great cause for alarm, and that the cold weather of Autumn will soon put a stop to the attacks of this pesti-

ferous fly.

I am, sir, Your obedient servant,

ANDREW SMITH.

VETERINARY COLLEGE, TORONTO, January 13, 1871.

HON. JOHN CARLING, Commissioner of Agriculture.

SIR,—Agreeably to your request, I have much pleasure in reporting, that as far as I have an opportunity of judging, the live stock of this country appears exceedingly healthy, and I have no hesitation in stating that the cattle of this Province are entirely free from any epizootic disease of a contagious nature.

As regards the "foot and mouth disease" (epizootic aptha), it is altogether unknown in Canada, and until lately I have not heard of its existence in the United States.

As you are aware, in the month of August last there was some little excitement regarding the appearance of a disease amongst cattle in various parts of Ontario. The alarm which was then created was due to the attack of flies upon the cattle, which for sometime previous had appeared in unprecedented numbers and proved a great source of annoyance both to cattle and to horses.

The affection was not of a contagious nature, and entirely disappeared on the ap-

proach of the cooler weather of autumn.

I am, sir, Your obedient servant, ANDREW SMITH ..

## APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

## APPENDIX (G).

ANALYSIS OF CROP RETURNS FOR THE YEAR 1870.

#### CROP RETURNS.

(Circular to Secretaries of Electorial Division Agricultural Societies.)

BUREAU OF AGRICULTURE AND ARTS, ONTARIO.

Toronto, August 25th, 1870.

SIR,—As the Harvest is now drawing to a conclusion throughout the Province, and the meteorological conditions on which crops materially depend for their growth and maturity, having been widely different within areas comparatively limited during the late growing season, I am desirous of procuring as reliable information as possible on the character of the present Harvest in each Electorial Division of Ontario, with a view of laying before the public, at the earliest date practicable, a condensed approximate statement of the results of the skill and labours of our Agriculturalists.

I have, therefore, again to request that you will cause to be prepared and returned to this Department by the 22nd of October, at the latest, as full and correct answers as practicable to the questions appended. And in order to render this duty as light as possible, I mail you a sufficient number of copies of this circular, to enable you to send one to each Township Society Secretary, or to some reliable person in each township not having a society organized, with a request, endorsed on the back, that returns may be made to you by the 12th October. You will, on the receipt of such statements, have the goodness to make your returns, based thereon, of as correct averages as may be obtainable under the circumstances.

I require only one Return from each Electorial Division, carefully collated from the returns made by the Township Societies, and from information that may be obtained from other sources. I would suggest that you keep a duplicate of your Return for future reference.

Yours Respectfully,

John Carling, Commissioner.

#### SERIES OF QUESTIONS CONTAINED IN THE FOREGOING CIRCULAR

Fall Wheat—Average produce per acre; and as compared with 1869.

Quality?

Spring Wheat—Average produce per acre; and as compared with 1869. Quality ?

Oats—Average produce per acre; and as compared with 1869.

Quality?

Rye—Average produce per acre; and as compared with 1869. Quality?

Barley—Average produce per acre; and as compared with 1869. Quality?

Peas—Average produce per acre; and as compared with 1869. Quality?

Beans—Average produce per acre; and as compared with 1869. Quality?

Hay—Average produce per acre; and as compared with 1869. Quality ?

Corn—What are the indications for the growing crop?

Potatoes—What are the indications for the growing crop?

Turnips—What are the indications for the growing crop? Carrots—What are the indications for the growing crop?

Pursnips—What are the indications for the growing crop?

Mangel Wurzel—What are the indications for the growing crop?

#### Please furnish any information available as to—

1st. Varieties of Fall Wheat most prolific and hardy?

2nd. Varieties of Spring Wheat most prolific and hardy?

3rd. Extent of damage by the midge, rust, &c., if any? 4th. Crops that may have been more or less cultivated this season than the averageof late years.

5th. Any remarks valuable as to the modes of cultivation, manuring, sowing, &c.

6th. What has been the character of the season relative to the different kinds of fruit?

#### ANALYSIS OF CROP RETURNS.

#### ADDINGTON.

Fall Wheat.—18 bushels per acre; about the same as last year; quality good. Spring Wheat.—17 bushels per acre; less than last year; quality good.

Oats.—40 bushels per acre; rather better than last year; quality pretty good. Rye.—10 bushels per acre; much inferior to last year; and quality poor.

Barley. -30 bushels per acre; yield much the same as last year; quality good.

Peas.—17 bushels per acre; rather better yield than last year; quality fair.

Beans.—But few cultivated.

Hay.—1 ton per acre; considerably less than last year; quality good.

Corn.—Early and good; much better than last year.

Potatoes.—Excellent; but turnips rather poor; mangel wurzel, a fair crop; Parsnips and carrots but little cultivated.

"Soule's" Winter and "Fife" Spring Wheats, thought to be the hardiest and best. Perhaps a fourth of the wheat crop was affected by the Midge. Season, remarkably hot and dry.

Brant, South.

Fall Wheat.—10 bushels; 50 per cent less; quality good. Spring Wheat.—5 bushels; 50 per cent less; quality poor. Outs.—20 bushels; 20 per cent less; quality inferior.

Ryc.—12 bushels; 20 per cent less; quality indifferent.

Barley.—12 bushels; one third less; quality inferior.

Peas.—10 bushels; yield less; quality about the same. Beans.—10 bushels; quality good, but few cultivated.

Hay.—1 ton; a third less; quality middling.

Corn. - 60 bushels; quality excellent.

Potatocs, and other root crops a fair average; but not generally so good as last year; Fruit, on the whole, a good yield.

#### BOTHWELL.

Fall Wheat.—15 to 20 bushels; only two thirds, quality tolerably good.

Spring Wheat.—15 to 20 bushels in Township of Sombra, but in most parts of the County nearly a failure.

Oats.—A very light crop, not more than half last year and quality inferior.

Rye.—None of any consequence raised in the county.

