









## SESSIONAL PAPERS.

VOLUME IX, PART II.

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### SECOND SESSION OF THE THIRD PARLIAMENT

OF THE

### PROVINCE OF ONTARIO.

Session 1877.





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### ANNUAL REPORT

OF THE

# Commissioner of Agriculture and Arts

FOR THE

### PROVINCE OF ONTARIO,

FOR THE YEAR

1876.

Brinted by Order of the Legislative Assembly.



#### Toronto:

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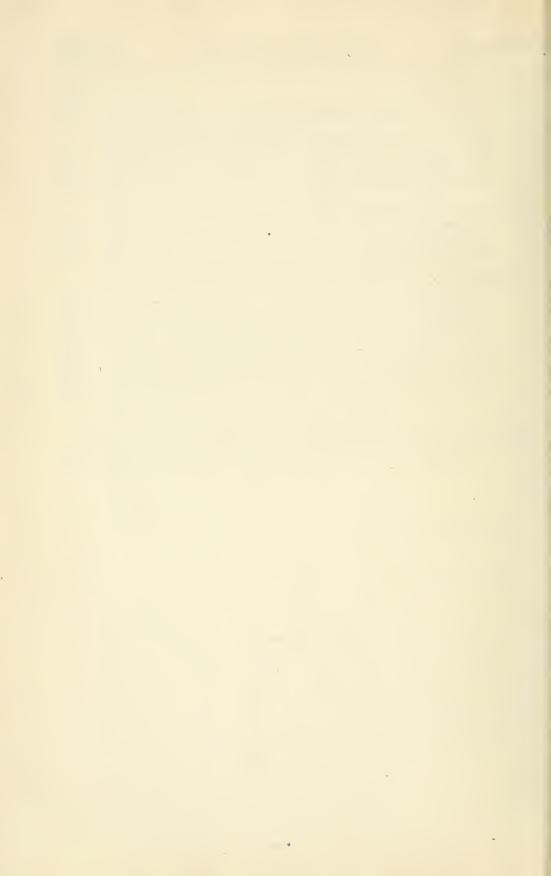
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### ANNUAL REPORT

OF THE

# Commissioner of Agriculture and Arts.

FOR THE

### PROVINCE OF ONTARIO,

FOR THE YEAR 1876.

To His Excellency the Honourable Donald Alexander Macdonald, Lieutenant-Governor of the Province of Ontario, &c., &c.

MAY IT PLEASE YOUR EXCELLENCY-

It again becomes my duty to submit a brief resumé of the proceedings of the Department of Agriculture and Arts for the year 1876. Full particulars of the state and progress of the several societies, embracing various branches of industry that have been encouraged by the receipt of Legislative aid, will be found in the Appendices to this report.

The past year has been distinguished by a general depression in commercial circles, which more or less characterized the two previous years; a state of things by no means peculiar to Canada, but intensely shared by the United States, and indeed, more or less by the whole civilized world. In this Dominion the absence so long of profitable business has had a depressing influence on trades and manufactures, and the ill effects thereof have been seriously felt by our rural population. Immigration of various industrial classes has experienced a severe check, although amidst all this depression the demand for farm labourers and domestic servants has fully kept pace with the supply. Unhappily this has not been the case with mechanics and people seeking employment in the lighter kinds of labour, among whom distress in one form or other has been extensively experienced.

But among the rural population, when thrift and industry are practised, the bitter pinchings of hunger may be said to be unknown. Indeed, Canada is peculiarly fitted to sustain in comparative prosperity whatever number of sober and industrious farm-labourers may be induced to make it their home; and when the gloom which at present overhangs traders, mechanics and manufacturers shall have passed away, these large and important classes will doubtless again participate in a similar prosperity which characterized recent years. True and healthy progress, however, is always distinguished for steady growth; over trading and wild speculations, inducing a desire to become suddenly rich—characteristics of the present day—will inevitably lead, sooner or later, to commercial depression, painful disappointment, and not unfrequently to permanent individual ruin.

Although fall wheat suffered in some places from the effects of frost during the winter and early spring of last year, and much of the spring grain was, in consequence of wet and cold, deposited under unfavourable conditions, yet the very favourable turn of the weather soon after the completion of seeding, imparted cheering hopes for the crops, a feeling that was participated in not only by the farmers, but the community at large. This pleasing anticipation was, however, destined to disappointment. The rapid growth of vegetation during a few weeks of moist and genial weather became suddenly and prematurely stopped by a tropical heat and drought, rapidly developing rust on the straw and blight in the ear, dissipating at once the fond hopes of the husbandman, and changing the appearance of average crops, at least, into comparative failure. This was particularly the case with wheat, the staple crop upon which Canada hitherto has so much depended, which was nearly everywhere greatly injured, and, not in a few cases, almost wholly destroyed. The other principal grains were not so much affected as wheat, but the general results of last year's harvest were very disappointing, involving in many cases, heavy losses to the producers. This most unfortunate circumstance in the depressed commercial condition of the country tended to make matters greatly worse; whereas if a bountiful harvest had been realized, as at one time there was a prospect of, a turning point would have been reached and a healthy improvement would have set in.

Agriculture is a pursuit in all parts of the world that is greatly influenced by the character of the seasons, as well as by skilful cultivation, and this condition applies with peculiar force to Canada, where the period of vegetable growth is short, leaving but a comparatively brief space for preparing the soil, sowing the seed, and reaping the harvest. Within the limits of this Province even, the weather varies sometimes considerably in different sections, thereby affecting the crops very differently, so as to render it a most difficult task, involving both time and expenditure, in making approximate averages of a reliable character. For this reason I did not ask for returns as heretofore, from the various Agricultural Societies of the Province, but trust that ere long a more efficient and trustworthy method may be devised for obtaining valuable information of this character.

#### AGRICULTURAL AND ARTS ASSOCIATION.

It was pretty generally anticipated that the great Centennial Exhibition would have seriously affected the Provincial Show held at Hamilton last September, as Canada, and Ontario in particular, was very largely represented in Philadelphia both by exhibits and visitors. This result, however, did not follow to any great extent, so as to reduce the

Show at Hamilton below the ordinary average, as appears from the report of the Council (Appendix B). It is true that a considerable number of our best horses, cattle and sheep, with a large amount of machinery, manufactures, &c., were retained at the Centennial, where they were highly distinguished, yet the exhibition at Hamilton, whether estimated by the amount and quality of the exhibits, or the number of visitors, must be regarded as having been quite a success. By comparing the exhibits of previous years, which are of course affected by the locality in which the show is held, it is obvious how steadily, and in some instances rapidly, the Provincial Exhibitions have continued to advance under the efficient management of the Council of the Agricultural and Arts Association.

THE ONTARIO VETERINARY COLLEGE, under the patronage and direction of the Agricultural and Arts Association, continues to make steady progress, both as to the number of students, and the proficiency they evince in their studies. The standard of examination is being progressively raised, and the pupils, as a whole, reach a higher status, indicating the soundness and extent of the course of study pursued. When all the additions and improvements now in course of being made shall be completed, this institution will favourably compare with similar ones in older and wealthier countries.

#### AGRICULTURAL SOCIETIES.

A feature of many of these numerous organizations specially deserving notice and commendation as appears by their reports (Appendix A), is the steadily increasing desire for union exhibitions. This is shown not only from a larger number than formerly of Township societies uniting with each other, or with their respective District Societies, but also from the efforts that have recently been made in the eastern section of the Province to follow the example of what has been successfully accomplished in some half-dozen places in the west, of establishing exhibitions that shall embrace a still wider area, and attract to them greater popularity and success. Their efforts for greater combinations appear to have been, almost in all cases, attended with beneficial consequences and a degree of success that is truly encouraging. In the remoter and more sparsely populated districts all that can be expected for some time to come is the union of two or more townships for the purpose of holding a show, and this method is already adopted in several places. But in the frontier and populous districts, where improved roads have been generally made, and the facilities of railway travel are more or less to be found, the foundation of Central Exhibitions may now be regarded as quite practicable, and the advantages to agriculture and the other industries comprised by these societies would be found almost incalculable.

### THE ASSOCIATION OF MECHANICS' INSTITUTES, AND MECHANICS' INSTITUTES.

There is not much of striking interest to record in relation to these important agencies for promoting the intellectual and social improvement of the operative classes during the past year. The number of these societies continues steadily to increase, and, on the whole, they are in an improving condition, though some appear to be almost stationary; while a few, perhaps, may be regarded as retrograding. Although the recent provision made by the Directors of the Mechanics' Institutes Association for the encouragement of class instruction in the more useful and important subjects relating to the daily life of

artizans, by the distribution of prizes, may not have as yet realized the sanguine expectations of some of its promoters, yet a steady progress has evidently set in in that direction, and encouraging information will be found in several of the reports (Appendix C). It is very difficult, and sometimes quite impracticable, for Institutes located in small places to introduce and sustain evening class instruction, except perhaps on a very limited scale and embracing only the merest rudiments of knowledge. Every earnest endeavour in this direction should always receive encouragement, as it is one of the most effectual means of sustaining the character and functions of this class of educational agencies. The libraries of these Institutes are unquestionably the most important and generally available means of meeting the intellectual wants of the people, and it is satisfactory to find from the reports that the books are extensively read, and that works of standard value in the various branches of science and literature are steadily increasing. It is also encouraging to know that the works of fiction put into circulation are generally of the higher and unobjectionable class, and that those of a sensational and doubtful character are rarely to be found. Tales and Novels, as public taste is constituted at present, seem essential to the successful working of circulating libraries, and will probably long continue so, but when such publications are selected with care and judgment they doubtless tend to promote rational gratification and the moral and social well-being of the community. The Statute wisely restricts the expenditure of the Legislative Grant to works of a more practical and useful character, specially adapted to the every day wants of the working classes, and leaves the Institutes to provide from their own resources whatever they may require of romance and fiction. For public lectures, except perhaps a few on attractive subjects, there now appears to be little demand, but social gatherings, including popular readings, with vocal and instrumental music, with an occasional excursion of the members and their friends to places of interest and beauty, have become quite frequent, and there can be no doubt that these agencies are often attended by the most valuable results to the physical moral and social health of the community.

#### FRUIT-GROWERS' ASSOCIATION.

It will be seen from the Report (Appendix D) that this popular Society continues to prosecute, with unabated energy, its important labours, and that it has been the means already of creating a taste for the cultivation of fruit, and furnished reliable and practical information relating thereto throughout the settled portions of the Province. The annual address of the talented and indefatigable President is, as usual, pregnant with useful suggestions and valuable information, and the various essays read at the quarterly meetings, and the discussions thereon, during the past year, clearly indicate that there has been no falling off in the ability and zeal of its members. Not only has the cultivation of fruit in the older sections of the Province been materially improved by the diffusion of sound information and the awakening of higher tastes, but the Association has already, by means of the actual experiments of its widely scattered members, thrown considerable light on the kinds of fruit best adapted to our newer and remoter settlements. The cultivation of fruit—particularly of apples—has of late been steadily progressing in most parts of the Province, and in those more favourably situated as regards soil and climate, a profitable business has sprung up in exporting apples to British markets, where they already occupy

a high rank. This branch of trade, if carefully and energetically pursued, will admit of great extension; while many parts of the Province hitherto thought to be incapable of profitable fruit-culture, by the introduction of hardier and more suitable kinds, will be found sufficient to meet, at least, all domestic demands.

#### ENTOMOLOGICAL SOCIETY.

The Report of this Society (Appendix E.) will be found to have lost none of the interest and sound practical information that have characterized its predecessors. Already much reliable information has been imparted to the public by these documents in relation to the character and habits of insects injurious or beneficial to farm and garden crops; and though, in some instances, entomological knowledge has not yet reached that degree of perfection in its application to practice as to point out an infallible remedy against insect depredations, still much has been already accomplished in that direction. In order to discover a reliable antidote, much time and patient observation are required, not only in acquiring a correct knowledge of the natural history of these pests, but also the conducting and frequent repetition of experiments under varying conditions, a work not likely to be very satisfactorily accomplished, except by zealous and intelligent individuals acting in concert as members of a Scientific Society. This object the Entomological Society has perseveringly pursued from the commencement of its operations, as the Reports clearly indicate, and the results, though not in all cases absolutely certain, are nevertheless on the whole exceedingly encouraging. The problem of prevention is at best, in many cases, very complicated, and can only be effectually solved by extensive observations and careful deductions, requiring intimate and practical acquaintance with the science of entomology, and the most exemplary perseverance. It is, therefore, encouraging to know that this Society has been the means of eliciting and diffusing a taste in this country for entomological investigation, and that its Journal already occupies a good position in the scientific literature of both hemispheres.

#### Dairymen's Association.

The ninth Annual Report for 1876, published separately by this society, contains a large amount of useful matter in relation to the dairy interests of this Province, and affords unmistakable evidence of progress. The annual Convention was extended to three days, instead of two as formerly, and the interest of the members was well sustained to the last. The addresses given in full in the Report are of great scientific and practical value, and an additional feature was introduced, comprising the manufacture and management of butter; an important branch of the Dairy that had hitherto only received incidental notice. The number of cheese factories continues steadily to increase, and the average quality of the article produced is as steadily improving, as is evidenced by the prices realized in the British markets. If the factory system can be as satisfactorily carried out in the making of butter as it has been already in cheese, the benefit to the country will be enormously increased.

In order still further to improve and extend the operations of this Association, a provision has been made in the amended Agricultural and Arts Act, passed during the

late session, for the establishment in Ontario of two Dairymen's Associations, one for the Western District, having its centre in Ingersoll; and the other for the Eastern District, with its headquarters in Belleville. This important change will be effected in May, and there can be no doubt, if both societies emulate the zeal and devotedness of the parent Association, the dairy interests in future will continue to advance.

#### CENTENNIAL EXHIBITION.

It is with peculiar pride and satisfaction that I look back on the most important proceedings of the past year in the high position that was taken by the Dominion of Canada at the great International Exhibition at Philadelphia. In this brief resumé, I can only allude in general terms to that great event, and for more detailed statements, as far as Ontario is concerned, must refer to my previous Report, in which full information will be found.

The results fully justify the wisdom of the arrangements made for collecting and arranging for exhibition the best specimens of the various branches of the industries of this Province, and the liberal pecuniary assistance given by the Government for effectually carrying out these objects. In the live-stock department our animals were, to say the least, quite unsurpassed, and must have made a very favourable impression on visitors in regard to the great capabilities of our soil and climate in this most important branch of agricultural industry, and the same may be said of cereals, all indicating the great progress that has been made of late years in the pursuits of Agriculture. The Dairy interest was admirably sustained by the well-directed efforts of the Dairymen's Association, indicating the extraordinary advancement that has been made of late years in the production of cheese, much of which now occupies a foremost rank in British markets. In Agricultural Implements and Machines the position which Ontario obtained was an enviable one, and this may be said generally of the many different branches of Arts and Manufactures. In Fruits, considering that the season had been unfavourable, our display may be considered marvellous, reflecting great praise on the skill of the growers, and the tried and sound judgment of the managers of the Fruit-Grower's Association. Nothing could have been so effective in dissipating the common error of the extreme rigidity of our climate than the rich productions of Pomona, that were replenished and so well sustained during the summer and autumnal months the Exhibition was open. The Ontario Entomological Society had an excellent display of Insects, which was much admired. Great pains had been taken by the Directors in mounting and arranging the various classes, and much of the success incident to this extensive, and in some respects, unique collection, is attributable to its talented and indefatigable President, Mr. Saunders.

From the rich display of our Agricultural and Manufacturing industries, brought under the notice of representative men from all parts of the civilized world, there is good ground for hoping that a fresh impetus will be imparted to our industry, and that new and more extended commercial relations will be formed with other countries, especially with the Australian Colonies. To the exhibition which will be opened at Sydney this Spring, a collection of articles has been sent. I have the satisfaction of further stating that mainly through the exertions of Hon. David Christie and Mr. Ira Morgan, the President of the Agricultural and Arts Association, an extensive and valuable collection of

Seeds was made, amounting to upwards of one thousand specimens, from the different States of the American Union, and the various foreign countries represented at the Centennial. This very interesting and instructive collection has been scientifically arranged and labelled by Dr. S. P. May, and is placed in a room of the Parliamentary Building, and duplicate specimens have been sent to the Museum of the School of Agriculture at Guelph.

#### THE SCHOOL OF AGRICULTURE.

I have much satisfaction in being able to state that this new and important Institution continues to make healthy progress. The curriculum of study has been extended, and is specially adapted to the requirements of the pupils; the staff of teachers is efficient, and work in harmony and earnestness in promoting the great objects of a scientific and practical knowledge of agriculture. Much of this efficiency is doubtless traceable to the ability and sound judgment of the President, who is ably seconded by the Professor of Agriculture and the various teachers, both in the school, on the farm and garden, and in the workshop.

The chief difficulty felt at present is the want of accommodation for the increasing numbers of young men applying for admission. To remove this obstruction to growth, it has been determined to erect at once another building that shall be in architectural expression in harmony with the two already existing, and capacious enough to accommodate fifty or sixty students. By this means the expense per head will be considerably reduced, as several of the fixed charges will not be thereby increased. Such as desire a minute account of the present condition and working of the Institution are referred to the able and elaborate Report recently published. There can now be no ground whatever to doubt that if the School continue to receive that support from the Legislature, and a hearty sympathy from the public, to which it is justly entitled, it will inevitably become a great and permanent success, and a powerful means of increasing the wealth, intelligence, and well-being of the country.