Barley.—Yield very variable, from 10 to 30 bushels; much inferior to last year.

Peas—Nearly a failure, and quality not good; the same of Beans.

Hay.— $1\frac{1}{2}$  to 2 tons; crop not so good, nor so well saved.

Corn.—Variable; in some parts pretty good, in others all but a failure.

Potatoes.—Yield in some places rather heavy, in others, but indifferent; Turnips much below an average, and the same will apply to other root crops, with trifling exceptions.

"Treadwell," "Midgeproof" and "Fife" Wheats are generally regarded as prolific and hardy; Apples, and most other kinds of fruit, a heavy yield of; quality mostly good.

Very little midge or rust. "The principal cause of our crops being so much below an average, and in some places almost a total failure, was the incessant rains, particularly of July, flooding the lands so that nothing could effectually be done in hoeing or weeding at the proper time."

BRUCE, NORTH.

Fall Wheat.—"Difficult to give an average, as much was more or less a failure. A few places escaped winter killing and yielded well; quality good.

Spring Wheat.—20 bushels the utmost average; early sown will yield well, but the

later will prove indifferent; quality generally good.

Oats.—45 to 50 bushels, superior to last year and of good quality. Barley.—25 to 30 bushels, of first quality; equal to last year. Peas.—25 to 30 bushels; fully equal and quality good.

Beans.—Only cultivated in gardens, and yield abundantly.

Hay.— $1\frac{1}{2}$  tons; fully equal; in some places 2 to 3 tons per acre, from land in good condition and free from stumps. Generally well saved; some, however, much injured.

Corn.—What little cultivated will yield abundantly.

Potatoes.—Yield large, but on low wet land rot has badly manifested itself.

Turnips and other root crops promise well; their culture is gradually extending,

and is profitable.
"Treadwell" and "Fife" wheat generally approved. The midge caused some injury, but much less than in former years. Mowing and reaping machines are getting into general use as the land becomes cleared.

Spring frosts injured some fruit crops considerably; apples were of excellent quality,

and the smaller fruits very abundant.

#### BRUCE, SOUTH.

Fall Wheat.—15 bushels; rather better; quality good.

Spring Wheat.—13 bushels; about equal; quality good.

Oats.—35 bushels; equal; quality good.

Barley.—25 bushels; about the same; of middling quality.

Peas.—25 bushels; rather better; quality good. Hay.—14 tons; much the same; well saved.

Corn and Beans.—But very little cultivated.

Potatoes.—Abundant yield, but much rotted on wet soils. Turnips.—Yield and quality good; other roots middling.

"Diehl" and "Treadwell" are the favourite winter wheats, and "Fife" for spring. Midge and blight affected a few places, but, on the whole, not seriously.

The culture of coarse grains is on the increase. Seed drills, cultivators, reapers and mowers are becoming pretty general; and underdmining in some few instances.

The season for Fruit was, on the whole, unfavorable.

#### CARDWELL.

Fall Wheat.—15 bushels; quality very good; yield much less.

Spring Wheat.—12 bushels; quality an average, but crop much lighter.

Oats.—30 bushels; a third less, and quality inferior.

Rye.—Not grown.

Barley.—25 bushels; a less yield, but colour good.

Peas. - 20 bushels; a third less; quality good; Beans, not grown as a field crop.

Hay.—About the same as last year.

Corn.-Not grown.

Potatoes.—Abundant yield, with appearance of rot in many places.

Turnips and other root crops promise an average.

Wheat.—"Treadwell" the hardiest; "Diehl" the most prolific, when not winter killed; "Mammoth" for dry land and "Glasgow" for swampy. Midge damaged but little, except late-sown spring varieties.

Fruit.—Good on the whole, both as to quantity and quality; very early ripened.

#### CORNWALL.

Fall Wheat.—25 bushels; quality good.

Spring Wheat.—25 bushels; not quite as heavy a yield; quality good.

Oats. -25 bushels; good quality, but yield less. Rye. -But little sown.

Barley.—25 bushels; less yield, but quality good.

Peas.—25 bushels; crop not so heavy, but grain good. Beans.—Not cultivated as a field crop.

Hay.—Very light, on account of the drought; the quality good; about one-third of

last year.

Corn.—Very good; as also Potatoes. Other root crops but little cultivated.

"Midge-proof" and "Black Sea" the most approved kinds of wheat. The midge, .&c., may have injured the wheat crop one-third.

Apples greatly affected by the worms; Plums and Grapes very good.

#### DURHAM, EAST.

Fall Wheat.—15 bushels; 40 per cent. less; inferior quality.

Spring Wheat.—9 bushels; 50 per cent. less; quality inferior.

Oats.—30 bushels; 40 per cent. less; and of indifferent quality.

. Rye.—A light crop, but good grain; not much cultivated.

Barley.—20 bushels; 30 per cent. less; quality middling.

Peas.—20 bushels; quality generally good, but in some places affected by the maggot.

Hay.—1 ton; 30 per cent. less; cured well. Corn.—Very good.

Potatoes.—An average crop, and of good quality.

Turnips, Carrots, Mangels, &c.—Indifferent.
"Soules" and "Deihl" the most approved Winter Wheats; and "Fife" and "Club" for Spring. Fresh varieties much wanted. But little damage by midge or rust.

Barley and Turnips continue to extend. Drainage and good cultivation this dry season have produced very beneficial results. All Fruits ripened remarkably early, in consequence of the drought. Apples, Grapes, and small fruits good; Pears and Plums indifferent.

#### DURHAM, WEST.

Full Wheat.—10 bushels; one half last year; much winter killed; quality ordinary. Spring Wheat.—9 bushels; one half; quality good.

Oats.—35 bushels; about the same; grain very inferior.

Cats.—35 bushels; about the same; grain very interpretable Rye.—12 bushels; rather less; quality good.

Barley.—20 bushels; two-thirds; quality fair.

Peas.—About the same as last year; quality good.

Hay.—11 tons; two-thirds; quality good.

Corn.—Highly promising; but not extensively cultivated. Potatoes, Turnips and other root crops generally good.