The two subjoined extracts from the Report will be read with interest; the first is from the pen of the Professor of Agriculture, and the other from the President:

"Our farm is a school in every possible detail, in every department. The greatest difficulty of any under my charge is, to see that every student has his changes of labour, that he does that labour well, that he understands the how and why of it of practical and scientific grounds, and that nothing whatever is done upon the premises that would stand as a bad lesson for any one. Outside work should accord with inside teaching—the students have to be taken from the lecture room to the field, and what is done in the field, the fold, the shop, and the garden, has to be questioned in the house, in order to rivet attention, impress principles, and make science and practice go hand in hand.

"In order to ascertain the progress of each student, and give a larger interest to manual labour, I have instituted special bi-yearly examinations of several details, such as cleaning, harnessing, and handling horses, ploughing, thinning roots, handling and explaining points of animals, shearing sheep, sowing broadcast by hand, mowing with scythe, hoeing, use of mechanical tools, and other practical subjects. The mechanical department is an important one—how few people can drive a nail properly—where the erection of all kinds of fences, additions

and repairs to buildings, making hurdles and sheep racks, gates, and numerous repairs are usual on a large farm; the cleaning and repairs to our implements, giving opportunity to a thorough acquaintance with their different parts. The detail parts of buildings, the method of computing lengths of timbers, and the principles involved in construction, are matters of thorough practical instruction.

"Then again, we profess to undertake all our own surveying and levelling—having begun duplicate enlarged reference plans of the farm and buildings—a work that cannot be hurriedly completed, owing to one-fourth only of the students being engaged upon it at one time, and at times of the year not otherwise important. All levelling for drainage, roads, and garden, is now performed by the students with a farmer's simple level, and a more perfect one as a check. All calculations that come under what may be called agricultural mathematics, are put to practical test. Ploughing is one of the favourite, as it is one of the most difficult requirements. In this it is our endeavour to give as many lessons as possible, under careful superintendence; but at times, with a rush of work, and so many students to instruct with a limited number of ploughs, such lessons as yet have been more limited than I would wish. A more matured system and two annual private ploughing matches will be my future aim in this matter; and, of course when practicable, we will, as heretofore, attend public ploughing matches.

"The more important public markets of Guelph are a source of many good lessons to us, but of all our applications of lecture-room work to outside practice, none have been so fruitful of pleasure and profit as visits to different herds and flocks. Within a radius of fifteen miles we have choice of some twelve herds of superior Short-horns, two of Galloways, one of Devons, and three of Herefords, as well as various flocks of Leicester, Cotswold, and South Downs, to each and all of which we are made welcome in a way highly creditable and characteristic of the country. True, such a practice requires careful handling, when of course, a lesson is the chief object, and as yet I am not satisfied with our plan of examinations, note-taking, and subsequent comparisons. In connection with this it may almost seem superfluous to refer to the immense value now in our hands in the possession of no fewer than six breeds each of cattle and sheep by which the pupil can be fully exercised by actual handling, on points, characteristics, and comparisons, both previous and subsequent to these inspections.

"And now, in conclusion," remarks the President, "it may be allowable to take a retrospect of the past, and a glance at the present and the future. It will be two years on the first of next month since the real work of the Institution began. A school had to be organized, and a farm brought into order for the purposes to which it was to be placed. The former was completed in a month, the latter is still going on. One hundred and three acres of natural pasture land have been broken up and brought under the plough. Seventy acres have been cleared. Main drains have been laid through half the Farm, and eighty-two acres under-drained. Fencing has been begun, and levelling and road-making are gradually changing the appearance of the place. The thirty acres in front of the buildings facing the Dundas Road have been laid out in lawn and gardens; approaches to the buildings have been cut out, graded and gravelled; flower-borders and shrubberies have been made, trees planted, and the lawn seeded down successfully. A kitchen garden of six acres has been laid out, fenced, and put into order; and the nucleus of a system of forcing-houses and green-houses begun. The out-buildings

have undergone necessary repairs, and various new structures, such as a poultry-house and a carpenter's shop have been erected. A Mansard roof has been placed on the main College building, and at a distance of fifty feet to the south another structure, forty by fifty, with a basement, two stories and a Mansard, has been erected to be used entirely as a school. And the latter has progressed. At the time spoken of there were twenty-six pupils in attendance, now there are forty. It was then difficult to get pupils, it is now difficult to procure accommodation. The teaching was then fitful, now it is systematized. We have laid down a course of study which includes Agriculture and all the allied sciences. The course has been divided into departments, and masters procured for each department. The students are receiving an education the value of which cannot be too highly estimated. Only when some scores of graduates have been placed in the country will it be known. We are now established, an accomplished fact, and working out our destiny. The farm is being brought more into the shape of a "a model" farm, experiments have been inaugurated, as a glance at the preceding pages will show, and the school work is prospering favourably. Our relation to the outside public is becoming more satisfactory. The disfavour is wearing away, the indifference vanishing, the freezing recognition is thawing into a warmer; and a kindlier interest is being manifested in our aims and our projects. Scores of letters lie near me to testify to these facts. We are working away quietly, but gathering strength for future energy. We are learning lessons from similar Institutions in other countries, and from our own mistakes, and gradually working such knowledge into our system, in order that the experiment may be an ultimate success. And by careful management, ready tact, and thorough work on our part, together with the moral and material support of the public, success is certain. The past has been assuring, the present is satisfactory, and the future is hopeful."

I must not conclude without distinctly, though very briefly, alluding to a trade pregnent with important consequences that has only just arisen, the exportation of fat beef and mutton, both alive and dead, to the Mother country. The business as yet must in a great measure be regarded as tentative, but every day's experience strengthens the hope that a great and profitable branch of commerce is being developed that will form a source of wealth to the country. It will specially benefit our Agriculture, by rendering the cropping of land with grain less frequent, and supplying it with what is now so urgently needed, a larger quantity of manure of superior quality.

Respectfully submitted,

S. C. Wood, Commissioner of Agriculture and Arts.

Toronto, April, 1877.



### APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

### APPENDIX (A.)

ANALYSIS OF REPORTS OF AGRICULTURAL AND HORTICULTURAL SOCIETIES FOR 1875.

### ANALYSIS OF REPORTS

OF

# Agricultural and Horticultural Societies,

FOR THE YEAR 1875.

ADDINGTON.			
Dr. To Balance in hand, as per last Annual Report "115 Members' Subscriptions "Legislative Grant Cr.	\$ ets. 27 62 117 00 700 00	\$ cts.	\$ cts.
By Prizes for Horses, \$56; Cattle \$40; Sheep, \$41; Pigs, \$15; Poultry, \$6.75	158 75		
Work, \$25  " Portions of Legislative Grant paid to Township Societies  " Printing and Advertising  " Working Expenses, including services of Secretary, Trea-	240 00	398 <b>75</b> 350 00 13 25	
surer and Assistants		60 43	822 43
Balance in hand			22 19
Camden.			
Dr. To 106 Members' Subscriptions	\$ ets. 106 00	\$ cts.	\$ cts.
Dr. To 106 Members' Subscriptions Admission Fees to Exhibition Legislative Grant from Electoral Division Society		\$ ets.	\$ cts.
Dr. To 106 Members' Subscriptions Admission Fees to Exhibition Legislative Grant from Electoral Division Society Cr. By balance due Treasurer, as per last Annual Report Prizes for Horses, \$48.50; Cattle, \$30; Sheep, \$27; Pigs,	106 00 4 00 162 00	\$ ets.	
Dr. To 106 Members' Subscriptions  "Admission Fees to Exhibition	106 00 4 00 162 00 126 50	π .	
Dr. To 106 Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	106 00 4 00 162 00	π .	
Dr. To 106 Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	106 00 4 00 162 00 126 50	21 55 221 50	

	Loughboro'.			
	balance in hand, as per last Annual Report	\$ cts.	\$ cts.	\$ cts.
"	53 Members' Subscriptions  Legislative Grant from Electoral Division Society	53 00 78 00		140.00
Cr. By	Prizes for Horses, \$28.50; Cattle, \$12.75; Sheep, \$13.50;	58 75		140 60
66	By Prizes for Grains and Seeds, \$18.45; Roots and other hoed crops, \$4.10; Dairy products, \$2.25; General	90 19		
•	Manufactures, \$4.25; Fine Arts, \$5; Ladies' Work, \$5.65	39 70		
٤6	Printing and Advertising		$98 \ 45 \ 7 \ 00$	
٤٤	Working Expenses, including services of Secretary, Treasurer and Assistants		19 45	*
				124 90
	Balance in hand			15 70
Dr.	Sheffield.	\$ cts.	\$ cts.	\$ cts.
66	Balance in hand, as per last Annual Report	$\begin{array}{cc} 6 & 50 \\ 77 & 00 \end{array}$		
Cr.	Legislative Grant from Electoral Division Society	110 00		193 50
	Prizes for Horses, \$35; Cattle, \$24.25; Sheep, \$15; Pigs, \$5.50	79 75		
66	Prizes for Grains and Seeds, \$15.75; Roots and other hoed crops, \$2.80; Dairy products, \$4.75; Fruits, \$1.50;			
	Vegetables, \$3.30; Agricultural Implements, \$12.25; General Manufactures, \$40.10	80 45	4.00 20	
	Printing and Advertising	difficulty is a second of the second	8 50	
1	Working Expenses, including services of Secretary, Treasurer and Assistants		24 60	109 00
	Balance in hand			193 30
	Datance in nand			0 20
Dr.	ALGOMA.	\$ cts.	\$ cts.	\$ ets.
To	balance in hand, as per last Annual Report	190 47 234 00	.p 000.	φ 065,
	Legislative Grant	700 00		1124 47
	Prizes for Horses, \$19.50; Cattle, \$47.50; Sheep, 21; Pigs, \$11; Poultry, \$7	106 00		
66	Prizes for Grains and Seeds, \$38.50; Roots and other hoed crops, \$22; Dairy products, \$26; Growing Crops, \$45;			
	Fruits, \$3; Vegetables, \$36.50; Agricultural Implements, \$35; General Manufactures, \$15; Fine Arts,			
	\$5; Ladies' Work, \$18; Ploughing Match, \$14	258 00		
	Unpaid	$364 00 \\ 10 00$		
	9		354 00	

	\$ cts.	\$		\$	cts.
By Prize for previous year paid		1	50		
By Prize for previous year paid		230	00		
" Exhibition Buildings and Grounds, fitting up, &c		58	24		
" Exhibition Buildings and Grounds, fitting up, &c " Paid for Agricultural or Horticultural Publications		16	00		
"Working Expenses, including services of Secretary, Trea-		165	70		
surer, and Assistants				000	4.4
				8ZE	44
Balance in hand				299	03

#### REPORT.

Your Directors and Officers beg respectfully to report, that the past year has been one of progress for your Society. Premiums for growing crops have been paid for the first time since the establishment thereof; and they are happy further to be in a position to state, that the wheat to which the first prize was awarded, was pronounced by the judges as good as the generality of such grain produced in the best wheat-growing sections of the Province. Your Directors, therefore, trust that this fact, together with your having mills in different parts of the District, will prove an incentive to the cultivation of a larger area of this valuable staple.

Your Directors would also call your attention to another new feature in the advancement of your Society, viz: the establishment of a Branch Society at Little Current, under the title of "The Howland Agricultural Society." From the reports of this organization we have no doubt it will prove an able auxiliary to the advancement of the agricultural interests of that locality, and we have no doubt you will join with us in wishing them and all other branch institutions which may hereafter be formed in connection with this Society, every

success which such laudable efforts merit.

The Exhibition of the parent Society here was a success for the season, which has been wet and backward. The cereals exhibited were tair, the principal drawback being their dark colour, owing to the wetness of the harvesting season. The displays of Potatoes, Roots and Vegetables were such as to sustain the reputation of Algoma, to the effect that in these productions we have always shown ourselves second to none.

The display of Horses and Cattle was not one which would be considered good, but we submit was an improvement on that of the preceding season. As we have now the advantage of a good bull and other male animals of improved stock, we trust in a short time to find our

exhibitions in these departments more creditable.

The Sheep were in large number for this new country, and of surprisingly good quality. We were sorry to observe a desided falling off in the "Ladies' Department," and trust that this hitherto interesting feature of former exhibitions will not be allowed to depreciate in attraction, and hope our ladies will look to it in future.

#### Howland.

Dr.		\$ cts.	\$ cts,
To Members' Subscriptions	87 00		
" Admission Fees to Exhibition	6 00		
" Legislative Grant from Electoral Division Society	140 00		
" Municipal Orant	10 00		
Cr.			243 00
By Prizes for Horses, \$23; Cattle, \$26.75; Sheep, \$3.50;			
Pigs, \$6.25; Poultry, \$1.50	61 00		
" Prizes for Grains and Seeds, \$13.75; Roots and other hoed			
crops, \$8.50; Dairy Products, \$4; Vegetables, \$2.75;			
Ladies' Work, \$6	35 00		
		96 00	
" Exhibition Buildings and Grounds		17 68	
" Printing and Advertising		4 00	

\$ cts \$ cts.

By Working Expenses, including services of Secretary, Treasurer and Assistants	\$ cts.	30 98 148 66 94 34 agly spoken of.
BRANT, NORTH.  Dr.  To balance in hand, as per last Annual Report	\$ cts. 742 72 337 00 503 91 900 00 40 00 684 25  342 50 1,026 75	\$ cts. \$ cts.
Unpaid	122 50	904 25 41 50 280 00 52 38 7 00 84 20 291 75 
Balance in hand		002 00

#### REPORT.

The close of the year 1874 showed that the North Brant Agricultural Society, after a successful year, was in a prosperous condition financially, and your Directors have the satisfaction at the end of another term, of being able to state that the success which attended the management of their predecessors has not deserted them in the past year, but has increased, and they are enabled to meet you with the assurance that the interests of the Society have not been neglected by them during their tenure of office.

The usual Spring Exhibition of Horses and Bulls, and for the sale and exchange of

The usual Spring Exhibition of Horses and Bulls, and for the sale and exchange of Seeds, was held on the 16th of April, and prizes to the amount of \$108.50 were awarded, including a special prize of \$30, got up by subscription, and paid to Mr. C. M. Jarvis, the

owner of the best blood horse on the ground.

Although these spring fairs are not as large or as well attended as they might be, and cannot be considered successful, your Directors are of opinion that it is not advisable to relinquish them, as they hope that, in the course of a few years, they will become better known and be better attended.

The Annual Exhibition was held on the 7th and 8th of October, and was fully equal if not superior, to any previously held in this County. The Hall, which contained such departments of the Exhibition as belong to the first day, was very creditably filled, and there was a fine display of Ladies' Work, home-made Flannels, Blankets and Quilts. Crossing over to the opposite side, the Dairy department showed a marked improvement over the previous year, and the Grain and seeds were not deficient either in quantity or quality. The display of Fruit was very fine, and bore witness to the well-known character of this section of the country, as a fruit-growing district.

The show of Roots and Vegetables was not behind in any respect.

On the second day the Horse-Ring was the great centre of attraction, and here, as in former years, the Exhibition sustained its high reputation. Nor was the show of Cattle deteriorated, a number of fine animals being on the ground, which were successful in winning prizes.

It was considered by competent judges that the Sheep made the best display which had been seen at any show of the season, and that they were, on the whole, superior to those exhibited at Ottawa, and the Central Fairs at Guelph, Hamilton and London.

Pigs were also in excess of former years, and of superior breeds.

There was also a large and extensive display of Carriages and Implements, some of which were brought from a considerable distance, and showed great merit in their construction and finish.

#### Onondaga.

	•	
S cts.	S ets.	\$ cts.
9 68	т	п
79 50		
12 52		
140 00		
20 00		
		261 70
159 75		
71 75		
	231 50	
	11 00	
	22 90	
		265 40
		3 70
	9 68 79 50 12 52 140 00 20 00	9 68 79 50 12 52 140 00 20 00 159 75  231 50 11 00

Note.—The Exhibition, considering the unpropitious character of the weather, may be called a success. In some departments of live stock it was highly satisfactory.

#### Paris Horticultural Society.

Dr. \$ cts.	S	cts.	S	cts.
To balance in hand, as per last Annual Report 354 44			π	
" 54 Members' Subscriptions				
"Admission Fees to Exhibition 95 09				
" Legislative Grant from Electoral Division Society 140 00				
" Municipal Grant				
Cr			668	53
By Prizes for Fruits, \$100; Plants and Flowers, \$109; Vege-			000	
tables, \$114.25; Fine Arts, Ladies' Work, &c., \$120.50	443	75		
" Printing and Advertising, \$36.90; Musical Bands, \$25	61	90		

By Working Expenses, including services of Sceretary, Treasurer and Assistants		cts. \$	ets.	\$	ets.
	*****	88	54	594	19
Balance in hand				74	34

The President and Directors of the Paris Horticultural Society in presenting this their

Eighth Annual Report, beg leave to state:

That no amalgamation of your Society with the County Society of North Brant having taken place the past year, the Directors deemed it advisable, the funds of your Society being sufficient, to hold two exhibitions in 1875. and accordingly two Exhibitions were held, viz: on Dominion Day, and on the seventeenth day of September.

That the Exhibition held on Dominion Day, although many forebodings were entertained as to its success on account of the cold, backward season, was an extra good one, the very reason for which it was expected not to be a success, having been the cause of many of the articles shown being in a better state than they usually are in a hot, dry season, especially flowers, and several kinds of early Vegetables, although some of the fruit shown were hardly ripe enough for exhibition.

The number of entries at the July Exhibition are as follows: Flowers, 107: Fruit, 102; Vegetables, 109; Ladies' Work. Miscellaneous, and Fine Arts, 180, exceeding any

former Exhibition of your Society

That the Fall Exhibition held on the seventeenth day of Septem'er was a grand success and far exceeded the most sanguine expectations of your Directors, having been by all odds the best Fall Exhibition ever held by your Society, the number of entries laving been as follows: Flowers, 208; Fruit, 201; Vegetables, 214; Ladies' Work, Miscellaneous, Dairy Products, and Fine Arts, 235; in all 852.

Although it would seem almost invidious to single out any one class of articles exhibited at the Fall Exhibition , yet your Directors cannot close their report without commenting on the excellence of the apples, pears and grapes, nor do they consider it would be right to close their report without at least a passing notice on the surpassing excellence of several new varieties of hybrid strawberries exhibited, one of which in particular, bids fair to surpass its parent, Wilson's Albany, having all its market qualities without the severe acidity of that strawberry, and being of equal flavour to any of the best known varieties.

Your Directors on retiring most heartily congratulate your Society on its most complete success in 1875, and trust that the people of Paris, now that their town has taken an upward movement, will come forward in force and make that success more complete at the Exhibi-

tions to be held in 1876.

## BRANT, SOUTH.

Dr.	S ets.	\$ cts. \$	cts.
To balance in hand, as per last Annual Report	34 33		
" Members Subscriptions	254 00		
"Admission Fees to Exhibition	409 45		
" Legislative Grant, \$700; Municipal Grant, \$200	9 0 00		
· Rent of Grounds, &c	241 50		
" Borrowed	100 00		
" Miscellaneous	46 25		
Cr.		1,988	5 53
By Prizes for Horses, \$193; Cattle, 192; Sheep, \$178; Pigs,			
79; Poultry, \$48	690 CO		
" Prizes for Grains and Seeds, \$92.50; Roots and other hoed			
crops, \$29.75; Dairy Products, \$47.25; Fruits, \$63.25;			
	690 CO		

Plants and Flowers, \$27.25; Vegetables, \$24.25; Agri-	\$	cts.	\$	cts.	\$	cts.
cultural Implements, \$55; General Manufactures, \$7575; Ladies' Work, \$65.25	<b>4</b> 80	25				
Unpaid	,170 26	50	7.40			
By Portions of Legislative Grant paid to Township Societies "Paid on purchase of Exhibition Grounds, or on the erection		— 1	,143 280			
of buildings  " Paid for Agricultural or Horticultural Publications " Printing and Advertising				65 95 45		
"Working Expenses, including services of Secretary, Treasurer and Assistants			209	41	.911	31
Balance in hand				_		22
Burford.						
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Borrowed  "Miscellaneous	141 112 140 300	86 50 00 00	\$	cts.	<b>69</b>	cts.
Cr. By Prizes for Horses, \$63; Cattle, \$45.25; Sheep, \$56.75; Pigs, \$15.50; Poultry, \$8.25	188	75			730	36
Unpaid	314	00 75				
" Paid on purchase of Exhibition Grounds, or on the erection			304	25		
of buildings  " Printing and Advertising  " Working Expenses, including services of Secretary, Trea-			329 10	25 50		
surer and Assistants			54	50	698	3 50
Balance in hand					3	1 86
Brantford Horticultural Society.						
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  Admission Fees to Eshibition  Legislative Grant from Electoral Division Society  Municipal Grant  Miscellaneous	$   \begin{array}{r}     29 \\     140 \\     25   \end{array} $	90	Ş	cts.		cts.
8					46	6 49

	Prizes for Fruits, \$80.25; Plants and Flowers, \$51; Vegetables, \$54	\$ ets.  185 25 20 00	\$ cts.	\$ cts.
66	Preparing for Exhibition		205 25 22 00 49 15 34 25	
	Suroi and Hissistants ,,,, ,			310 65
	Balance in hand			155 84
	BROCKVILLE.			
Dr. To	balance in hand, as per last Annual Report	\$ cts. 22 78 768 00	\$ cţs.	\$ cts.
"	Admission Fees to Exhibition Legislative Grant, \$350; Municipal Grant, \$100 Miscellaneous	74 00 450 00 49 50		
Cr.		485 00		1,364 28
\$\$	Prizes for Grains and Seeds, \$53.15; Roots and other hoed crops, \$28; Dairy products, \$47.75; Growing Crops, \$115.50; Fruits, \$18.20; Vegetables, \$18; Agricultural Implements, \$12; General Manufactures, \$29;			
	Fine Arts, \$26.75; Ladies' Work, \$82.45; Discretionary, \$48.71	479 21		
	Unpaid	964 21 281 67	682 54	
46	Prizes for previous years paid		52 00	
56	of buildings  Printing and Advertising  Working Expenses, including services of Secretary, Trea-		414 63 66 60	
	surer and Assistants.		190 89	1,406 66
	Balance due Treasurer			42 38
Dr.	BRUCE, NORTH.	e ata	3	Ċ oto
То	balance in hand, as per last Annual Report	\$ cts. 18 45	o cus.	\$ cts.
6.4	Members' Subscriptions Legislative Grant	73 00		
6.6	Proceeds of Service	$ \begin{array}{ccc} 700 & 00 \\ 25 & 00 \end{array} $		
Cr.	Miscellancous	5 60		000.05
	Prizes for Horses, \$28; Cattle, \$16 "Reaping Match	44 00 24 00		822 05
			68 00	

By	Prizes for previous years paid	S	ets.	**	75	\$	cts.
	Exhibition Buildings and Grounds				00		
66	Purchase of Live Stock			218	30		
	Bank Discounts			10	10		
. 6	Printing and Advertising			10	50		
4.6	Working Expenses, including services of Secretary, Treasurer and Assistants			83	30		
						819	95
	Balance in hand					2	10

As you are aware our excellent Aricultural Act requires that we, the Directors of the North Riding of Bruce Electoral Division Agricultural Society, in common with other Societies, should now, before the term of our office expires, render unto you a full and detailed report of our proceedings during the past year, coupled with such remarks and suggestions as we may consider advantageous to the working of the Agricultural Societies of the County.

The Spring Show was held at Port Elgin on the 22nd day of April, and in briefly reverting to this, your Directors would point with gratification to the show of Horses on the grounds, being much larger in number and of a much better breed and culture than on any former occasion. In the class of Bulls, however, the entries were very meagre, this your Directors must attribute to the trouble and inconvenience of bringing these animals a long distance, but your Directors are pleased to find that there seems to be an increasing desire amongst the farmers of our County to infuse new blood into their agricultural stock, which we deem to be a most essential point in good farming.

As to the Reaping Match held in the Township of Saugeen on the 13th August, your Directors have only to say that the Match exceeded their best expectations; the day was fine, the attendance large, competition keen, and the work on the whole was well executed, and while not attempting to single out any particular machine for special praise, yet we are pleased to find that we have manufactured in our own Riding a machine which in many keen

contests has proved itself second to none manufactured in the Province.

After due consideration as to how the funds of the Society could be best expended for the benefit of the members, your Directors, at a meeting held early last spring, determined upon purchasing another young bull, in addition to the three thorough bred animals formerly owned by the Sceiety, which was accordingly done; and in order to carry out this determination the holding of a Fall Show had to be dispensed with, owing to the want of sufficient

funds to offer anything like a fair prize list.

We can congratulate ourselves as we look over the acres of our County, and note the improved condition of things presented by the farm and farm-yard, the past year has been one of great advancement throughout the County. The crops have been good in the main, and this state of matters showing plainly as it does that our soil is fertile and highly adapted to the growth of almost every variety of produce, and this, with increased facilities for travelling and marketing, justify us in representing our County as second to none in the Province. And with all these advantages there ought to be a grand inducement to make the honourable occupation of tilling the soil a little more attractive, and this can be obtained in a great measure through our Agricultural Societies, which to a great many of our farmers, generally speaking, seem to be a mere blank. Many individuals will not contribute the trifling sum of one dollar as a member's fee, until they are favoured with an opportunity of putting in return ten times the amount direct into their own pockets. Such a principle vested in any man is altogether at variance with the advantageous working of our Agricultural Societies. Such a feeling of disregard by our Agriculturists is nothing more than an insult to the Legislature of our Province, which deals very liberally with our Societies in making such a large grant as \$700 to each County Society.

While your Directors cannot congratulate the members on anything like a financial success for the Society, they feel that we have much reason to be thankful to the Giver of all

good for the many blessings we enjoy. Prosperity reigns amongst us; we have a sufficiency for man and beast; may these considerations make us truly thankful.

	Amabel and Albemarle.			
Dr.		\$ cts.	\$ cts.	\$ cts.
To	balance in hand, as per last Annual Report	14 47		
"	Members' Subscriptions	86 00		
	Admission Fees to Exhibition Legislative Grant from Electoral Division Society	$\begin{array}{ccc} 1 & 45 \\ 73 & 00 \end{array}$		
Cr.	Legislative Grant from Electoral Division Society	15 00		174 92
	Prizes for Horses, \$14.50: Cattle, \$15.50; Sheep, \$7.75;			111 02
		$43 \ 25$		
	Pigs, \$5.50 Prizes for Grains and Seeds, \$12.75; Roots and other hoed			
	erops, \$7.35; Dairy products, \$8.20; Fruits, \$5.25;			
	Plants and Flowers, \$0.75; Vegetables, \$1.25; Agri-			
	cultural Implements, \$2; General Manufactures, \$2.75;			
	Fine Arts, \$0.50; Ladies Work, 7.20; Ploughing Match, \$12	60 00		
	172000 tg (g/ Las 11111 1111 1111 1111 1111 1111 1111		103 25	
66	Preparing Grounds		12 20	
4.5	Printing and Advertising		6 50	
"	Working Expenses, including services of Secretary, Trea-		40.00	
	surer and Assistants		18 80	1.10.75
				140 75
	Balance in hand			34 17
	Databoo iii nana			01 21
	Arran.			
Dr.		@ ata	\$ cts.	\$ ets.
	balance in hand, as per last Annual Report	\$ cts. 86 75	\$ cts.	o cus.
	Members' Subscriptions	147 00		
66	Admission Fees to Exhibition	10 30		
66	Legislative Grant from Electoral Division Society	104 00		
	Proceeds of Service	2 00		
Cr.	D' 6. TT			350 05
Ву	Prizes for Horses, \$35; Cattle, 29.75; Sheep, \$12.50;	90 #5		
cc	Pigs, \$8.25; Poultry, \$4.25 Prizes for Grains and Seeds, \$25.75; Roots and other hoed	89 75		
	crops, \$12.20; Dairy Products, \$8.75; Fruits, \$7.25;			
	Vegetables, \$5; Agricultural Implements, \$24; Gen-			
	eral Manufactures, \$15; Ladies' Work, \$16	114 25		
			204 00	
44	Prizes for previous years paid		1 00	
"	Preparing Show Grounds		2 25	
46	Keep of Live Stock		$\frac{43}{17} \frac{00}{55}$	
66	Working Expenses, including services of Secretary, Trea-		11 00	
	surer and Assistants		53 30	
				321 10
	Balance in hand			28 95
	Bruce.			
Dr.		O -4	0 -1-	© oto
	balance in hand, as per last Annual Report	\$ cts. 62 22	\$ cts.	\$ cts.
"	Members' Subscriptions	99 00		
66	Admission Fees to Exhibition	8 10		
	11			

To Legislative Grant from Electoral Division Society	\$ cts. 63 00 20 00	\$ cts.	\$ cts.
Cr.  By Prizes for Horses, \$29.75; Cattle, \$35.25; Sheep, \$14.25; Pigs, \$2.25; Poultry, \$4.50  "Prizes for Grains and Seeds, \$19; Roots and other hoed crops, \$12.25; Dairy products, \$8.25; Fruits, \$10.50; Vegetables, \$13.50; Agricultural Implements, \$12.50;	86 00		202 <b>9</b> 2
Miscellaneous, \$22.25	98 25		
Unpaid	184 25 7 75	176 50	
" Prizes for previous years paid " Preparing Grounds		15 50 2 00 5 50	
"Working Expenses, including services of Secretary, Treasurer and Assistants		34 17	233 67
Balance in hand			18 65
Elderslie.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ cts. 85 75 188 00 30 79 119 00 12 00	\$ ets.	\$ ets.
" Miscellaneous Cr. By Prizes " Prizes for previous years paid " Preparing Exhibition Grounds " Printing and Advertising " Working Expenses, including services of Secretary, Trea-	233 75 49 25 17 70 10 25		435 54
surer and Assistants	40 00		350 95
Balance in hand			84 59
Saugeen.			
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Half of Surplus of County Show, 1874	\$ ets. 84 00 15 15 57 00 76 50	\$ ets.	\$ ets.
Cr.  By balance due the Treasurer, as per last Annual Report  "By Prizes for Horses, \$22: Cattle, \$21.50; Sheep. \$2325; Pigs, \$6.50; Poultry, \$1.50  "Prizes for Grains and Seeds, \$16.25; Roots and other hoed crops, \$7.25; Dairy products, \$8.75; Fruits, \$1.75; Plants and Flowers, \$0.25; Vegetables, \$3.25; Agri-	74 75	1 03	232 65
cultural Implements, \$15; General Manufactures, \$13.75; Ladies' Work, \$6.50	72 75	147 50	
19			

čc	Prizes for previous years paid Printing and Advertising Working Expenses, including services of Secretary, Treasurer and Assistants  Balance in hand	\$	ets.	5 6	cts. 00 50	189	42 23
	BRUCE, SOUTH.						
cc cc Cr. By	balance in hand, as per last Annual Report  132 Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant Grant from Culross  For Special Pfizes  Prizes for Horses, \$102.50; Cattle, \$106.75; Sheep, \$69.50; Pigs, \$24; Poultry, \$5.75  Prizes for Grains and Seeds, \$45; Roots and other hoed crops, \$15.75; Dairy products, \$18; Fruits, \$15.50; Plants and Flowers, \$0.75; Vegetables, \$15.50; Agricultural Implements, \$47.75; General Manufactures, \$13.50; Fine Arts, \$3.75; Ladies' Work, \$18.75	74 132 82 698 91 23 308	20 25 33 00  50	90	ets.	\$ <b>1,1</b> 01	cts.
66	Prizes for previous years paid Portions of Legislative Grant paid to Township Societies			418	50 92		
	Preparing Exhibition Grounds				77		
66	Printing and Advertising			27	30		
	surer and Assistants				00	1,103	24
	Balance due Treasurer					1	74

The Directors in making their annual report, are happy to be able to say that the society is in a healthy state, both financially and in the competition for prizes offered.

At the spring show held at Walkerton, there was a large number of entries made of live stock, many of which were very fine animals, and in cattle the most of the entries were thoroughbreds, some of which were purchased from the most prominent breeders in Ontario.

The Directors were pleased to find that the number of entries made for the Fall Show. which was held in the village of Teeswater, on the 6th and 7th October last, exceeded that of last year, but owing to the inclemency of the weather, a great many were prevented from bringing out all the stock and produce which they entered, which they otherwise would have done. Nothwithstanding this drawback the show was a decided success.

There was a large display of agricultural implements, including Reapers, Mowers,

Ploughs, &c., and also some very fine buggies on the ground.

In sheep and cattle there were some very fine animals exhibited. In these classes there seems to be a decided improvement; in the former class, the Leicesters and Cotswolds seem to take the lead, in the latter class the Durhams are the favourites. There seems to be a marked improvement in pigs from former years, there being some very fine animals exhibited.

The show of horses was not up to former years, although there were some excellent teams on the ground, the entries were not so numerous as what might be expected—there does not seem to be as much interest taken to try and improve in this class, as what there ought to be. In poultry there is little or no interest taken—the farmers do not seem to think this class of much importance.

The dairy produce was largely represented, especially in butter, the judges in this

class having great difficulty in deciding to whom the prize should be given.

The show of roots and vegetables was very good, there being some very large samples of potatoes and turnips shown, also, some very fine samples of vegetables; grains and seeds were fairly represented in the former class; the colour was not so bright as on some former years, owing, no doubt, to the wet harvest.

The ladies' department was well represented, there being quite a display in this class.