"Soule's" Winter Wheat is the most extensively cultivated, but the "Red Chaff" is considered hardier. "Fife" or "Scotch" the most approved spring variety. But little damage done by midge or rust. Barley cultivation increasing. Fruit.—Generally good.

#### DUNDAS.

#### (Township of Winchester.)

Fall IV heat.—25 bushels; sample better than last year.

Spring Wheat.—19 bushels; better quality.

Oats.—25 bushels; grain bright, but not heavy.

Barley.—25 bushels; quality very fine. Peas.—20 bushels; quality fair.

Hay.—1 ton; about one half, but better quality.

Corn. -60 bushels; extra good.

Potatoes.—225 bushels; generally sound. Turnips and other root crops but slightly cultivated.

"Midge Proof" and "Black Sea" the most common kinds of wheat sown. Very little damage either by midge or rust. Greater breadth of Wheat than for the past eight years. To manure and plough in the Fall, and also to plough in the Spring, is an approved preparation. Some good Apples are produced; but not considered a Fruit section.

#### ELGIN, EAST.

Fall Wheat.—25 bushels; yield less, and quality about the same as last year.

Spring Wheat.—Seven per cent. better; but little sown.

Oats.—Fifteen per cent. less; and grain lighter. No Rye cultivated.

Barley.—Ten per cent. less; darker and lighter grain.

Peas.—Fifty per cent. less; quality pretty good. No Beans cultivated as a field crop.

Hay.—Pretty good; but much of it injured by wet. Corn.—15 per cent. better.

Potatoes.—Heavy yield; but less cultivated. Other roots generally, pretty fair.

Wheat but little injured by midge or rust. "Deihl," "Mediterranean," and "Fife," the most prolific and hardy sorts. Apples and Grapes.—Abundant; but Pears, Plums and Peaches scarce.

#### Essex.

Fall Wheat.—16; bushels; quality good; 20 per cent less.

Spring Wheat.—10 bushels; quality very good; considerably less.

Outs.—40 bushels; quality good; much the same as last year. Rye.—But little cultivated.

Barley.—20 bushels; 10 per cent. less; quality somewhat injured by wet in harresting.

Peas.—18 bushels; less yield by 10 per cent.; quality good. Beans.—But little cultivated; quality good.

Hay.—11 tons; very much less than last year; saved in pretty good condition.

Corn.—Extremely good; probably double the yield of 1869.

Potatoes-Yield very good, and the same will apply, with few exceptions, to most

other kinds of roots.

"Deihl," "Treadwell," "Mediterranean," and "Fife," are the most hardy and prolific Wheats. No Midge to any extent. Sorghum and Broom Corn more largely cultivated.

Most kinds of fruit were somewhat injuriously affected by the extremely hot and dry weather in the early part of the season.

#### FRONTENAC.

Fall Wheat.—12 bushels; quality middling; yield only half last year.

Spring Wheat.—10 bushels; only half, and quality indifferent.

Outs.—24 bushels; a third less, and sample poor. Rye.—10 bushels; about half, and quality indifferent.

Barley.—16 bushels; about half, but of good quality.

Peas.—25 bushels; sample good, and yield about an average.

Beans.—none sown.

Hay.— $\frac{3}{4}$  ton; about half a crop; well saved. Corn.—Good.

Potatoes, and other roots, in most places, an average.

"Soules," "Fife," and "Black Sea," the most approved Wheat. Damage by Midge and rust considerable, and the extreme drought has been generally very unfavourable; fruit even having suffered therefrom.

#### GLENGARRY.

Fall Wheat.—An average crop; not much sown; quality very good.

Spring Wheat.—An average crop; good quality, but inferior yield to last year.

Oats.—A light crop, and quality fair. Rye.—Not grown.

Barley.—An average, and of good quality.

Peas.—Crop and quality good. Much better than last year. Beans.—confined to gardens.

Hay.—Light; a fourth less, but quality excellent.

Corn.—A great crop; double last year.

Potatoes.—A very heavy crop; other roots middling; not much cultivated.

"Treadwell" and "Odessa," the most approved kinds of Wheat. Midge and rust have been disappearing for the last few years. The season has been rather too dry.

"It is proved by experience that thorough draining and early sowing with barn-yard

manure turn out best in this section of country, particularly for Wheat."

#### GRENVILLE, SOUTH.

Fall Wheat.—15 bushels; quality good. Spring Wheat-15 bushels; quality good.

Oats.—25 bushels; light and inferior.

Rye.—20 bushels; quality good. Barley.—25 bushels; quality good.

Peas.—20 bushels; good. Beans.—A fair crop.

Hay. -3 ton; good quality. Corn. - Good. The same of Potatoes and other roots.

#### GREY, SOUTH.

Fall Wheat.—25 bushels; splendid quality; much better yield; but comparatively little cultivated.

Spring Wheat.—15 bushels; quality very fine.

Oats.—40 bushels; rather better; and good quality. Ryc.—None cultivated.

Barley.—20 bushels; about the same; quality good.

Peas.—40 bushels; very much better; and quality good. Beans.—Only in gardens. Hay.—1 ton; inferior yield; but well saved.

385

Corn.—Promising; but little cultivated, on account of frosts.

Potatoes.—Heavy crop; but diseased in wet soils. Other root crops, generally good. "Treadwell" and "Glasgow" Wheat best suited; Early Spring Wheat was greatly damaged by midge. Turnip culture gradually increasing.

Apples.—Good; but Currants, &c., nearly destroyed by the green caterpillar.

#### HALDIMAND.

Fall Wheat.--20 bushels; one-third less; quality pretty good.

Spring Wheat.—12 bushels; considerably less; and quality indifferent.

Oats.—22 bushels; one-third less; and of sound quality. Rye—Very little raised.

Barley.—24 bushels; yield considerably less; and quality rather inferior. Peas.—15 bushels; about half; quality good. Beans.—But little cultivated.

Hay.— $1\frac{1}{4}$  ton; a fourth less; and pretty well saved.