Б	T'	a	n	l	

Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	15 05		
" Members' Subscriptions  " Admission Fees to Exhibition	98 00 31 30		
" Legislative Grant from Electoral Division Society	33 98		
Cr.			178 33
By Prizes for Horses, \$22; Cattle, \$31.50; Sheep, \$19.75;			
Pigs, \$4.50	77 75		
"Prizes for Grains and Seeds, \$11; Roots and other hoed crops, \$5.50; Dairy products, \$12.25; Fruits, \$7;			
Vegetables, \$3; Agricultural Implements, \$4.75; Gen-			
eral Manufactures, \$6.50	50 00		
		127 75	
" Printing and Advertising		11 25	
" Working Expenses, including services of Secretary, Treasurer and Assistants		26 61	
OMIDA CHIM LENGIDOCHIOU speed and an annual speed an annual speed and an annual speed an annual speed and an annual speed an a		20 01	165 61
Balance in hand			12 72
Carrick,			
	0 -1-	(h)	
Dr.	\$ cts.	\$ cts.	\$ cts.
Dr. To balance in hand, as per last Annual Report " Members' Subscriptions	\$ cts. 53 29 101 00	\$ cts.	\$ ets.
Dr. To balance in hand, as per last Annual Report " Members' Subscriptions " Admission Fees to Exhibition	53 29	\$ cts.	\$ cts.
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society	53 29 101 00 10 65 49 32	\$ cts.	\$ cts.
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant.	53 29 101 00 10 65 49 32 30 00	\$ cts.	\$ cts.
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous Cr.	53 29 101 00 10 65 49 32	\$ ets.	*
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant. "Miscellaneous Cr. By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18:	53 29 101 00 10 65 49 32 30 00	\$ cts.	\$ cts. 264 9 <b>5</b>
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous.  Cr.  By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18;  Pigs, \$5.50; Poultry, \$4.50	53 29 101 00 10 65 49 32 30 00	\$ cts.	*
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous.  Cr.  By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18;  Pigs, \$5.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$17.25; Roots and other	53 29 101 00 10 65 49 32 30 00 20 69	\$ cts.	*
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous.  Cr.  By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18;  Pigs, \$5.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2;	53 29 101 00 10 65 49 32 30 00 20 69	\$ cts.	*
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr. By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18; Pigs, \$5.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2; Vegetables, \$0.25; Agricultural Implements, \$7.50	53 29 101 00 10 65 49 32 30 00 20 69	\$ cts.	*
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous  Cr. By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18;  Pigs, \$5.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2; Vegetables, \$0.25; Agricultural Implements, \$7.50; General Manufactures, \$5.25; Ladies' Work, \$6.75	53 29 101 00 10 65 49 32 30 00 20 69 123 25	\$ cts.	*
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous.  Cr. By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18; Pigs, \$5.50; Poultry, \$4.50.  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2; Vegetables, \$0.25; Agricultural Implements, \$7.50; General Manufactures, \$5.25; Ladies' Work, \$6.75  "Prizes for previous year	53 29 101 00 10 65 49 32 30 00 20 69 123 25		*
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr.  By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18; Pigs, \$5.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2; Vegetables, \$0.25; Agricultural Implements, \$7.50; General Manufactures, \$5.25; Ladies' Work, \$6.75  "Prizes for previous year  "Working Expenses, including services of Secretary, Trea-	53 29 101 00 10 65 49 32 30 00 20 69 123 25	177 25 41 25	*
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Miscellaneous.  Cr. By Prizes for Horses, \$41.50; Cattle, \$53.75; Sheep, \$18; Pigs, \$5.50; Poultry, \$4.50.  "Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$7.50; Dairy products, \$7.50; Fruits, \$2; Vegetables, \$0.25; Agricultural Implements, \$7.50; General Manufactures, \$5.25; Ladies' Work, \$6.75  "Prizes for previous year	53 29 101 00 10 65 49 32 30 00 20 69 123 25	177 25	*

Culross.			
Dr.	\$ cts.	\$ cts.	\$ ets.
To balance in hand, as per last Annual Report	29 87	"	
" Members' Subscriptions,	56 00		
" Legislative Grant from Electoral Division Society	$32 \ 33$		
Cr.			118 20
By Electoral Division Society for Union Show	59 00		
" " · · · · · · · · · · · · · · · · · ·	$32 \ 33$		
" Sundries	5 35		
			96 68
Balance in hand			11 52
Greenock.			
Dr.	S ets.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	17 10		
" Members' Subscriptions	97 00		
" Admission Fees to Exhibition	16 95		
" Legislative Grant from Electoral Division Society	40 55		
" Miscellaneous	15 50		
Cr.			187 10
By Prizes for Horses, \$24.50, Cattle, \$17.75, Sheep \$10, Pigs,			
\$2.50, Poultry, \$2	59 75		
" Prizes for Grains and Seeds, \$13; Roots and other hoed crops,			
\$7.75; Dairy Products, \$14.50; Fruits, \$4.25, Plants			
and Flowers, \$1; Agricultural implements, \$8.75,			
General Manufactures, \$9.75; Ladies Work, \$7.25.	66 25		
		123 00	
" For preparing Show Grounds		10 00	
" Printing and Advertising		5 50	
"Working Expenses, including services of Secretary, Trea-			
surer and Assistants,		21 29	
· ·			159 79
9			
Balance in hand			27 31
	•		
Kinloss.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand, as per last Annual Report	90 72		*
" Members' Subscriptions	170 00		
" Admission Fees to Exhibition	69 <b>2</b> 5		
" Legislative Grant from Electoral Division Society	76 00		
" Micellaneous	69 00		
Cr.			474 97
By prizes for Horses, \$31.25; Cattle, \$23.25; Sheep, \$20.25;			
Pigs, \$6.25; Poultry, \$5	87 00		
" Prizes for Grains and Seeds, \$17.25, Roots and other hoed			
erops, \$7.25; Dairy Products, \$15.25; Fruits, \$6;			
Vegetables. \$5.25; Agricultural Implements, \$14.75;			
General Manufactures, \$1.50; Ladies' Work, \$30.75	98 00		
, , , , , , , , , , , , , , , , , , , ,		185 00	
" Prizes for previous years paid		20 25	•
" Printing and Advertising		22 00	
"Working Expenses, including services of Secretary, Trea-			
surer and Assistants		75 87	
		1001	303 12
			000 12
Balance in hand			171 85
			111 00

Huron.						
Dr.	\$	cts.	\$	cts.	\$	cts.
To balance in hand, as per last Annual Report.		69				
" Members' Subscriptions"  " Legislative Grant from Electoral Division Society		$\begin{array}{c} 00 \\ 43 \end{array}$				
Cr.					114	12
Amount paid to West Bruce Agricultural Exhibition					106	43
Balance in hand					7	69
Kincardine, Huron, and Kincardine Horticultural Socie	ty (U	nion	Exhi	bition	.)	
Dr.	\$	cts.	\$	cts.	\$	cts.
To Balance in hand, as per last Annual Report of Kincardine	49	67				
Horticultural Society  "Members' Subscriptions of the three Societies	346					
" Admission Fees to Exhibition		00				
"Legislative Grant from Electoral Division Society	186					
" Miscellaneous	14	08			661	32
By Prizes for Horses, \$47.50; Cattle, \$31.25; Sheep, \$27.50;						
Pigs, \$17.50 : Poultry. \$51	174	15				
" Prizes for Grains and Seeds, \$33.50; Roots and other hoed crops, \$21.25; Dairy Products, \$25.50; Fruits, \$58.25;						
Plants and Flowers, \$29.25; Vegetables, \$27.50; Agri-						
cultural Implements, \$26.50; General Manufactures,						
\$42.50; Fine Arts, \$4.50; Ladies' Work, \$46.25	315	60	489	75		
" Printing and Advertising				85		
"Working Expenses, including services of Secretary, Trea-						
surer and Assistants			148	62	649	ออ
					049	
Balance in hand					12	10
Kincardine Horticultural Society.	Φ.	,	0	4.	(5)	
Dr. To balance in hand as per last Aunual Report	\$ 49		\$ (	ets.	\$	cts.
"Members' Subscriptions.	204					
" Legislative Grant from Electoral Division Society	110	69				
Cr.					364	36
By paid Treasurer of West Bruce Agricultural and Arts Association for Union Show	359	36				
" Working expenses	5	00				
					364	3
A L D D WITH T						
CARDWELL,	46.					
Dr. To belonge in hand, as nor last Annual Report.	\$ 6		\$ 0	ts.	S	cts.
To balance in hand, as per last Annual Report  "Members' Subscriptions	173					
"Admission Fees to Exhibition	105					
" Legislative Grant	<b>70</b> 0	00			000	0.4
Cr. By Prizes for Horses, \$94.25; Cattle, \$70.50; Sheep, \$50.40;					992	94
Pigs, \$25.30; Poultry, \$7	247	45				
16						

Ву	Prizes for Grains and Seeds, \$41.25; Roots and other hoed crops, \$21.30; Dairy products, \$27.15; Fruits, \$19; Plants and Flowers, \$3.20; Vegetables, \$13; Agricultural Implements, \$38; General Manufactures, \$19; Fine Arts, \$17.40; Ladies' Work, \$50	\$ ets.	\$ cts.	\$ cts.
66	Portions of Legislative Grant paid to Township Societies Preparing grounds Printing and Advertising. Working Expenses, including services of Secretary, Treas-		415 00 4 50 19 00	
	urer and Assistants		94 72	1029 97
				1029 91
	Balance due Treasurer			37 03
	Adjala.			
Dr. To	135 Members' Subscriptions	\$ cts.	\$ cts.	\$ cts.
66	Admission Fees to Exhibition	25 40 90 00		
Cr.				250 40
	balance due the Treasurer, as per last Annual Report Prizes for Horses, \$57.50; Cattle, \$35; Sheep, \$27; Pigs, \$13.50	199 00	36 59	
44	Prizes for Grain and Seeds, \$22.50; Roots and other hoed crops, \$23.50; Fruit, \$8.50; Vegetables, \$10; Agri-	133 00		
	cultural Implements, \$22.25; General Manufactures,			
	\$10.50	97 25	020	
	Preparing Grounds		230 25 9 00	
	Working Expenses, including services of Secretary, Treasurer and Assistants		65 98	341 82
	Balance due Treasurer			91 42
	Albion.			
66	balance in hand, as per last Annual Report  Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society  Miscellaneous	\$ cts. 3 19 192 00 176 00 148 50 46 35	\$ cts.	\$ cts.
Cr. By	Prizes for Horses, \$120; Cattle, \$50; Sheep, \$37; Pigs,			566 04
·	\$24; Poultry, \$6	237 00 133 50		
			370 50	
"	Exhibition Buildings and Grounds		93 88	
.,	Printing and Advertising		17 75	

Cr. By Working Expenses, including services of Secretary, Trea-	\$ cts.	\$	cts.	\$	cts.
surer and Assistants		75	80	557	7 93
Balance in hand				- {	3 11

Note.—The Exhibition was successful; prospects of the Society encouraging, and the convenient show grounds nearly out of debt.

# Caledon.

Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr.  By Prizes for Horses, \$62; Cattle, \$63; Sheep, \$46; Pigs, 27;	\$ cts. 259 34 215 50 156 65 129 00 50 00 2 80	\$ cts.	\$ cts.
Poultry, \$5.75  "Prizes for Grains and Seeds, \$39.50; Roots and other hoed crops, \$20; Dairy products \$21.25; Fruits, \$12; Plants and Flowers, \$7; Vegetables, \$10.50; Agricultural Implements, \$30; General Manufactures, \$30; Fine Arts, \$10; Ladies' Work \$20; Miscellaneous, \$13	212 75	416 50	
" Prizes for previous years paid " Preparing Grounds " Printing and Advertising \$30; Musical Bands, \$5 " Working Expenses, including services of Secretary, Treasurer and Assistants		28 75 5 00 35 00 130 96	616 01
			616 21
Balance in hand			197 08
Tecumseth.			
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant "Miscellaneous	\$ cts. 60 64 155 00 54 00 92 00 50 00 41 10	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$63.69; Cattle, \$42.46; Sheep, \$42.47; Pigs, \$21.23  "Prizes for Grain and Seeds, \$20; Roots and other hoed crops, \$22.75; Dairy products, \$7; Fruits, \$4; Vegetables. \$6; Agricultural Implements, \$13.50; General Manufactures, \$10; Fine Arts, \$6; Ladies' Work, \$15.	169 85 104 90	271 75	452 74
" Prizes for previous year paid " Exhibition Buildings and Grounds " Printing and Advertising		274 75 9 00 43 00 14 75	

Ву	Working Expenses, including services of Secretary, Treasurer and Assistants  Balance in hand	<b>**</b>	ets.	\$ cts. 34 20	\$ ets:  375 70  77 04
	CARLETON.				
Cr. By	Balance in hand, as per Annual Report	53 280 268	53 60 00 00 50 00 78	\$ ets.	\$ ets.
"	bition Working Expenses, including services of Secretary, Treasurer and Assistants	69	54		871 82
	Balance in hand				300 71
disp	Note.—In consequence of the Provincial Exhibition being pensed with its Annual Show.	g held	in (	ttawa, the	e Society
"	Fitzroy.  balance in hand, as per last Annual Report.  Members' Subscriptions.  Legislative Grant from Electoral Division Society.  Miscellaneous.	89 140	$\begin{array}{c} 24 \\ 00 \end{array}$	\$ cts.	\$ cts.
Cr. By	Prizes for Horses, \$49.50; Cattle, \$56; Sheep, \$15; Pigs, \$19; Poultry, \$4.25	143	- <del></del> 75		277 24
	plements, \$4.50; General Manufactures, \$25.75	126	00		
	Deduct as per By-law		30		
66	Exhibition Buildings and Grounds		-	147 45 50 60 40 00 4 00	
	surer and Assistants.			37 20	279 25
	Balance due Treasurer				2 01

19

$\it Mareh.$						
Dr.	\$	cts.	\$	cts.	\$	cts.
To balance in hand, as per last Annual Report	₩	75	₩		77	
" Members' Subscriptions	65	00				
" Admission Fees to Exhibition		00				
" Legislative Grant from Electoral Division Society	140	00			201	7 75
Cr					20	7 75
By Prizes for Horses, \$40.34; Cattle, \$41.06; Sheep, \$20.76; Pigs, \$11.65	113	81				
" Prizes for Grains and Seeds, \$33.81; Roots and other hoed	110					
Crops, \$14.80; Dairy products, \$7.92; Ploughing Match						
\$10.00	66	63				
Cr.			180	44		
By Working Expenses, including services of Secretary, Trea-			0.0	00	900	3 44
surer and Assistants			20	00	200	5 44
Balance in hand						1 31
Databoo II Haba						
CORNWALL.						
Dr.	\$	cts.	\$	cts.	8	cts.
To balance in hand, as per last Annual Report	272		w		77	
" Members' Subscriptions	137	00				
" Legislative Grant	300					
" Proceeds of Service	158					
" Miscellaneous	13	99			22	1 45
Cr. By Prizes for Horses, \$34.50; Cattle, \$29.25; Sheep, \$14.50;					00	1 40
Poultry, \$10.00	88	25				
" Prizes for Grains and Seeds \$29.00; Roots and other hoed						
crops, \$23.75; Dairy products, \$20.25; Fruits, \$5.00;						
Agricultural implements, \$41.00; General Manufactures,						
\$33.75; Discretionary Prizes, \$2.15	154	90	0.40	1 -		
(/ Dail or numbers of Live Steels			$\frac{245}{589}$	15 57		
" Paid on purchase of Live Stock "Printing and Advertising "				43		
Working Expenses, including services of Secretary, Trea-			10	10		
surer and Assistants			38	30		
					88	1 45
DUNDAS.						
D.,	0	ıta.	<b>@</b>	ata	S	ata
Dr.	\$ 0	ets.	\$	cts.	<b>D</b>	cts.
To Members' Subscriptions	309					
"Admission Fees to Exhibition	202					
" Legislative Grant" Saloons and Sheds	700	00				
" Proceeds of Note		00				
" Donation of President		00				
Cr.					141	1 94
By Prizes for Horses, \$67.37; Cattle, 113.84; Sheep, \$53.75;						
Pigs, \$6.27; Poultry, \$3.90	245	13				
20						

"	Prizes for Grains and Seeds, \$34.32; Dairy Products, \$10.62; Plants and Flowers, \$3.50; Vegetables, \$21.45; Agricultural Implements, \$23.66; General	\$ cts.	\$ cts.	\$ cts.
66	Manufactures, \$39.22; Fine Arts, Ladies' Work, \$25.49.  Portions of Legislative Grant paid to Township Societies Exhibition Buildings and Grounds Borrowed Money and Interest.  Printing and Advertising  Working Expenses, including services of Secretary, Trea-	158 26	403 39 361 00 120 00 101 50 58 58	
	surer and Assistants		127 20	1171 67
and	Balance in hand	ive Stock e careful	: Horses	240 27 s, Cattle
	Williamsburg.			
Dr.	· ·	\$ cts.	\$ cts.	\$ cts.
	balance in hand, as per last Annual Report	7 26		
	Members' Subscriptions	$\frac{126}{30} \frac{00}{00}$		
61	Admission Fees to Exhibition	140 00		
	Miscellaneous	5 00		
Cr.				
	Prizes for Horses, \$26.50; Cattle, \$45.70; Sheep, \$12; Poultry, \$1	85 20		
	\$27.70; General Manufactures, \$14.90; Ladies' Work,			
	\$15.25	90	^-	
-	71.		175 90	
By	Prizes for previous years paid		$17   45 \\ 60   00$	
	Exhibition Buildings and Grounds, fitting up, etc., Printing and Advertising		25 00	
66	Working Expenses, including services of Secretary, Trea-		-0 00	
	surer and Assistants		28 69	
				307 04
	Delever in Level			1 22
	Balance in hand.	1	the	
qui	Note.—The Exhibition, notwithstanding the unfavourable up to previous years.	leness of	tne weatr	ier, was
	Winchester.		•	
Dr.		\$ ets.	\$ cts.	S cts.
To	Members' Subscriptions.	67 00 81 00		
Cr.	Legislative Grant from Electoral Division Society			148 00
	Prizes for Horses, \$35.75; Cattle, \$35.20; Sheep, \$8.25;			
	Pigs, \$7.50; Poultry, 75cts	87 45		
66	Prizes for Grains and Seeds, \$7.75; Roots and other hoed			
	crops, \$4; Dairy products, \$9; Fruits, \$1.50; Vege-			
	tables, \$2.50; Agricultural Implements, \$15.50; General Manufactures, \$9.25; Ladies' Work, \$6.50	56 00		
	crar manuractures, words, matter work, words		143 45	
	91			

By Exhibition Buildings and Grounds " Printing and Advertising" " Working Expenses, including services of Secretary, Trea-	\$ cts.	\$ cts. 3 00 13 26	\$ ets.
surer and Assistants		21 93	181 64
Balance due Treasurer			33 64
·			
DURHAM, EAST.			
Dr. To Members' Subscriptions	\$ ets. 101 00 700 00	\$ ets	\$ ets.
Cr. By balance due the Treasurer, as per Annual Report Portions of Legislative Grant paid to Township Societies Paid on purchase of Exhibition Grounds Central Exhibition, Peterborough	7 67 420 00 100 00 150 00		801 00
" Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants.	15 34 36 00		
Suite and Assistants			729 01
Balance in band			71 99

The Society did not hold an exhibition this year, but united with a number of other Riding and Township Societies, in holding a central exhibition at Peterborough. The sum of one hundred and fifty dollars was voted by the Directors out of the funds of this Society for that purpose. The sum of one hundred dollars has been applied to a fund for procuring land for exhibition purposes at Port Hope, in connection with the Township of Hope Society.

A meeting was held at Port Hope on the 8th of February, when delegates from nearly all the societies, both Riding and Township, in district No. 5 were present, and arrangements are being made for holding a grand central exhibition at Port Hope, in the fall of this year. The people are tired of the small exhibitions, and there seems to be a desire to have the

Riding Societies done away with, and District Societies established.

The united societies in this district have agreed to hold their shows at Peterborough, Port Hope, Lindsay, and Cobourg, in rotation. The show at Peterborough, last fall, was a decided success, and we are encouraged to expect a show at Port Hope this year on a far more extensive scale, but it is doubtful whether these associations can be perpetuated, unless there is some change in the statute to meet these cases. We suppose the best way would be to hold a convention in Torouto, some time before the next meeting of the Ontario Legislature, when representatives could be sent from the different societies, and the matter be fairly discussed.

Cavan.					
Dr.	S ets.	S	cts.	S cts.	
To Members' Subscriptions					
" Admission Fees to Exhibition	103 88				
" Legislative Grant from Electoral Division Society	140 00				
Cr.				474 88	
By balance due the Treasurer, as per last Annual Report			5 50		
"Prizes for Horses, \$47; Cattle, \$18; Sheep, \$22; Pigs,					
\$12; Poultry, \$3	103 00				

By Prizes for Grains and Seeds, \$22; Roots and other hoed crojs, \$18; Dairy products, \$10; Fruits, \$6; Plants and Flowers, \$4; Vegetables, \$8; Agricultural Implements, \$10; General Manufactures, \$4; Fine Arts, \$2; Ladies' Work, \$9.30	9:	ets.		cts.	\$	ets.
" Exhibition Buildings and Grounds " Paid for Agricultural or Horticultural Publications" " Printing and Advertising			30 161	00		
surer and Assistants			33	00	455	2 80
Balance in hand					22	2 08
Hope.						
Dr. — To balance in hand, as per last Annual Report	$\begin{array}{c} \$ \\ 72 \\ 122 \\ 109 \end{array}$	77 00	\$	cts.	\$.	ets
Cr. By Prizes for previous years paid  Exhibition Buildings and Grounds  Central Exhibition, Peterborough  Printing and Advertising					303	82
"Working Expenses, including services of Secretary, Treasurer and Assistants"			25	00	160	62
Balance in hand  Note.—The Society united with other Societies, County a Peterborough a Central Exhibition, which proved highly success  Manvers.		owns	ship, i	in he		20 g at
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant	\$ 46 121 59 92 15	67 00 71 40 00	\$	ets.	\$	cts.
" Miscellaneous	33	00			367	78
By Prizes for Horses, \$105; Cattle, \$15.50; Sheep, \$21.50; Pigs, \$8.50; Poultry, \$2.75	155	25				
Implements, \$10; General Manufactures, \$16.50; Fine Arts, \$5; Ladies' Work, \$16.75	89	25	040	50		
" Prizes for previous years paid.  " Grant to Peterboro' Central Exhibition.  " Printing and Advertising.			242 6 ( 50 ( 11 (	00		
"Working Expenses, including services of Secretary, Treasurer and Assistants			58 8	84	368	34
Balance due Treasurer						5.6
Datance due Treasurer					U	56

Port Hope Horticultural Society.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions	\$ cts. 164 00 78 00 58 64 78 55 5 00	\$ cts.	\$ cts-
Cr. By Fruits, \$15; Plants and Flowers, \$74.50; Vegetables, \$32.75  "Fine Arts, \$39.50; Ladies' Work, \$5; Birds, \$19.25  "Extra Prizes	119 25 54 75 18 79		304 21
" Exhibition (preparing for)"  Printing and Advertising, \$26; Musical Bands, \$10  Working Expenses, including services of Secretary, Trea-		162 79 22 00 36 00	
surer and Assistants		36 50	287 29
Balance in hand			96 92
DURHAM, WEST.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant  "Darlington Society for Union Show  "Miscellaneous  Cr.  By Prizes for Horses, \$245; Cattle, \$162; Sheep, \$102; Pigs, \$38.50; Poultry, 14.50  "Prizes for Grain and Seeds, \$37.50; Roots and other hoed crops, \$29; Dairy Products, \$22; Growing Crops, \$31; Fruits, \$48.25; Plants and Flowers, \$27.50; Vegetables,	\$ ets. 65 19 110 00 840 46 700 00 219 25 31 75 562 00	\$ cts.	\$ ets.
\$45.62; Agricultural Implements, \$67; General Manufactures, \$60.25; Fine Arts, \$10.75; Ladies' Work, \$64.75	445 62	1007 60	
" Portions of Legislative Grant paid to Township Societies " Paid on purchase of Exhibition Grounds and preparation " Printing and Advertising		1007 62 398 50 344 26 30 20	
surer and Assistant		77 65	1858 23
Balance in hand			108 42

Your Directors take pleasure in tendering you their congratulations on the close of their

labours for another year.

To the members of this Society it must be a gratifying fact, that every year of its history has witnessed an advance on the year preceding, and it affords your Directors no little satisfaction to be able to report that, notwithstanding the financial pressure now bearing so heavily on every branch of industry, the year now closed is not an exceptional one in this respect, but that the Society has maintained even more than its ordinary rate of advancement.

A. 1877

The memberships of the united societies show an increase of 46 over last year; and the total receipts have advanced from \$1,672 to \$1,901. Over \$1,000 have been paid in prizes; \$328 on purchase of ground; and after meeting every other liability, the respectable sum of \$108 remains in the hands of the Treasurer, being \$43 more than the amount on

hand at the commencement of the year.

The two exhibitions held were a great success, especially the Fall Show, which was the most complete and extensive of any ever held in the County. The entries were 130 in advance of any former year, and the amount realized for admission to the grounds, notwithstanding that free admission tickets were furnished to the members-which had not been done beforereached the large sum of \$840, being \$150 in advance of the amount received in any former year.

As the union between this Society and the Darlington Branch Society continues to work to the entire satisfaction of all concerned, your Directors recommend that the same be continued

during the coming year.

Your Directors are happy to learn from the reports of the Branch Societies received, that

they are also in a prosperous condition.

Your Directors invite your careful consideration to a communication that will be laid before you, asking this Society to co-operate in a union central exhibition to be held in the Town of Port Hope next fall, and also to documents which will be submitted inviting us to assist in a display of Canadian products at the American Centennial Exhibition, to take place

in the city of Philadelphia, during the present year.

As any sketch of the history of this Society for the past year, however brief, clothed only in bright colours, would be very imperfect, your Directors must be permitted to add one tint of a sombre hue. The startling and melancholy fact must be still fresh in the mind of every member of this Society, that no less than three members of your Board of Directors have during the year passed away from the labours of earth; William Renwick and John Bellwood, Esqs., the two Vice-Presidents of the Society, and Matthew Joness, Esq., a Director and Ex-President, gentlemen prominently connected with this Society throughout its whole history, and who were ever foremost to promote; its interests—gentlemen who did much to make this Society what it has been, and what it is to-day. Their places will be hard to fill, and their familiar faces will long be missed, not only here, but throughout the Province, for they had, as agriculturists, a Provincial as well as local celebrity. Their colleagues can but sorrowfully record this last expression of appreciation of their friends' exalted worth, and reverently accept the admonition which their sudden and almost simultaneous departure so forcibly supplies, that life's labours with us all will soon be done, and with some of us much sooner perhaps than may be expected.

	Cartwright.				
Dr.		\$ ets	. \$	cts.	\$ cts.
То	Balance in hand, as per last Annual Report	71 48			
66	Members' Subscriptions	196 00			
66	Admission Fees to Exhibition	125 00			
66	Legislative Grant from Electoral Division Society	140 00			
Cr.		angun Parthing samus			532 48
Ву	Prizes for Horses, \$112.50; Cattle, \$52.50; Sheep, \$54;				
Ť	Pigs, \$21; Poultry, \$3.75	243 75			
46	Prizes for Grains and Seeds, \$22; Roots and other hoed				
	crops, \$5; Dairy Products, \$12: Fruits, \$9.75; Vegeta-				
	bles, \$4.50; Agricultural Implements, \$8.50; General				
	Manufactures, \$12.50; Ladies' Work, \$44	118 25			
			362	00	
66	Prizes for previous years paid		6	75	
66	Preparing Buildings and Grounds		20	00	
66	Printing and Advertising for two years		25	25	
66	Working Expenses, including services of Secretary, Trea-				
	surer and Assistants		48	48	
					462
	Balance in hand				70 00

Clarke.				
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society  Municipal Grant  Miscellaneous	\$ ets 256 61 216 00 231 90 140 00 100 00 13 00	. \$ cts.		cts.
Cr. By Prizes for Horses, \$113; Cattle, \$39; Sheep, \$24; Poultry, \$20 25	236 25		957	51
crops, \$12; Dairy products, \$18.75; Fruits, \$19; Plants and Flowers, \$8.25; Vegetables, \$13; Agricultural Implements, \$39; General Manufactures, \$25.75; Fine Arts, \$22.50; Ladies' Work, \$68.75	265 00	501 25		
<ul> <li>Preparing Exhibition Buildings and Grounds</li> <li>Printing and Advertising, \$35.55; Musical Bands, \$16</li> <li>Working Expenses, including services of Secretary, Treasurer and Assistants</li> </ul>	ganggal makada SEP Tan Pilipin SEP TAN	501 25 91 50 51 55 74 45		
Surer and Assistants			718	75
Balance in hand			238	<b>7</b> 6
Dr.  To Members' Subscriptions  'Legislative Grant from Electoral Division Society	\$ cts. 133 00 99 75	\$ cts.	\$ (	cts.
County Society for Union Show	${219} {25}$ ${13} {50}$		232	75
Note.—The union of the Society with that of the County that a continuance thereof is strongly recommended.	has work	ed so satis	232 factori	
DUFFERIN.				
Dr. To Members' Subscriptions  " Admission Fees to Exhibition  " Legislative Grant, \$280; Municipal Grant, \$75  " For special prizes	\$ cts. 208 00 320 00 355 00 400 00		\$ c	
Cr. By Prizes for Horses, \$160; Cattle, \$125; Sheep, \$70; Pigs, \$45; Poultry, \$30	430 00		1283	00
plements, \$105; General Manufactures, \$100; Fine Arts, \$45; Ladies' Work, \$52 " Printing and Advertising, \$63; Musical Bands, \$25	687 00	1117 00 88 00	205	00
Balance in hand		_	78	00

	Garafraxa, East.			
Dr.		\$ cts.	\$. ets.	\$ cts.
To	Members' Subscriptions	117 00		
66	Admission Fees to Exhibition	47 70		
66	Legislative Grant from Electoral Division Society	104 16		
Cr.				268 86
Ву	balance due Treasurer, as per last Annual Report		38 78	
66	Prizes for Horses, \$31.50; Cattle, \$29; Sheep, 30.50;			
	Pigs, \$9.75; Poultry, \$3	103 75		
	Prizes for Grains and Seeds, \$16.75; Root and other hoed			
	crops, \$12.50; Dairy products, \$11.25; Fruits, \$4;			
	Agricultural Implements, \$10.50; General Manufac-	79.00		
	tures, \$5.25; Ladies' Work, \$12.75	73 00	170 75	
61	Driggs for provious years raid		176 75	
46	Prizes for previous years paid		8 00	
66	Printing and Advertising		10 50	
	surer and Assistants		21 08	
	Sulti and Thisistands			255 11
	Balance in hand			13 75
	Melanethon.			
Dr.	111 0000110110110	\$ cts.	\$ cts.	\$ cts.
	balance in hand, as per last Annual Report	53 34	Ψ στοι	Ψ
	Members' Subscriptions	85 00		
64	Admission Fees to Exhibition	35 85		
66	Legislative Grant from Electoral Division Society	79 00		
6.6	Miscellaneous	15 50		
Cr.				268 69
	total amount of Prizes		81 75	
	Prizes for previous years paid		30 25	
((	Preparing Show Grounds		7 00	
46	Printing and Advertising		30 10	
	Working Expenses, including services of Secretary, Treasurer and Assistants		35 27	
	sarci and Assistants		30 21	184 37
				104 01
	Balance in hand			84 32
	Mulmur.			
Dr.		\$ cts.	\$ ets.	\$ ets.
	Members' Subscriptions	56 00	,	"
66	Admission Fees to Exhibition	24 00		
66	Legislative Grant	50 00		
Cr.				130 00
By	Prizes for Horses, \$19.50; Cattle, \$13.50; Sheep, \$6;			
	Pigs, \$6; Poultry, \$3	48 00		
6.6	Prizes for Grain and Seeds, \$9; Roots and other hoed crops,			
	\$9.25; Dairy Products, \$6.25; Fruits, \$7.25; Vege-			
	tables, \$4.75; Agricultural Implements, \$19.50; Ladies'	70.95		
	Work, \$14.25	70 25	118 25	
66	Working Expenses		2 75	
	0 2 possess			121 00
	Balance in hand			9 00
	. 27			

DUNDAS.						
Dr. To Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant "Saloons and Shows "Proceeds of Note "Miscellaneous	\$ 309 202 700 94 96 10	90 00 00 00	\$	cts.	\$	ets.
Cr. By Prizes for Horses, \$63.37; Cattle, \$113.84; Sheep, \$57 75; Pigs, \$6.27; Poultry, \$3.90  "Prizes for Grains and Seeds, \$34.32; Dairy Products, \$10.62; Plants and Flowers, \$3.50; Vegetables, \$21 45; Agricultural Implements, \$23.66; General Manufactures, \$31.42; Ladies' Work, \$25.49; Leather, &c., \$7 80	245 158		403	20	1411	94
" Portions of Legislative Grant paid to Township Societies " Exhibition Buildings and Grounds" " Paid borrowed money and interest" " Printing and Advertising" " Working Expenses, including services of Secretary, Treasurer and Assistants			361 120 101 58 127	00 00 50 58	1314	81
Balance in hand					97	13

Note.—The Exhibition was not inferior to any of its predecessors, and clearly indicated the advantages of improved breeding in the various classes of Live Stock.

## Williamsburgh.

Dr. To balance in hand, as per last Annual Report "Members' Subscriptions. "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Miscellaneous	7 126 30 140	26 00 00	63	cts.	8	ets.
Cr.					308	26
By Prizes for Horses, \$26.50; Cattle, \$45.70; Sheep, \$12; Poultry, \$1	85	20				
\$5.25; Vegetables, \$13.20; Agricultural Implements, \$27.70; General Manufactures, \$14.90; Ladies' Work, \$15.25	90	70	175	90		
" Prizes for previous years paid			17	45		
" Exhibition Buildings			60	0 0		
" Printing and Advertising " Working Expenses				00 69		
					307	04
Balance in hand					1	22

Note.—Notwithstanding the unfavourable weather the Fall Show proved very satisfactory.