Corn.—Never better; 100 bushels of ears per acre in some places.

Potatoes and other root crops, a large yield.

"Soule's," most prolific Wheat; "Treadwell" and "Flint" the most hardy. Spring varieties :-- "Fife," "Golden Drop" and "Club."

But little injury from midge, rust, on late sown injured 10 per cent.

Ground properly summer fallowed and sown early, top dressed with well rotted barn yard manure, will almost be certain to produce a good crop.

Apples.—Were never better. Pears, Cherries and Peaches.—Not extensively raised.

#### HALTON.

Fall Wheat.—12 bushels; only half that of last year; quality good.

Spring Wheat.—10 bushels; a third less; good quality.

Oats.—30 bushels; a third less; sample light. Rye.—But little cultivated. Barley.—20 bushels; very much below last year; and quality rather inferior

Peas.—20 bushels; much injured by the maggot.

Hay.—Average under a ton; considerably less; but well saved. Corn.—But little cultivated.

Potatoes.—Yield good; but probably more than half destroyed by disease. Turnips. three quarters of an average. Mangels.—Quite an average. Carrols and Parsnips.—Good,

but not extensively grown.

"Deihl," "Treadwell" and "Rio Grande" among the most hardy and prolific Wheat. "Deihl" and "Soule's" and some Spring Wheat, damaged by midge. Late Oats by rust. Hops.—Yield inferior; but quality better than last season; the culture is diminishing.

Fruit.—Generally pretty good; but Apples much injured by the maggot.

#### Hastings, North.

Fall Wheat.—15 bushels; about the same; quality good.

Spring Wheat.—12 bushels; less; very good quality. Oats.—25 bushels; rather more; quality an average.

Rye.—12 bushels; much less; winter killed.

Barley.—20 bushels; rather better, and quality excellent.

Peas.—14 bushels; much less; average quality.

Beans.—22 bushels; better; quality good.

Hay.—1 ton; much less, but well saved. Corn,—Good.

Potatoes.—Very good, and most other root crops quite an average. Not much Winter Wheat cultivated. Soules preferred, for Spring China, Club and Fife. Midge and rust not worth naming. Culture of Barley extending. Fruit, very good in general.

#### HASTINGS, EAST.

Full Wheat.—18 bushels; of good quality. Spring Wheat.—12 bushels; less, but quality good.

Oats.—25 bushels; less, and grain light.

Rye.—10 bushels; quality inferior, and not so much cultivated.

Barley.—19 bushels; less, and grain light. Peas.—16 bushels; less, but of good quality. Beans.—25 bushels; quality good, but yield less.

Hay.—3 ton; not half that of last year; quality good. Corn.—Excellent. Potatoes.—A large yield, but other root crops indifferent. Dairying is fast increasing, and is far more profitable than grain raising. Fall ploughing and early sowing much recommended. Fruit.—Good.

#### HASTINGS, WEST

Fall Wheat.—8 bushels; one-fifth less than last year; quality good.

Spring Wheat.—8 bushels; a third less; good quality.

Oats.—20 bushels; a fifth less; sample good.

Rye.—7 bushels; five-twelfths less, and quality poor.

Barley.—15 bushels; one-fourth less; sample somewhat discoloured.

Peas.—10 bushels; quality good; equal.

Beans. - 25 bushels; three-eighths less; quality poor, on account of drought.

Hay— $\frac{1}{2}$  ton; one-half less; well saved. Corn.—Extra fine.

Polutoes.—A good crop, but other roots indifferent.
"Soules" and "Fife," the most reliable Wheats. Of Corn and Potatoes, larger breadth cultivated. Top-dressing is found, in practice, to be very beneficial. Fruit.— On account of drought, not equal to last year.

#### Huron, South.

Fall Wheat.—10 bushels; a third less; quality fair; considerable quantity winter killed and ploughed up.

Spring Wheat.—8 bushels; about half less; medium quality.

Oats.—32 bushels; rather less; quality good. Rye.—But little cultivated.

Barley.—23 bushels; a fourth less; quality fair. Peas.—20 bushels; rather less; quality middling.

Hay.—14 tons; less than last year; and not of first quality. Corn.—Very good. Potatoes.—Large crop; but greatly rotted. Turnips.—Middling; but Carrots and

Mungels good.

Of Wheat, "Diehl" most prolific; "Treadwell" the most hardy; few others sown. "Fife" not so hardy as formerly; "Rio Grande," stem soft and apt to lodge. Damage by midge small, but very great by rust and blight. Less breadth of wheat sown, but that of Spring grain and green crops increased. The use of the seed drill increasing.

Fruit.—Generally a good average crop; but the quality injured, it is supposed, by

excessive moisture.

#### KENT.

Fall Wheat.—20 bushels; quality good; but some damaged by rains in harvesting. Spring Wheat.—But very little cultivated.

Oats.—25 bushels; grain light.

Barley.—20 bushels; much damaged by wet.

Peas.—8 bushels; quality indifferent. Beans.—15 bushels; quality good. Hay.—1 ton; medium quality.

Corn.—Very good. Potatoes, Turnips, &c.—Promise indifferently.
"Treadwell" and "Diehl" the Winter Wheats most raised; "Fife" for Spring. No midge or rust worth notice.

Fruit—Generally abundant; ripened much earlier than usual, particularly grapes

and Peaches.

#### LAMBTON

Fall Wheat.—16 bushels; less average 10 to 20 per cent. than last year; quality fair.

Spring Wheat.—7 bushels; half less; quality quite inferior.

Oats.—35 bushels; less 20 per cent.; grain inferior.

Barley.—20 bushels; 30 per cent. less; grain plump, but discoloured.

Peas.—10 bushels; about half last year; quality rather poor.

Beans.—But little cultivated; but grow very well.

Hay.—1 ton; deficiency of 30 per cent.

Corn.—Indications very good; not extensively cultivated.

Potatoes.—Heavy on dry or drained lands; in other places injured by wet. Other

root crops generally inferior, in consequence of the season.