	Winchester.			
Dr.		\$ cts.	\$ cts.	\$ cts.
	Members' Subscriptions	67 00 81 00		
Cr.	Prizes for Horses, \$35.75; Cattle, \$35.20; Sheep, \$8.25;			148 00
	Pigs, \$7.50; Poultry, \$0.75	87 45		
44	Prizes for Grains and Seeds, \$7.75; Roots and other hoed crops, \$4; Dairy Products, \$9; Fruits, \$1.50; Vege-			
	tables, \$2.50; Agricultural Implements, \$15.50; Gen-	<b>EC</b> 00		
	eral Manufactures, \$9; Ladies' Work, \$6.50	56 00	143 45	
By	Exhibition Buildings Printing and Advertising		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	Working Expenses		21 93	
				181 64
	Balance due Treasurer			33 64
	ELGIN EAST.			
Dr.		\$ cts.	\$ cts.	\$ cts.
10	Members' Subscriptions	$112 00 \\ 119 00$		
66	Legislative Grant Sale of Land	700 00		
Cr.				,931 00
	balance due the Treasurer, as per last Annual Report Prizes for Horses, \$90.50; Cattle, \$119.00; Sheep, \$75.50;		139 38	
	Pigs, \$26.50; Poultry, \$8.48	319 98		
**	Prizes for Grains and Seeds, \$57.75; Roots and other hoed crops, \$14.00; Dairy products, \$14.50; Fruits, \$17.75;			
	Vegetables, \$7.81; Agricultural Implements, \$14.00; General Manufactures, \$10.50; Fine Arts, \$9.47; Ladies'			
	Work, \$28.00	173 76		
		493 74		
D.,	Unpaid	102 00	391 74 7 83	
66	Prizes for previous year paid		418 00	
66	Paid on purchase of Exhibition Grounds Printing and Advertising	]	1,000 00 $54 75$	
	Working Expenses, including services of Secretary, Trea-			
	surer and Assistants		75 32 :	2,087 02
	Balance due Treasurer			156 02
	Danielo du Honstof mining			100 02
	ELGIN, WEST.			
Dr.	balance in hand, as per last Annual Report	\$ cts. 304 83	\$ cts.	\$ cts.
66	Members' Subscriptions	197 00		
66	Admission Fees to ExhibitionLegislative Grant	346 60 700 00		
66	Miscellaneous	10 00		1550 49
				1558 43

Cr. By Prizes for Horses, \$133 25[; Cattle, \$140 75; Sheep, \$81 50; Pigs, \$54; Poultry, \$13 50	\$ cts.	\$ cts.	\$ ets.
tures, \$56; Fine Arts, \$20 85; Ladies' Work, \$23 30  "Prizes for previous year paid"  Portions of Legislative Grant paid to Township Societies	276 42	699 42 3 <b>75</b> 280 00	
" Exhibition Buildings and Grounds " Working Expenses, including services of Secretary, Treasurer and Assistants		270 00 281 76	1,54,00
Balance in hand			1534 93 23 50
Dr. To Members' Subscriptions "Admission Fees to Exhibition "Iegislative Grant from Electoral Division Society	\$ cts. 105 00 21 72 140 00	\$ cts.	\$ cts.
Cr.  By balance due the Treasurer as per last Annual Report  "Prizes for Horses, \$36.75; Cattle, \$25.50; Sheep, \$22; Pigs, \$6; Poultry, \$2  "Prizes for Grains and Seeds, \$13.75; Roots and other hoed crops, \$5.35; Dairy products, \$3.45; Fruits, \$3.15; Plants and Flowers, \$0.95; Vegetables, \$2.25; Agricul-	92 25	10 39	266 72
tural Implements, \$3.50; General Manufactures, \$9.75; Ladies' Work, \$7.55	49 77	142 02 18 80 15 18 31 85 22 25	
Balance in hand			$\frac{240 \ 49}{26 \ 23}$
Southold and Dunwich.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Sale of Stock, \$50.00; Proceeds of Service, \$468  "Miscellaneous	\$ cts. 36 52 180 00 67 88 140 00 518 00 17 00	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$30.85; Cattle, \$43.15; Sheep, \$12.25; Pigs, \$15.25; Poultry, \$9.60 "Prizes for Grain and Seeds, \$10.40; Roots and other hoed crops, \$6.50; Dairy Products, \$17.10; Fruits, \$5.30; Plants and Flowers, \$1.25; Vegetables, \$1.85; Agri-30	111 10		959 4(

Cr.	cultural Implements, \$12; General Manufactures, \$1240; Ladies' Work, \$26.30	\$ 93	cts.	\$ 204		\$	cts.
	Preparing Grounds.  Paid on purchase of Exhibition Grounds, or on the erection of buildings.  Keep of Live Stock.  Printing and Advertising, \$16.50; Musical Bands, \$15  Working Expenses, including services of Secretary, Treasurer and Assistants.			179 345 31			
						876	35
	Balance in hand					83	05
	- Dagny North						
	ESSEX, NORTH.						
66	balance in hand, as per last Annual Report	\$ 36 117 35 700 51	00 00 00	\$	cts.	\$	cts.
Cr. By	Prizes for Horses, \$120.50; Cattle, \$32.50; Sheep, \$24; Pigs, \$67; Poultry, \$12.55	256	55			939	07
66	Portions of Legislative Grant paid to Township Societies Printing and Advertising Working Expenses, iucluding services of Secretary, Treassurer and Assistants						
				-		905	22
	Balance in hand					33	85
	REPORT.						

Organized so late as February last, and officered, with one or two exceptions, by gentlemen who previously had taken no leading part in the administration of the affairs of Agricultural Societies, it could not have been expected that anything extraordinarily great could be accomplished by the North Essex Society at its initial exhibition; yet we make bold to say, that all things considered, neither the Society nor the Riding suffered much in reputation from last October's display.

The weather for a day or two prior to the opening of the exhibition, was such as to create fears of coming rains, and these indications had the effect of deterring many who would otherwise have been exhibitors, from making their entries, they being unwilling to expose their products during wet weather in rough board buildings, or their live stock in shedless yards; and on the exhibition days the anticipated showers descended so continuously as to render moving about at any time after the first morning very unpleasant, to make the work of the judges well nigh impossible of performance, and to necessitate the closing of the show at noon,

on the second day. Despite all hindrances and disadvantages under which the management laboured, however, the exhibition was creditable in most of the departments, and noticeably deficient only in those in which Essex has always failed, viz: horned cattle, heavy draught horses, and sheep.

The fine grains exhibited were good in every respect but colour, their brightness having been marred by rain during the progress of harvest operations. The coarse grains all commended themselves to the admiration of spectators; especially so in the case of the several

varieties of Indian corn.

The most noticeable feature of the display of farm products, was the truly magnificent array of field roots—mangolds, carrots, turnips and sugar-beets—reminding old visitors of agricultural shows of the splendid results accomplished by the agriculturists of the eastern counties of the Province, where farming is more systematically and scientifically pursued than in this western portion of the Peninsula; where such splendid roots are produced, it is quite plain that the farmers are industrious, intelligent and progressive. As a rule, large crops of roots mean stall-fed cattle for the shambles, and stall-fed cattle as surely indicate thorough tillage, enriched soil and highly profitable farming. Let us hope that the impetus given last year by a portion of our members to the larger cultivation of field roots for stockfeeding may rapidly extend to all parts of the Riding. The contributions to the dairy department were few in number, but creditable in the quality of the produce. All the cheese and butter exhibited was purchased on the spot at good figures by the merchants of the town, and ten times the quantity would readily have found buyers, showing in a pecuniary sense, it is advantageous to producers to put their products on exhibition.

Of the horses competing, the great majority were adapted for the lighter kinds of work, but they embraced fair specimens of the several classes represented, and some were exceedingly good ones. While there were a few heavy animals, a lamentable scarcity of what are known as draught horses was noticeable. A large infusion of the heavy, yet active and symmetrical Clydesdale of modern days, among the horse-stock of the county, would undoubtedly prove

a great boon to the farmers.

The cattle shown were few in number, and generally of a very ordinary character. Our farmers have seemingly yet to learn that by the introduction of thorough-breds, a great direct gain is acquired in the case of any animal sold from the farm, to say nothing of the advantage that accrues to the dairy, when high grade cows only are kept. In this connection it is pleasant to know that the more enterprising of the farming community are putting forth their best efforts towards bringing into the Riding more pure-bred stock animals, hoping hereby to encourage all to improve the character of their cattle; and for this those men merit and should receive the thanks of the Society.

With regard to the sheep exhibited, the remarks concerning cattle will apply with equal force. The indifference with which farmers here view the prodigious strides made by those of other sections, in almost every respect less favoured than our own, towards the improve ment of their flocks is indeed surprising, when we know that the cost of raising an animal that if offered for sale will fetch ten dollars, is no greater than of raising one that would command half the price. The sheep that were shown possessed a good deal of merit, particularly a few pens; but the number was insignificant, and no greater than one of our large farmers

ought to be able to exhibit.

The swine constituted one of the great features of the exhibiton, for which the thanks of the Society are due principally to Messrs. Wright & Butterfield, who made a display that could not have been surpassed, if equalled, by any single firm in America. Other exhibitors showed fine animals, also; and it would be a grand thing for the North Riding of Essex if all the other live stock classes could be brought up to the standard reached in the one devoted to swine.

The display of fruit was good so far as it extended, but the entries were much too few. An unfortunate mistake was the cause of a great dissatisfaction to the exhibitors of this class,

and resulted in no awards being made.

The department of home manufactures was not as well filled as it should have been, in any branch, but a beginning was made that will doubtless result in greater and more general efforts in future years. The contributions in the ladies' department afforded much encouragement to increase the premiums in some classes, and at the same time pointed to the necessity of dropping altogether or largely curtailing those in others. The judges officially directed

attention to the fact that quite a number of prizes were offered for articles which are now but very seldom made, being out of fashion.

Our show, as others throughout the country have done, evinced a growing desire for better provision than hitherto for competition among those who give attention to breeding what is termed fancy poultry, and it might conduce to the pecuniary advantage of the Society

if the premiums in this department were made more attractive and comprehensive.

You will observe that while we claim credit for the results thus far accomplished by the Society, as illustrated by its competitive meeting, we have not hesitated to notice the defects of that gathering, and some of the causes that contributed thereto, believing that no permanent good can be attained by glossing over with soft words those spots upon our record that were either within or beyond our control. So because wholly successful and as useful as such an organization ought to be, we must be quick to spy out all faults and hindrances, and stand ever ready to apply the necessary remedies with a fearless hand. In this connection we make a few suggestions to be acted upon or rejected, as in your judgment may seem best. It would appear absolutely indispensable that the Society should have within its control, if not absolutely own, a permanent Exhibition Building, weather-proof, with ample grounds and sheds in connection therewith. Exhibitors will not expose costly goods or valuable animals to the caprices of the weather. Complaints upon that score have been numerous since the Fall Show. How this improvement is to be made it is not our purpose here to show, further than to say that perhaps it would be well, if the law permits, to employ the revenue of the Society for a year, supplemented by private or municipal subscriptions, to the purchase of a site and the erection of a proper hall and outbuildings. It would undoubtedly be better to do without an exhibition for a season than to continue in the old path.

Field roots—turnips, carrots and mangold wurtzels—might be judged by a good large

committee in the fields where grown, at a different time to that of holding the fair.

Entire horses and bulls should be pronounced upon by a committee in March or April,

and not permitted on the grounds during fair days.

In closing this Report we desire to allude to the experiments made last summer by quite a number of our members to test the adaptability of the soil and climate of this locality for the cultivation of beet for sugar-making purposes. These experiments proved remarkably successful, the crop in every case being enormous and the quality of the vegetables all that could be desired.

### Maidstone and Sandwich, East.

	\$ cts.	\$ ets.	\$ cts.
balance in hand, as per last Annual Report	97 52		
Members' Subscriptions	81 00		
Legislative Grant from Electoral Division Society	130 72		
Sale of Stock	$13 \ 25$		
			322 49
Live Stock		135 00	
Working Expenses, including services of Secretary, Trea-			
surer and Assistants		23 01	
			158 01
Balance in hand			164 48
	Members' Subscriptions.  Legislative Grant from Electoral Division Society  Sale of Stock.  Live Stock  Working Expenses, including services of Secretary, Treasurer and Assistants.	balance in hand, as per last Annual Report 97 52 Members' Subscriptions. 81 00 Legislative Grant from Electoral Division Society 130 72 Sale of Stock. 13 25  Live Stock. 25 Working Expenses, including services of Secretary, Treasurer and Assistants.	Members' Subscriptions. 81 00 Legislative Grant from Electoral Division Society 130 72 Sale of Stock. 13 25  Live Stock. 135 00 Working Expenses, including services of Secretary, Treasurer and Assistants. 23 01

Note.—The Society is reported to be working satisfactorily. No show was held, and the funds husbanded for the purchase of live stock for breeding purposes.

## Rochester and Maidstone.

Dr.		\$ cts.	\$ ets.	\$ cts.
To	balance in hand, as per last Annual Report	69 31		
"	Members' Subscriptions	117 00		
44	Legislative Grant from Electoral Division Society	201 24		
"	Miscellaneous	5 00		
				392 55

33

3

Cr. By Prizes for Horses, \$7; Cattle, \$8; Sheep, \$3.50; Pigs,	\$ cts.	\$ cts.	\$ cts.
\$1.50 " Prizes for Grains and Seeds, \$4; Roots and other hoed crops, \$2; Dairy products, \$1	20 00 7 00		
" Prize for previous year paid " Preparing Show Grounds " Live Stock " Keep of Live Stock " Printing and Advertising		27 00 1 50 2 00 150 00 48 00 3 00	
"Working Expenses, including services of Secretary, Treasurer and Assistants		29 05	260 55
Balance in hand	ortion of	its funds	132 00 to the
min 11 .			
Dr. To Members' Subscriptions " Legislative Grant from Electoral Division Society	\$ cts. 50 00 86 00	S cts.	\$ cts.
Cr. By Prizes for Horses, \$23.75; Cattle, \$23.50; Sheep, \$7.25; Pigs, \$8; Poultry, \$1.50  "Prizes for grain and Seeds, \$7.25; Roots and other hoed orops, \$6.75; Dairy products, \$0.75; Fruits, \$5;	64 00		130 00
Ladies' Work, \$4.25  "Printing and Advertising	24 00	88 00 3 25	
"Working Expenses, including services of Secretary, Treasurer and Assistants		10 27	102 12
Balance in hand	•••		<b>33</b> 88
ESSEX, SOUTH.		40.	
Dr. To balance in hand, as per last Annual Report "132 Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant	\$ cts. 36 07 132 00 120 00 700 00	₩ Cts.	\$ cts. 988 07
Cr. By Prizes for Horses, \$95.25; Cattle, \$89.25; Sheep, \$52.75; Pigs, \$37; Poultry, \$8.75  "Prizes for Grains and Seeds, \$42.75; Roots and other hoed crops, \$8.98; Dairy products, \$14.50; Fruits, \$33.25; Vegetables, \$1.73; General Manufactures, \$39.50;	283 00		
Fine Arts, \$3.75; Ladies' Work, \$23.55	168 01	451 01	
" Portions of Legislative Grant paid to Township Societies " Printing and Advertising" " Working Expenses, including services of Secretary, Trea-		420 00 13 60	
surer and Assistants		21 68	906 29
Balance in hand 34			81 78

The Directors of the Agricultural Society of the South Riding of the County of Essex,

at the close of their term of office would respectfully report:

That the first Annual Exhibition of the Society was held in the Village of Kingsville, on the 6th and 7th days of October last. The number of entries made were large; the articles exhibited were excellent, and the attendance exceedingly good, notwithstanding the very inclement state of the weather during the first day. Your Directors are happy to report that the crops upon the whole have been a fair average. The wheat crop was much better than for some years previous, the yield of oats above an average. Indian corn, although not as heavy a crop as in 1874, was still excellent. It was noted that while in the eastern part of the Riding the wheat crops were much superior to that in the western part, the corn crop in the latter was much superior to that in the former. The potato crop has been excessive. The Directors are happy to report that the ravages of the potato beetle have ceased. Your Directors are of the opinion that with a little more public spirit displayed by the farmers in support of the Society, and more energy exerted by them in exhibiting the products of their farms, this Riding would be second to none within the Province of Ontario. They have the material and the means at their disposal, if they only had the will to perform. \*

Your Directors regret the apathy shown by the majority of the farmers in reference to Agricultural Societies and Exhibitions. Much good has been done by these Societies even with the meagre means at their disposal, and the indifferent support that they receive from those who should support them. The annual average of members' subscriptions to the County Society does not exceed \$120, less than one-half the amount received from the Legislative Grant. Out of a population of 15,000 this would be only about three-fourths of a cent per head of the population of South Essex, or with a ratable property valued at four millions, the amount would be but the mere fraction of  $\frac{3}{100}$  of a mill in the dollar, or one cent and a half on an assessment of \$500, which sum is a burlesque, a blot upon the name of the rich and prosperous Electoral Division of South Essex. Your Directors are of the opinion that a sum at least equal to the Legislative grant to County Societies, should be raised by the County Council in aid of Electoral Division Societies, and to raise this amount the special rate required would not be more than  $\frac{7}{100}$  of a mill in the dollar, or three and a half cents in an assessment of \$500.

In conclusion, your Directors feel that notwithstanding the low prices of farm products, and the various drawbacks occasioned by the general depression of trade, the farmers of this county have much to be thankful for, and should humbly acknowledge their dependence upon the Almighty Giver of all good, for, the many and various blessings which they are

permitted to enjoy.

~	*	mr.		
17.	alc.	h	100+	003

Dr.	\$ cts.	\$ ets.	\$ cts.	
To balance in hand, as per last Annual Report	20 00			
" 50 Members' Subscriptions	$53 \ 00$			
" Legislative Grant from Electoral Division Society	101 60			
" Sale of Stock	153 80			
Cr.			328 40	
By Paid on purchase of Live Stock		226 66		
"Working Expenses, including services of Secretary, Trea-				
surer and Assistants.		54 60		
			281 26	
Balance in hand			47 14	
~ 411				
Gosfield.				
Dr.	\$ cts.	\$ ets.	\$ cts.	
To balance in hand, as per last Annual Report	61 88			
" 109 Members' Subscriptions	109 00			
" Legislative Grant from Electoral Division Society	130 80			
9			301 68	

		-	
Cr.  By Exhibition Grounds  "Live Stock  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants.	\$ cts.	\$ ets. 3 14 250 50 8 38 4 53	\$ cts.
Balance in hand			35 13
Malden and Anderson.			
Dr. To Members' Subscriptions  "Legislative Grant from Electoral Division [Society	\$ cts. 45 00 54 00	\$ cts.	\$ cts.
Cr. By balance due the Treasurer, as per last Annual Report  " Paid for Agricultural or Horticultural Publications  " Miscellaneons		30 00 30 20 3 31	63 51
Dulance in hand			35 49
Balance in hand			39 43
Mersea.	A	/h -4	
Dr To 143 Members' Subscriptions  " Admission Fees to Exhibition  " Legislative Grant from Electoral Division Society  " Sale of Stock  " Apportionment on division Gosfield and Mersea Society  " Notes and Accounts uncollected  Cr.	\$ cts. 155 67 92 52 171 60 58 25 123 75 109 75	\$ cts.	\$ ets.
By Prizes for Horses, \$26.75; Cattle, \$12.75; Sheep, \$7.75; Pigs, \$6	53 25 65 40		
Cr. By prizes for previous years paid.  "Exhibition Buildings and Grounds.  "Live Stock.  "Printing and Advertising  "Working Expenses, including Freight on Live Stock		118 65 31 46 14 56 256 75 17 80 86 81	5 <b>26</b> 0 <b>3</b>
Balance in hand			185 51
FRONTENAC.—Midland Contral F	air.		
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant, \$700; Municipal Grant, \$1,500  "Grant from Electoral Division Society  "Miscellaneous	\$ ets. 746 50 833 64 2200 00 250 00 113 45	\$ cts.	\$ cts.
Balance due Treasurer		145 13	,143 59
36			

Cr.  By Prizes for Horses, \$328; Cattle, \$253; Sheep, \$183; Pigs, \$92.50; Poultry, \$131	\$ ets. 987 50 960 75	\$ cts. \$ cts.  1948 25 13 00 50 00 237 32 25 00 258 30  391 50 175 05 3243 55 900 04
GLENGARRY.		
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant  "Miscellaneous  Cr. By balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$76.87; Cattle, \$102; Sheep, \$94; Pigs, \$13.50; Poultry, \$5  "Prizes for Grain and Seeds, \$79.50; Dairy products, \$38.50; Fruits, \$4.50; Vegetables, \$9.10; Agricultural Implements, \$89.83; General Manufactures, \$75.34  By Portions of Legislative Grant paid to Township Societies  "Exhibition Bnildings and Grounds  "Expenses on imported horses  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants	\$ cts. 178 50 210 00 700 00 5 00 291 31 319 96	\$ cts. \$ cts.  1093 50  55 14  611 27 140 00 81 70 19 00 21 31  158 48 1086 90
Balance in hand		6 60
Lochiel and Kenyon.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society  Cr. By Prizes for Horses, \$34; Cattle, \$31; Sheep, \$22; Pigs, \$14  "Prizes for Grains and Seeds, \$11; Roots and other hoed crops, \$10; Dairy products, \$13; Growing Crops, \$38;	\$ cts. 14 71 64 50 140 00 101 00	\$ cts. \$ cts.

37

Cr. Vegetables, \$5.73; General Manufactures, \$8.00;	\$ ets.	\$ cts.	\$	cts.
Ploughing Match, \$7	92 73	193 73		
By Working Expenses, including services of Secretary, Treasurer and Assistants		24 31	010	0.1
			<b>2</b> 18	04
Balance in hand			1	17
GRENVILLE, SOUTH.				
Dr.	\$ cts.	\$ ots.		cts.
To balance in hand, as per last Annual Report	25 88			
" 231 Members' Subscriptions	231 00			
" Admission Fees to Exhibition	620 70			
" Legislative Grant, \$700; Municipal Grant, \$200	900 00			
" Proceeds of Booths, Stands, &c	289 09			
"Subscriptions	203 50			
"Donation from Hon, C, F, Fraser	20 00 20 00			
" Dr. Brouse, M.P	<b>A</b> () ()()		2,310	17
By Paid Prizes	470 00		2,010	1 6
" Portions of Legislative Grant paid to Township Societies	140 00			
"Exhibition Buildings and Grounds	550 00			
" Printing and Advertising, \$90; Musical Bands, \$80	170 00			
"Working Expenses, including services of Secretary, Trea-				
surer and Assistants	450 00			
" Miscellaneous	518 24			
	-		2,298	24
Balance in hand		-	11	93

The President and Directors of the South Grenville Society beg to present their eighteenth yearly report. The annual Exhibition was held on the 15th, 16th, 17th, and 18th days of September, but it is a matter of regret that it was not as successful as some of its predecessors. This was owing to the unfavourable condition of the weather. Your Board put forth every exertion to make this fair attractive to the public and remunerative to the Society, but the continual downpour of rain during the entire week of holding marred all the good results which should have crowned the strenuous efforts made. The consequences are disappointing, for your Directors had hoped by a successful issue of their programme to have had a sufficient surplus on hand to largely liquidate the debt that has been incurred by the extension of the Society's premises. The receipts and expenditures of the current year will be laid before you, with the report of the auditors—both gentlemen of ability and good standing in this town.

In attempting to give any idea of the animals and articles on exhibition, the horses deserve the most particular notice. The entire stock of Rysdeck farm was on exhibition (some thirty in all), embracing the celebrated Rysdeck himself. These, with the carriage horses and roadsters, made this department the largest or most attractive ever shown in South Grenville. Durhams, Ayrshires and grade eattle were in much larger numbers than last year, but owing to the inclemency of the weather, were seen to disadvantage. Grain, roots and vegetables showed a falling off, but this was to be expected, as grain is not usually threshed,

nor have roots or vegetables reached their growth so early in the season.

All praise is due to the ladies for their tasteful decoration of the Floral Hall, and the creditable manner in which they set it out with their elegant handiwork. Your Board owe a

debt of gratitude to the Hon. C. F. Fraser, Dr. Brouse, M. P., and J. P. Wiser, Esq., their donations to the fund as special prizes.

Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  Cr. By Prizes for Horses, \$28; Cattle, \$30; Sheep, \$20; Pigs, \$3.50; Poultry, \$10.50  "Prizes for Grains and Seeds, \$37.25; Roots and other hoed crops, \$38; Dairy products, \$12; Fruits, \$12; Vegetables, \$20.25; Ladies' work, \$32.50  By Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer, and Assistants  Balance due to Treasurer	\$ cts. 3 25 77 74 28 38 140 00 92 00 152 00	\$ cts.  244 00 13 00 26 37	\$ cts.  249 37  283 37  34 00
GREY, NORTH.  Dr. To balance in hand, as per last Annual Report	\$ cts. 284 59 133 00	\$ cts.	\$ cts.
"Admissson Fees to Exhibition "Legislative Grant, \$700; Municipal Grant, \$200 "Special Subscriptions Cr. By Prizes for Horses, \$113.50; Cattle, \$79; Sheep, \$42.50; Pigs, \$13.50; Poultry, \$8 Prizes for Grains and Seeds, \$57.50; Roots and other hood	44 00 900 00 18 00 ———————————————————————————————————	1	,379 5 €
crops, \$23.25; Dairy products, \$19; Fruits, \$19; Vegetables, \$21.25; Agricultural Implements, \$11.50; General Manufactures, \$12.25; Ladies' Work, \$26.50	190 25	4.46 75 147 25 420 32 93 38 58 70	
"Working Expenses, including services of Secretary, Treasurer, and Assistants		117 80	,284 <u>20</u> 95 <u>39</u>

# REPORT.

The matter of bringing about the holding of a Central Show for the Riding in the Town of Owen Sound has been again before the Directors. The Township of Sydenham is thus far the only one which has agreed to unite with the Riding Society for the above purpose. It has agreed, the Directors are informed, to unite with the Riding Society this year, 1876, whether any other Society does so or not. The example thus set will, it is hoped, lead

to a reconsideration by other Township Societies, and more particularly will this be likely to be the result if matters are so arranged and conducted at the first United Show, as to evidence to the general public that the actuating motive and evident desire of the promoters of the scheme is to encourage enterprise, to reward merit, and to economise, in so far as may be possible, the time and labour given to exhibitions. Experience has shown that prejudices have to be overcome in order to bring about the result at which the Directors have been aiming, of establishing a Central Exhibition for the Riding, but they believe that these are gradually giving way, and they recommend that the effort be still continued.

With respect to the different exhibitions for the year, the Directors present the follow-

ing statement :-

At the Spring Show, held on the 28th of April, there were exhibited three heavy draught stallions, nine general-purposes stallions, one bull over three years old and one bull

under that age.

At the Fall Show, held on the 30th of September, there were entered for exhibition, horses, 100; cattle, 61; sheep, 69; swine, 17 entries, fowls, 13 entries; grain and seeds, 98 entries; roots, 134 entries; vegetables, 61 entries; fruit, 72 entries; dairy produce, 33 entries; honey in comb, 4 entries; manufactures, 35 entries; domestic manufactures and ladies' work, 90 entries; special entries 21; total entries, 541.

At the Christmas Show of fat animals there were 27 entries in all, and the show was

decidedly good.

On the whole the exhibitions were creditable to the skill and enterprise of the farming and manufacturing communities.

Derby.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society.  "Municipal Grant.  "Miscellaneous.  Cr.	\$ cts. 28 70 146 00 9 15 86 80 30 00 5 00	\$ cts.	\$ ets.
By Prizes for Horses, \$20.75; Cattle, \$22; Sheep, \$14.75; Pigs, \$6.25; Poultry, \$3	66 <b>7</b> 5 75 25	142 00	
By Exhibition Buildings and Grounds  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants		55 00 15 00 25 95	237 95
Balance in hand			67 70
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant	\$ ets. 79 75 15 43 40 10 00	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$12.15; Gattle, \$18.55; Sheep, \$8.75; "Pigs, \$4; Poultry, \$3.25	46 70		133 30
40			

			2002
Cr. By Prizes for Grains and Seeds, \$10.87; Dairy Products, \$7;	\$ cts.	\$ ets.	\$ ets.
Fruits, \$2.75; Plants and Flowers, 75 cts; Vegetables, \$10.25; Agicultural Implements, \$1.62; General Manu-	40.60		
factures, \$5.97; Ladies' Work, \$1.38	40 60	87 30	
"Prizes for previous years paid" Printing and Advertising		9 50 7 75	
"Working Expenses, including services of Secretary, Treasurer and Assistants		26 06	130 61
Balance in hand			2 69
Sullivan.			
	d ota	e oto	e ata
Dr. To Members' Subscriptions	\$ cts. 105 05 85	\$ cts.	\$. ets.
" Legislative Grant from Electoral Division Society	54 64		
" Municipal Grant Cr.	30 00		190 54
By balance due the Treasurer, as per last Annual Report " Prizes for Horses, \$22.00; Cattle, \$28.25; Sheep, \$15.00;		1 46	
Pigs, \$7.00; Poultry, \$3.00	75 25		
"Prizes for Grains and Seeds, \$23.25; Roots and other hoed crops, \$16.75; Dairy products, \$6.00; Fruits, \$7.25;			
Vegetables, \$7.50; Agricultural Implements, \$2.00;	97 50	•	
General Manufactures, \$7.25; Ladies' Work, \$17.00	87 50	162 75	
"Exhibition Buildings		85	
" Printing and Advertising" " Working Expenses, including services of Secretary, Trea-		7 25	
surer and Assistants.		8 00	180 31
Balance in hand			10 23
Sydenham.			
Dr.	\$ ets.	\$ cts.	\$ ets.
To balance in hand, as per last Annual Report	33 66		
" Members' Subscriptions " Admission Fees to Exhibition	114 00 5 40		
"Legislative Grant from Electoral Division Society	46 40		
" Municipal Grant	25 00		201 16
Cr. By Prizes for Horses, \$14.50; Cattle, \$17; Sheep, \$12.25;			224 46
Pigs, \$2 " Prizes for Grains and Seeds, \$11; Roots and other heed crops, \$4.25; Dairy products, \$4.50; Fruits, \$6.75;	<b>45</b> 75		
Vegetables, \$4.50; General Manufactures, \$1.50; Ladies' Work \$4	36 50		
Ilmaid	82 25		
Unpaid	32 75	49 50	
" Prizes for previous years paid		15 00	

Dr. By Printing and Advertising "Working Expenses, including services of Secretary, Trea-	*	cts.	10	66	\$	cts.
surer and Assistants			25	50	121	46
Balance in hand						00
Saint Vincent.						
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Entrance Fees for Ploughing Match	169 15 89 35	cts. 60 00 95 35 00 50	*	ets		cts.
Cr. By Prizes for Horses, \$59; Cattle, \$31; Sheep, \$15; Pigs, \$5 " Prizes for Grains and Seeds, \$25; Roots and other hoed crops, \$8.75; Dairy products, \$3.50; Growing Crops, \$1; Fruits, \$9.70; Agricultural Implements, \$12.75; General Manufactures, \$18.30; Ladies' Work, \$18; Ploughing Match, \$39	110				357	40
Unpaid	246 60					
" Prises for previous years paid  " Exhibition Buildings and Grounds  " Printing and Advertising  " Working Expenses, including services of Secretary, Treasurer and Assistants.			186 19 13 11 29	75 61 90	261	02
Balance in hand					96	38
Owen Sound Horticultural Society.						
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous  Cr.	\$ 161 74 99 3	50	\$	cts.	<b>\$</b>	cts
By Prizes for Fruits, \$28.50; Plants and Flowers, \$54.50; Vegetables, \$68.25  "Prizes for Fine Arts, \$1.75; Ladies' Work, \$32.50	151 34				011	90
" Printing and Advertising " Working Expenses, including services of Secretary, Transurer and Assistants			185 42 88	15		
				_	315	65
Balance in hand42					32	00

GREY, SOUTH.	
Dr.	\$ cts. \$ ets. \$ cts.
To balance in hand, as per last Annual Report	14 80
" Members' Subscriptions	
" Admission Fees to Exhibition	<b> 2</b> 8 9 <b>3</b>
" Legislative Grant, \$700; Municipal Grant, \$200	
"Glenelg Society for Union Show	53 72
Cr.	1,133 45
By Prizes for Horses, \$71.50; Cattle, \$131; Sheep	
Pigs, \$14.50; Poultry, \$6	
" Prizes for Grains and Seeds, \$59.50; Roots and oth	
erops, \$26; Dairy products, \$54.50; Fruits,	
Vegetables, \$9; Agricultural Implements, \$38	
eral Manufactures, \$26.50; Ladies' Work, \$8;	
ing Match, \$23.75	
	<u> 550 75</u>
" Portions of Legislative Grant paid to Township Soc	oieties 420 00
" Exhibition Buildings and Grounds	47 00
" Arbitration and other expenses with East Grey	
" Printing and Advertising	
" Working Expenses, including services of Secretary	v. Trea-
surer and Assistants	94 26
Said and Indiaman	1,190 31
	1,130 31
Balance due Treasurer	56 86

It appears to your Directors that the general tendency in reference to agricultural exhibitions is to increase the area over which their operations shall extend, as in the instance of those held in Guelph, Hamilton and London—while in reference to the Agricultural Association of South Grey, circumstances have conspired to reduce its area to the extent of one half of its original dimensions; notwithstanding, as compared with the previous year, there was no very perceptible falling off in the number of prizes, or in the general interest felt in the objects proposed to be secured by the Annual Agricultural Exhibitions.

The samples of grain were not so numerous as on former occasions, owing no doubt to the backwardness of the season and to the earlier period of the year in which it was held, but

the improvement in the character and quality of cattle and sheep was marked.

Your Directors deem it proper to refer to the wisdom and self-denial of the Glenelg Society in merging its funds and membership in those of the Riding Association. By its action in that respect it sacrifices in the interests of the other Townships the portion of the government grant to which it would be entitled by sustaining its own local organization.

Your Directors, in view of the apparent general tendency already noticed, of the action of the Township of Glenelg, and of the small and compact character of the South Riding, respectfully suggest that the question of merging the smaller societies into the more general

one of the Riding, is deserving of the consideration of all the parties interested.