The most hardy Fall Wheat, the "Amber Midge Proof"; most prolific, "Treadwell " and "Diehl," latter decidedly superior quality. Spring Wheats:—"Rio Grande" or "Western Midge Proof;" "Fife" the better quality. More Fall Wheat sown than Spring, and a large breadth with Barley.

On account of the wet Spring, seeding was late. June proved favorable, and the crops had a splendid appearance. In July the rains were excessive (18 days), and the crops seriously injured. But little damage by midge. Spring Wheat and Oats badly

Fruit.—Generally good. Apples.—Very abundant, and of good quality. Grapes, Peaches, Plums, &c.—have also done well.

#### LANARK, SOUTH.

Fall Wheat.—25 bushels; much more; quality good. Spring Wheat.—9 bushels; much less; grain fair. Oats.—20 bushels; 50 per cent. less; quality inferior. Barley.—20 bushels; rather less; quality good. Peas.—20 bushels; 10 per cent. less; grain good. Beans.—20 bushels; rather better; average quality.

Hay.— $\frac{3}{4}$  ton: 10 per cent. less; well saved. Corn.—Much better.

Potatoes and other root crops reported generally bad. Fall Wheats-Midge-proof, White-chaff (bearded), and Diehl: Spring—Fife and Black Sea, the most approved. No rust, and but very little midge. Early sown crops the best. State of cultivation in general, not very high. The season extremely dry, and most kinds of fruit very small.

#### LEEDS, SOUTH.

Fall Wheat.—Very little raised.

Spring Wheat.—15 bushels; less; quality very good.

Oats.-25 bushels; less; grain light.

Barley.—25 bushels; rather less; quality excellent. Peas.—25 bushels; about the same; quality superior. Hay.—2 tons; less; quality first rate. Corn.—Good.

Potatoes.—Very good; but other roots not favorable. "Black Sea," as Spring Wheat,

much preferred; considered less liable to ravages by midge, but little of which, or rust, has been this year experienced. "Farmers are now raising less grain, and keeping more cattle, principally for dairy purposes." Plaster is much used, and found very valuable as a manure.

"Apples are the only fruit raised in large quantities. The season was too dry for them, and a large part of the fruit was worm eaten, and fell from the trees before maturity."

LINCOLN.

Fall Wheat.—12 bushels; half less; quality good.

Spring Wheat.—Very little sown.

Oats.—A fourth less; and Barley one half; grain inferior.

Peas.—30 per cent. better; and quality good.

Hay.—30 per cent. less; well saved. Corn.—much beyond an average.

Potatoes and other roots very abundant.

"Deihl," "Soule's" and "Mediterranean" most approved kinds of Wheat; of Spring varieties most kinds fail in this section. No midge, and but little rust.

Fruit.—Generally favourable; and, on account of the excessive heat, matured

unusually early.

#### MIDDLESEX, EAST.

Fall Wheat.—12 bushels; only one-half; badly winter killed; quality pretty good, except when sprouted in harvesting.

Spring Wheat.—6 bushels; much less; quality rather inferior. Fife Wheat generally

sown; annually deteriorating.

Outs.—35 bushels; considerably less; quality an average.

Barley.—30 bushels; a little less; grain plump, but much discolored. Peas.—15 bushels; considerably less; quality injured by maggot. Hay.—2 tons; much the same; about one-half damaged by wet.

Corn.—Excellent, and more than usual planted.

Potatoes.—On sound, well-drained land, good in quantity and quality; the reverse in opposite conditions. Crop, on the whole, less than an average. Other roots but indifferent.

Treadwell and Mediterranean Wheat preferred. Some Deihl sown last year, and much more this fall. Of Spring Wheat, old kinds seem to have run out. "Some Red River Wheat" has produced nearly 30 bushels per acre, of first quality, and we have great hopes it will succeed." Pasturage and dairying are constantly extending. "This year has given farmers a lesson on draining."

Fruit, generally good, especially Apples. Grape culture much increasing, with

satisfactory results.

#### MIDDLESEX, WEST.

Fall Wheat.—15 bushels; one-fifth less; quality good.

Spring Wheat.—8 bushels; one-fourth less; grain inferior.

Oats.—30 bushels; one third less; grain light.

Burley.—20 bushels; one-third less; quality inferior.

Peus.—12 bushels; only half, and grain inferior.

Beans.—20 bushels; about the same; quality good.

Hay.—1½ tons; much of it damaged by wet in making.

Corn.—25 bushels, shelled; good quality.

Potatoes.—Good on light, dry land, but much rotten on undrained clays. Turnips.—Not very good; other roots an average.

Treadwell and Red Midge Proof, Winter Wheat, and Fife and Tea Wheat (Spring),

considered most prolific and hardy.

The weather, after June, was unusually wet; most crops suffered severely on heavy, undrained soils. "The most abundant crop of Fruit ever raised in Middlesex."

#### NIAGARA.

Fall Wheat.—10 bushels; quality good; 60 per cent. decrease.

Spring Wheat.—Pretty good, but very little cultivated.

Oats.—20 bushels; inferior quality; 60 per cent. decrease.

Rye.—Very little grown.

Barley.—10 bushels; quality fair; 75 per cent. decrease.

Peas.—20 bushels; good sample; 20 per cent. decrease. Beans.—none cultivated as a field crop.

Hay.  $-1\frac{1}{2}$  tons; quality pretty good. Clover slightly injured by wet.

Corn.—Considerably above an average.

Potatoes.—Abundant crop, but inclined to rot on wet lands. Turnips and other roots

rather inferior. "Deihl," "Prolific," and "Mediterranean" Wheat most hardy. Fall Wheat has, of late, been under an average of former years, but Spring grain above, Fruit—Generally pretty good; ripened early owing to the warm season.

#### NORFOLK, NORTH.

Fall Wheat.—15 bushels; quality good; only half a crop.

Spring Wheat.—Scarcely any grown in the county.

Oats.—20 bushels; inferior samples; much below. Rye.—Pretty good; but little cultivated.

Barley.—10 bushels; quality light; only one-third.

Peas.—Almost a failure; quality poor. Beans.—Very few grown.

Hay.—1½ tons; a little damaged in making.

Corn.—An unusually abundant crop; matured without damage by frost.

Potatoes.—Not very heavy; with indications of rot. Turnips.—Early sown injured by the grub in the root; late sown promising. Other roots middling. In preparing for wheat "the mode rapidly gaining favour is, to plough once, cultivate thoroughly, topdress with barn yard manure, sow from 10th to 15th September, broadcast, and cover with cultivator."

Apples, Peaches and Cherries.—Abundant. Pears and Plums.—Scarce.

#### NORTHUMBERLAND, WEST.

Fall Wheat.—15 bushels; a third less; grain good.

Spring Wheat.—10 bushels; 8 less than last year.

Oats.—34 bushels; a little less; quality good.

Rye.—15 bushels; nearly as large; grain middling.

Barley.—25 bushels; rather less; grain good.

Peas.—16 bushels; less. Beans.—16 bushels.

Hay.—\(\frac{3}{4}\) ton; much less; well made. Corn.—Good.

Potatoes.—Heavy. Other roots but middling. Soules, Club and Fife the most approved Wheat.—Damage by midge or rust very partial. Fruit.—Generally pretty good.

#### ONTARIO, SOUTH.

#### Townships of Pickering and Whitby.

Spring Wheat.—The returns from these Townships do not give the estimated averages of the crops, but only speak of them as compared with the previous year. Wheat-Is reported from one to two-thirds less. Oats-Half less, and very inferior. Barley-A fourth less, but of better quality. Hny—One-third less, but quality good. Root crops are reported an average.

OXFORD, NORTH.

Fall Wheat.—8 bushels; 50 per cent. less; quality inferior.

Spring Wheat.—10 bushels; 33 per cent. less; average quality. Oats.—25 bushels; 20 per cent. less; grain very light.

Barley.—30 bushels; 10 per cent. less; dark coloured.

Peas.—20 bushels; 10 per cent. more; quality fair; affected in some places by the bug.

Hay.— $1\frac{1}{2}$  tons; 20 per cent. less; damaged.

Corn.—Never better; indications of an enormous crop.

Potatoes.—Bad; appearance of nine-tenths rotting.

Turnips.—Poor: too much wet; other roots below an average.

"Treadwell," "Deihl" and "Midge Proof" badly rusted. Very little midge. More Flax cultivated.

"Farmers more than ever have learnt this season the necessity of Draining, and the consequence is a greater demand for drain tiles."

Fruit.—Too much heat and wet; immense yield but of inferior quality, especially keeping. Winter fruit rotting early.

#### PEEL.

Fall Wheat.—16 bushels; much less; quality good.

Spring Wheat .- 10 bushels; about half; quality good.

Oats.—30 bushels; raised on sod good, but on stubble light and poor. Rye but little cultivated.

Barley.—25 bushels; a little less; colour better. Peas.—20 bushels; about the same; good quality.

Hay.—15 cwt.; only half; quality good. Corn.—Indications good; not much raised.

Potatoes.—Tubers rather small, with some indications of rot. Turnips and other roots

"Deihl" wheat the most productive; "Treadwell" the hardiest. For Spring, "Fife." Midge and Rust affected only slightly. Increased breadth of peas and burley sown. Fruit generally good.

#### RENFREW, SOUTH.

Fall Wheat.—15 bushels; a third less; quality fair.

Spring Wheat.—12 bushels; more than a third less; quality pretty good.

Oats.—25 bushels; nearly half less; quality inferior.

Rye.—15 bushels; a third less; average quality; not largely cultivated.

Bartey.—18 bushels; a third less; quality middling; not extensively cultivated. Peas.—15 bushels; a third less; quality middling. Beans but little cultivated;

quality good. Hay.—1 ton; a third less; well saved.

Corn.—Promised fair early in the season, but the subsequent severe drought arrested its progress. The same applies to Potatoes; only half a crop, or 100 bushels per acre.

"Chilian" variety done best this year. Other roots but little cultivated as yet.

Of Wheat, "White Flint" (bearded), "Blue Stem," "Fife" and "Club," most approved. But little midge. "Early sown grain has done the best, getting a start before the ground got too hard by the drought. Draining is a great advantage in securing an early seed-bed. Too dry for fruit."

#### SIMCOE, NORTH.

Fall Wheat.—Extensively winter killed; a large area ploughed up. Yield in favorable places from 10 to 13 bushels.

Spring Wheat.—12 or 13 bushels; less, quality good. Oats.—35 bushels; better, and a large breadth sown. Barley.—Crop large; in some instances, 40 bushels.

Peas.—20 bushels; not so much injured by the maggot as in former years.

Hay.—11 ton; equal. Corn not much planted.

Potatoes. - Variable, on clays poor, but very fair on sandy loam; other roots middling. Soules, Treadwell, Club and Fife, the most approved Wheats. Flax appears to have died out, though soil and climate seem adapted to it; the expense of labor, &c., exceeds the value of the crop. Fruit very variable in different localities.

#### STORMONT.

Fall and Spring Wheat.—10 per cent. less than last year; quality good. Flint and Black Sea generally grown. No rust or midge.

Oats and Barley .- 30 per cent less; the latter a bright sample, the former indiffer-

ent.

Peus, Beans and Corn, average crops, of good quality. Hay.—About half less; but of excellent quality.

Potatoes.—5 per cent. less than an average, but sound. Turnips.—Entirely destroyed by the fly. Other roots very inferior, in consequence of the severe drought. Too dry for Fruit.

#### Victoria, North.

Fall Wheat.—15 bushels; a little less; quality superior.

Spring Wheat.—9 bushels; much less; grain light and inferior.

Outs.—25 bushels; a little less; quality good. Rye.—10 bushels; but very little cultivated.

Burley.—30 bushels; somewhat better; and quality good. Peas.—20 bushels; rather less; quality rather indifferent.

Hay.— $\frac{3}{4}$  ton; less; quality fair.

Potatoes.—Good in the north; but considerably blighted south east.

Turnips, &c.—Appearances favourable.

"Soules" and "Club," most prolific Wheats; "Treadwell" and "Scotch" the most hardy. No damage sustained either by midge or rust.

Fruit.—Badly affected by the worm.

#### VICTORIA, SOUTH.

Fall Wheat.—221 bushels; quality good.

Spring Wheat.—14 bushels; do.

Oats.—30 bushels;

Barley.—32 bushels; much discoloured.

Peas.—25 bushels; quality good.

Hay.—1½ tons; quality good.

Potatoes.—200 bushels; badly rotted on wet land.

Turnips and other root crops, variable; inferior in some places. "Soules," "Scotch," "Fife," and "Club," the kinds of Wheat usually cultivated. No midge of consequence; but Oats badly rusted in some sections.

Fruit.—Generally abundant.

#### WATERLOO, SOUTH.

Fall Wheat.—20 bushels; rather better; and quality good.

Spring Wheat.—12 bushels; quality not good; very little raised.

Oats.—30 bushels; rather better; but injured by rust. Rye.—But little cultivated.

Barley.—20 bushels; about the same; quality indifferent.

Peas.—14 bushels; less; quality fair. Beans.—But little grown. Hay.— $1\frac{1}{2}$  tons; less; well saved, except in the north of the county.

Corn.—Good; but not much raised.

Potatoes and other roots, generally good.
"Treadwell" Wheat suits well; "Soules" and "Deihl" did well. But little midge; but rust injured Oats and Barley in some places. Considerable Flax is raised in the upper section. Drilling grain is fast superseding broadcasting, and is decidedly advantageous. Fruit crop large.

#### WENTWORTH, NORTH.

Fall Wheat.—15 bushels; one-third less; quality good.

Spring Wheat.—14 bushels; one-third less; grain indifferent.

Oats.—25 bushels; one-third less; quality light.

Barley.—22 bushels; one-third less; rather light and discoloured.

Peas.—20 bushels; one-fifth less; good quality.

Hay.-1 ton; one-fifth less; good quality.

Corn never better.

Potatoes.—A good average crop.

Turnips.—Generally a comparative failure. Carrots and Mangolds.—Pretty fair; Deihl and Soule's most prolific; Treadwell the hardiest; Fife and Bearded most approved, Spring Wheat.—Very little midge, but winter-killed in places. Fruit.—Generally favourable; quality good; ripened very early.

#### WENTWORTH, SOUTH.

Fall Wheat.—20 bushels; less: quality good.

Spring Wheat.—10 bushels; much less; grain inferior.

Oats.—25 bushels; grain light.

Barley.—22 bushels; less; grain thin and stained.

Peas—15 bushels; rather better; quality good.

Here 1 ton : less; quality good.

Hay.—1 ton; less; quality good. Corn.—Very good. Potatoes.—Heavy yield; indications of rot on heavy land.

Turnips.—Very light, but Carrots and Mangolds good; Dheil and Treadwell most approved, Fall Wheat.—No damage worth notice from midge or rust: more fall wheat than usual sown. Apples.—A heavy crop, and free from worm; small fruits not so productive.

#### WELLINGTON, NORTH.

Fall Wheat.—15 bushels; middling quality; much was winter killed and ploughed up.

Spring Wheat.—10 or 12 bushels; quality middling; considerable spring wheat was blighted by storms in July, and produced only 3 or 4 bushels per acre.

Oats,—40 bushels; early sown, heavy, but late sown very light.

Barley.—23 bushels; quality middling. Peas.—30 bushels; quality good.

Hay.—1½ ton; early cut good, but late damaged by wet weather. But little Corn cultivated.

Potatoes.—A splendid crop, but damaged by rot, especially the older sorts, as Cups, Kidneys, Pinkeyes, &c.; the kinds that stood the rot best were the Black Butts, Gleeson, Goderich and Peach Blows.

Turnips.—Early sown much injured by the drought; the rains in July helped the later sown wonderfully, promising a fair crop.

Carrots. -600 bushels per acre; of good quality.

Mangolds.—The best crop ever seen in this quarter; about 1,000 bushels per acre

where well managed.

Soule's Wheat is very subject to rust, but the best quality. Treadwell and Deihl more hardy, but not equal to the former in quality. Fife the most hardy spring wheat; but Ohio Club more prolific, but liable to rust.

It is thought that it would be an improvement were the ground intended for root crops manured in the fall, and Mangolds and Carrots sown by the 15th of May, and

turnips between the 1st and 10th of June.

There is not much *Fruit* produced as yet in this County, except the smaller kinds. The young orchards of Apples, Pears, &c., are beginning to produce, and promise satisfactorily.

#### WELLINGTON, SOUTH,

Full Wheat.—13 bushels; half of last year; quality good.

Spring Wheat.—12 bushels; about half; grain good.

Oats.—30 bushels; much less, and very light.

Barley.—25 bushels; much less; grain rather light, and dark coloured.

Peas.—25 bushels; rather less; quality good.

Hay.—11 tons; rather less, and quality middling. Corn.—Not much raised, but looks well.

Potatoes.—Very large yield, and good quality. Other root crops good. Most approved varieties of Wheat, Treadwell and Fife. But very little damage by Midge, &c. Root crops are now more extensively grown. Fruit.—Very good.

#### WELLAND.

Fall Wheat.—10 bushels; 60 per cent. less; quality good.

Spring Wheat.—7 bushels; 60 per cent. less; grain much shrunken.

Outs.—25 bushels; 30 per cent. less; grain light. 26 393 Barley.-15 bushels; 40 per cent. less; damaged in colour by rain.

Peas.—15 bushels; 20 per cent. less; grain considerably eaten by the pea-bug.

Hay.—1 ton; 25 per cent. less; quality good.

Corn.—Indications of a heavy crop of good quality.

Potatoes.—Yield large, and quality, in most places, excellent.

Turnips and other roots, not extensively cultivated, and indications indifferent. Treadwell and Mediterranean as Winter Wheats, and Excelsion and Fife as Spring,

most generally approved. No damage by Midge; but Oats were affected by rust. General preparation for Wheat: Summer fallow, ploughing, first time, the end of

May; second time, the last week in June, ploughing in manure; sowing about 1st September. The season was very dry and warm till June, afterwards, frequent showers. All kinds of Fruit ripened exceedingly early; crop indifferent, except Apples.

#### YORK, NORTH.

Fall Wheat.—14 bushels; good quality.

Spring Wheat.—13 bushels; grain inferior. Oats.—30 bushels; grain light.

Barley.—20 bushels; average quality.

Peas.—20 bushels; inferior. Hay.—11 tons; average.

Corn.—Very good, but not extensively grown.

Potatoes.—Good crop, but affected by rot in heavy land. Turnips and most other roots scarcely an average.

Soules, Treadwell and Scotch Fife among the most approved kinds of Wheat. The season has been generally favorable to most kinds of Fruit.

#### YORK, EAST.

Fall Wheat.—17 bushels; yield less; quality good.

Spring Wheat.—12 bushels; less; grain light.

Oats.—25 bushels; less; quality inferior. Rye.—But very little cultivated. Barley.—25 bushels; less; of fair quality.

Peas.—15 bushels; yield less, and of medium quality. But few Beans grown. Hay.—11 tons; not quite as heavy; quality good. Corn.—But little cultivated.

Potatoes.—A poor crop, and much rotten. Other roots light, except Mangolds. Midge did but little damage, but considerable by mildew and rust. Soule's, Treadwell and Fife most approved. Fruit generally good.

Estimated average of grain per acre, made up from Returns of Electoral Division Societies to the Bureau of Agriculture, for the years 1868, 1869 and 1870.

	1870—48 Retu	ms.	1869 51 B	eturns.	1868-	-47 Returns.
Fall Wheat	153 bushels		213 bush	els	20분	bushels
Spring Wheat	12 do		$19\frac{7}{4}$ de		14	do
Oats						
Rye						
Barley	22 do		$30\frac{1}{2}$ do		$22\frac{1}{2}$	do
Peas	19 do		$22\frac{1}{4}$ do		14	do

The low average of 1870, particularly of wheat, can in great measure be accounted for from the very peculiar character of the season. The severe drought that prevailed through the summer months in the eastern portions of the Province, and the excessive rains which prevailed during a part of the summer and autumn in the west, were alike injurious—in some instances disastrous even—to the crops generally. The necessity of draining, and a more thorough cultivation of the soil was never, perhaps, more apparent than during the past season.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

## APPENDIX (H).

AMOUNTS EXPENDED FOR THE ENCOURAGEMENT OF AGRICUL-TURE AND ARTS IN ONTARIO IN 1870.

No. 1.—Amounts paid to Agricultural Societies in 1870.

Algoma*   300 00   Huron, N.	\$ c 18,150 700 700 700 350 700 760 700
Cornwall         350 00 Durham, E.         Lennox Lincoln           Do         W         700 00 London           Dundas         700 00 Middlesex, N.           Elgin, E.         700 00 Do           Do W.         700 00 Do           Essex         700 00 Monek           Frontenac         700 00 Northumberland, E.           Generville, S.         700 00 Norfolk, N.           Grey, N.         700 00 Ontario, N.           Haldimand         700 00 Ontario, N.           Hamilton         350 00 Oxford, N.           Do E.         700 00 Oxford, N.           Do E.         700 00 Oxford, N.           Do E.         700 00 Oxford, N.           Do E.         700 00 Oxford, N.           Do E.         700 00 Oxford, N.           Do E.         700 00 Oxford, N.           Peel         Peel	700 700 700 700 700 350 700 700 700 700 700 700 700 700 700 7

^{*} This Society did not qualify so as to receive the full amount of the grant, \$700.

No. 1.—Amounts paid to Agricultural Societies in 1870.—Continued.

NAME OF SOCIETY.	AMOUNT.	NAME OF SOCIETY.	AMOUNT.
Brought forward  Perth, N	\$ cts. 35,650 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00	Brought forward  Victoria, N	S cts. 41,224 50 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00 700 00
Carried forward	44,324 50	Total	53,424 50

^{*} This Society did not qualify so as to receive the full amount of the grant, \$550.

No. 2.—Amounts paid to Mechanics' Institutes in 1870.

NAME OF INSTITUTE.	AMOUNT.	NAME OF INSTITUTE.	AMOUNT.
Smith's Falls Brantford Dundas Paris Toronto Meaford Streetsville Hamilton Berlin Galt Mount Forest Richmond Hill Clinton  Carried forward	8 cts. 60 00 200 00 200 00 100 00 200 00 50 00 200 00 200 00 200 00 41 88 52 68 200 00 1,741 70	Erought forward  Ayr Merrickville Woodstock St. Mary's Thorold Peterborough Bowmanville Brampton Collingwood Brighton Port Elgin  Total	\$ cts. 1,741 70 167 00 50 00 150 00 109 00 100 00 200 00 30 00 100 00 50 00 100 00 2,947 70

No. 3.—Total Payments for encouragement of Agriculture and Arts made in 1870.

Service.	Appropriation.	Expended to 31 December, 1870.	Unexpended.
Electoral Division Societies, 73 at \$700  Do 1 at \$550 Do 7 at \$350.  Fruit Growers' Association.  Agricultural and Arts Association.  Mechanics' Institutes	\$ cts. 51,100 00 550 00 2,450 00 350 00 10,000 00 5,000 00	\$ cts. 50,700 00 274 50 2,450 00 350 00 10,000 00 2,947 70	\$ cts. 400 00 275 50 2,052 30
Total	69,450 00	66,722 20	2,727 80:

F. T. JONES,

DEPARTMENT OF AGRICULTURE AND ARTS, TORONTO, 31st December, 1870. Accountant