# Bentinek.

Dr.	8	cts.	8	cts-	\$	cts.
To balance in hand, as per last Annual Report	29	91				
" Members' Subscriptions,	108	00				
" Legislative Grant from Electoral Division Seciety	92	41				
" Miscellaneous		55				
Cr.					230	87
By Prizes for Horses, \$30; Cattle, \$30.25; Sheep, \$31.25;						
Pigs, \$8; Poultry, \$2.50	102	00				
" Prizes for Grains and Seeds, \$12.50; Roots and other hoed						
crops, \$8; Dairy products, \$13; Fruits, \$7.75; Vege-						

43

Cr. tables, \$7; Agricultural Implements, \$8; General Manufactures, \$10; Ladies' Work, \$8	\$ cts.	\$ cts.	\$ cts.
By Printing and Advertising, \$9.50; Musical Bands, \$5 "Working Expenses, including services of Secretary, Treasurer, and Assistants		176 25 14 50 40 12	
			230 87
Egremont.			
Dr. To Members' Subscriptions "Legislative Grant from Electoral Division Society	\$ ets. 118 25 135 08	\$ cts.	\$ cts.
Cr. By balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$41.75; cattle, \$36; Sheep, \$16.50, Pigs, \$12.50; Poultry, \$3  "Prizes for Grains and Seeds, \$20.50; Roots and other hoed crops, \$8.75; Dairy products, \$18.25; Fruits, \$6;	109 75	3 37	<i>i</i> mUU UU
Vegetables, \$6; Agricultural Implements, \$14; General Manufactures, \$11.50; Ladies' Work, \$16.25	100 25		
Amount retained	21 <b>0</b> 00 40 00	170 00	
" Exhibition Buildings and Grounds "Working Expenses, including services of Secretary, Treasurer and Assistants		3 00	216 57
Balance in hand			36 76
Normanby.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	\$ cts. 10 79 126 00 8 33 161 71	\$ cts.	\$ ets.
"Municipal Grant Cr. By Prizes for Horses, \$18; Cattle, \$27; Sheep, \$15; Pigs, \$4; Poultry, \$1.50  "Prizes for Grains and Seeds, \$22; Roots and other hood	65 50	3 <b>3</b> 1 83	
crops, \$5; Dairy products, \$11; Fruits, \$4.50; Vegetables, \$6.75; Agricultural Implements, \$19; General Manufactures, \$21.75; Ladies' Work, \$17.25	107 25	17 <b>2</b> 75	
"Prizes for previous years paid "Printing and advertising "Working Expenses, including services of Secretary, Trea-		4 00 10 00	
surerer and Assistants		73 75	260 50
Balance in hand 44			71 33

GREY, EAST.	e ata	e oto e to
To Members' Subscriptions	\$ cts. 157 00	\$ cts. \$ cts.
" Admission Fees to Exhibition	42 40	
" Legislative Grant, \$700; Municipal Grant, \$200	900 00	
Cr.		1099 40
By Prizes for Horses, \$81; Cattle, \$49; Sheep, \$52; Pigs,		1000 10
\$27.50; Poultry, \$10	210 50	
" Prizes for Grains and Seeds, \$60; Roots and other hoed		
crops, \$32.75; Dairy products, \$18.50; Fruits, \$16;		
Vegetables, \$5; Agricultural Implements, \$36; General		
Manufactures, \$16; Fine Arts, \$60.50; Ladies' Work,		
\$28	<b>2</b> 81 <b>75</b>	
		492 25
" portions of Legislative Grant paid to Township Societies		420 00
" Exhibition Buildings and Grounds		17 73
"Printing and Advertising		42 03
"Working Expenses, including services of Secretary, Trea-		04 56
surer and Assistants		84 76
		1056 77
Balance in hand		42 63

The East Grey Agricultural Society in presenting this, their first Annual Report, beg leave to state:—

A Spring Show was held in April, competition not being what we could wish; but the

stock shown was of good quality.

The annual Fall Show was held in the village of Flesherton, in the month of October, and was well attended. The show of cattle was not what might be desired, there being a great lack of thorough-breds. The show of general purpose and carriage horses was very good.

There was likewise a good show of sheep and hogs. Grain was up to the mark in quality

but not in quantity, but competition will likely be better next year.

Dairy produce was fully up to the mark, both in quality and quantity; the judges having stated that it was extremely difficult to award premiums, owing to the excellence of the articles exhibited.

Roots not quite as good as was expected. Potatoes, quality fair; but owing to the

Colorado beetle the quantity was not large. Fruit excellent.

Your Directors regret that in the southern townships the summer frosts damaged the grain crops to a most serious extent; and would strongly urge upon the farmers in that portion of the Riding, to devote their attention to stock-raising and dairying; as owing to climate

and soil, it is evidently more adapted to that system of farming.

And in connection with the above recommendation, we take this, the earliest opportunity, of expressing the gratitude of the people of this section to the Toronto, Grey & Bruce Railway Company, for the manner in which they have, under great difficulties, completed the road; as by means of this great enterprise the farmers have at their doors a market for all the surplus stock their farms can support, instead of, as formerly, driving long distances to market, stock arriving in a very deteriorated condition, entailing in consequence loss of value. We reiterate and strongly urge stock-raising and dairy-farming, which is our sheet anchor. More roots, more stock, therefore more grain.

It is a matter of regret that the northern townships did not take a greater interest in the Society, there being only a few exhibitors from Collingwood and Holland, and only one from Euphrasia. We trust, however, that a similar statement will not have to be made at our next annual meeting; our earnest desire being that all the townships in the riding should take a more active part, that through friendly rivalry in the interests of agriculture, the material well-being of the whole Riding may be advanced. Your Directors call attention to the Grange movement, which they hope will tend towards accomplishing the last clause of the

preceding paragraph.

Artemesia.					
r.	\$ ets.	Ş	cts.	*	cts
Members' Subscriptions	113 50				
Admission Fees to Exhibition	2 74 69 33				
Legislative Grant from Electoral Division Society	20 00				
Wunicipal Grant	20 00			205	5
v. Prizes for Horses, \$17.05; Cattle, \$19.50; Sheep, \$15.				T 0.0	U
45; Poultry, \$3; Pigs, \$4	59 00				
Prizes for Grains and Seeds, \$13; Roots and other hoed					
orops, \$10.75; Dairy products, \$10.50; Fruits, \$6;					
Vegetables, \$2.35; Agricultural Implements, \$5;					
General Manufactures, \$15.90; Fine Arts, \$5.75;					
Ladies' Work, \$1.50	70 75				
		129	75		
Working Expenses, including services of Secretary, Trea-					
surer and Assistants		28	56		
				158	3
D 1 t. L. 1				4 4	—-
Balance in hand				4-1	1 1
Collingwood.					
	\$ cts.	\$	cts.	\$	ct
balance in hand, as per last Annual Report	172 89				
'Members' Subscriptions	182 00				
Admission Fees to Exhibition	83 09				
Legislative Grant from Electoral Division Society	60 00				
Miscellaneous	20 00				
P	20 00			632	)
y Prizes for Horses, \$65; Cattle, \$51; Sheep, \$24; Pigs,				002	
\$16 Poultry, \$6.25	162 25				
Prizes for Grain and Seeds, \$36.75; Roots and other hoed					
crops, \$8.50; Dairy Products, \$15; Fruits, \$11; Vege-					
tables, \$8; Agricultural Implements, \$27.75; General					
Manufactures, \$15; Fine Arts, \$10; Ladies' Work,					
\$18	150 00				
( D 1994 D 994 1 0 1 )		312			
Exhibition Buildings and Grounds		145			
· Printing and Advertising		23	90		
Working Expenses, including services of Secretary, Trea-		co	2.0		
surer and Assistants		60	32	542	) ;
				042	. 2
Balance in hand					) 1

# PRESIDENT'S ADDRESS.

Since the last annual gathering of our Township Agricultural Society we have passed through one of the most eventful years of modern times; Russia, France, England and parts of America have been visited with floods most destructive to life and property; in those countries thousands of farmers have in a few hours lost the accumulations of years, and many others by the same floods have lost their lives. In our own country we have had a winter most remarkable for its length and great depth of snow, followed by a spring and summer so wet and changeable as to cause much inconvenience and great anxiety; yet at the close of the year we find great cause for congratulation. Our crops, as a whole, are abund ant, and have suffered much less damage than we had reason to fear. Prices of produce in some articles, less than we have been led to expect, are still far from low, thus affording us great cause for thankfulness, a feeling which I fear we do not sufficiently cultivate.

grain it could possibly have produced.

The funds of our Society have been largely drawn upon during the past year for the purpose of fencing in a much enlarged Show ground which the rapid growth of the Society has proved to be necessary. This, I regret to say, made it necessary to forego having a ploughing match, a sacrifice that has afforded to us for the future increased facilities for holding our Shows.

The seed fair, that was inaugurated last spring, for the sale of seed, grain. &c., will. I hope, continue to receive the cordial support of 'the farming community, as I have do doubt it will be attended with beneficial results. In this connection I would suggest that, in my opinion, our Society might be the means of doing much good by obtaining and distributing (as rewards for procuring members or otherwise,) new varieties of grain, seeds, roots, plants, &c., &c., which means would have a tendency to strengthen the Society and at the same time afford opportunities of testing the value and suitableness to our own locality, of many of the new varieties that the experimental enterprize of the present day is constantly bringing forward. The benefits derived from such an enterprise are too well known to need comment.

It affords me great pleasure to see unmistakable signs of prosperity amongst the agriculturists of this locality, which are particularly noticeable in the numerous fine houses and commodious outbuildings that are rapidly springing up; and this encourages me to venture a word of advice to you all, to make your houses and surroundings as pleasant as possible. I hope many of the homes you are now making will be occupied by your children and childrens' children for generations to come; therefore make them beautiful and lovable; lay off a good-sized piece of land anjoining your house, seed it with grass, ornament it with trees and shrubs as a pleasure ground for yourself and family, and if the soil be never so fertile be sure the health and happiness derivable therefrom will far outweigh the heaviest crops of

Let me now only say a few words for the benefit of the young farmer. It is a fact much to be regretted that a large number of the sons of farmers show a great distaste for farming, and look with wistful eyes at their acquaintances who occupy offices, stores, and workshops, and acquire fine clothes, smooth hands, and gentlemanly manners; the young men who have been brought up on new farms where rough and unceasing work has been the order of the day may well be excused for such feelings; and to such I would say; the rough work will not last forever; your farms will soon be cleared; machinery can then help to do the hardest of the work; and if you will cultivate your minds, your manners, and your farms, no class of men will be your superiors. The occupation is a noble one and rapidly becoming less laborious and more profitable. Stick to it, and you will soon feel that most of the men that you felt inclined to envy, would gladly exchange places with you.

It has for several years past been difficult to farm successfully, owing to the high price of labour and the increased cost of merchandise, both of these necessaries are now procurable at greatly reduced rates; manufacturers have lately been largely reducing their prices, thereby greatly cheapening the cost of living, so that I am glad to believe that, although the price of labour be considerably reduced, the labourer who has a family to support will be as well able to do so as formerly, and farmers will thus be enabled to give more employment then heretofore, which, I believe, will promote a more satisfactory state of things.

## Ruphrasia.

Dr.	\$	ets.	S	cts.	£ (	CIS.
To balance in hand, as per last Annual Report	4	36				
" Members' Sul scriptions	147	00				
" Admission Fees to Exhibition	15	40				
" Legislative Grant from Electoral Division Society	93	15				
" Municipal Grant	25	00				
"Special prizes	111	00				
"Miscellaneous	28					
Cr.					424	4.
By Prizes for Horses, \$73.25; Cattle, \$25.75; Sheep, \$15.50;						
Pigs, \$6	120	50				
" Prizes for Grains and Seeds, \$17.25; Roots and other hoed						
crops, \$6.75 : Dairy Products, \$6.25 · Fruits, \$6.75 ·						

Vegetables, \$3.50; Agricultural Implements \$6; Gen-

eral Manufactures, \$19.25; Ladies' Work, \$58.75; Ploughing Match, \$42	<b>\$</b> 165	ots.	\$	cts.	\$	cts
By Miscellaneous " Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants			287 10 20 8	00		
				_	325	68
Balance in hand					98	73
Holland.						
Dr. To balance in hand, as per last Annual Report "Members' subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant	87	50 55	\$	cts.	\$	cts.
Cr. By Prizes for Horses, \$22.25; Cattle, \$18.25; Sheep, \$15.50; Pigs, \$4.75  "Prizes for Grain and Seeds, \$19.25; Roots and other hoed crops, \$8; Dairy Products, \$5; Growing Crops, \$2.45; Pruits, \$5.75; Vegetables, \$4.00; Agricultural Implements, \$1.50; General Manufactures, \$5.80; Ladies'	60	75			165	68
Work, \$7.25  "Exhibition Buildings and Grounds."  Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants	59	50		50 43	152	12
				_		
Balance in hand					13	25
Osprey.  Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ 5 5 9 1 38 4 4	00 88 00	\$ (	ets.		cts.
Cr By Prizes for Horses, \$13.50; Cattle, \$7.50; Sheep, \$17.50; Pigs, \$11.50; Poultry, 50 cents	50 5 36 4		87 (		109	29
" Printing and Advertising" " Working Expenses, including services of Secretary, Treasurer and Assistants			14 8	35	105	85
Balance in hand					3	44

· Proton.			
Dr. To balance in hand, as per last Annual Report	\$ cts. 2 04	\$ cts.	\$ cts.
" Members' Subscriptions " Admission Fees to Exhibition	77 00		
" Legislative Grant from Electoral Division Society"  "Municipal Grant	$\frac{45}{10} \frac{00}{00}$		
Cr. By Prizes for Horses, \$18.50; Cattle, \$14.25; Sheep, \$7.50;			135 54
Pigs, \$3 " Prizes for Grain and Seeds, \$7; Roots and other hoed crops,	43 25		
\$5.25; Dairy Products, \$3.50; Fruits, \$2.25; General Manufactures, \$13.25	31 25		
" Exhibition Buildings and Grounds		$\begin{array}{cc} 74 & 50 \\ 2 & 00 \end{array}$	
" Printing and Advertising "Working Expenses, including services of Secretary, Trea-		5 22	
surer and Assistants		16 04	97 76
Balance in hand			37 78
HALDIMAND.			
Dr. To Members' Subscriptions	\$ cts. 149 00	\$ ets.	\$ ots
"Admission Fees to Exhibition "Legislative Grant, \$700; Municipal Grant, \$25	$     \begin{array}{cccc}       102 & 30 \\       725 & 00     \end{array} $		
"Rents of Booths and Grounds	61 00		1027 20
By Prizes for Horses, \$106; Cattle, \$80.50; Sheep, \$74.50; Pigs, 15.50; Poultry, \$3.10	279 50		1037 30
"Prizes for Grains and Seeds, \$27.50; Roots and other hoed crops, \$6.25; Dairy Products, \$11.50; Fruits, \$6.25;	419 90		
Vegetables, \$2.00; Agricultural Implements, \$21.50;	115 05		
General Manufactures, \$20.50; Ladies' Work, \$20.25	115 75	395 25	
By Portions of Legislative Grant paid to Township Societies  "Paid on Purchase of Exhibition Grounds		384 95 207 21	
" Printing and Advertising " Working Expenses, including services of Secretary and		25 00	
Treasurer		66 89	,079 30
Balance due Treasurer		-	42 00

The Annual meeting of the County Agricultural Society was held in Cayuga, on Wednesday the 19th instant, the President, Mr. David McClung, in the chair. The Secretary having presented the financial statement, read the following report:

Your Directors, in presenting this their Annual Report for the last year, in a measure, have to congratulate you on the encouraging position of your Society. A year ago your Society's indebtedness was some \$176, to-day your liabilities are only \$42. In reviewing the the past few years, knowing the large amount of money that has been expended, first by the enclosure of the agricultural grounds with a permanent tight board fence nearly seven feet high, at a cost of \$370; then the building of a large and commodious Hall, which is alike cre-

ditable to your Society as well as an ornament to the place, as compared with the former inconvenient and unsuitable building, at a cost of some \$950. These desirable necessities were matters of serious consideration for some time previous, the Society knowing that the erection of a suitable Hall for their growing requirements would necessarily entail a large expenditure of money; and with the unpleasant fact that there were apparently no available sources to draw from to meet such a large outlay, and with the knowledge that the cash balances for a number of years previous were very small, for in 1867 there was a balance only of \$3.89; in 1868 \$14.58; in 1869 \$29.79 in favour of the Society.

Under these adverse circumstances our prospects for some time to come, at least were not of the most encouraging description; however, with a determination and zeal on the part of a few liberal-minded gentlemen having the interest of the Society sincerely at heart, an effort was made and the desired object was accomplished, and we have now the pleasure of seeing the benefits accruing from the result, by the increased number of exhibitors this year over that of former years, showing clearly that the public appreciate the advantages of such a structure. Your Directors do not consider it out of place at this time to name these gentlemen, who not only put their hands in their pockets and contributed freely, but through the unremitting exertions and perseverance of some of them, we obtained from the County Council \$200, and a like sum from the Town Council of Cayuga. Our worthy member D. Thompson, M. P., with his usual liberality headed the list with \$60, Dr. Baxter M. P. P. whose hand is always open, \$20; His Honour, Judge Stevenson, \$10; Sheriff Martin, \$10; Col Farrell, \$10; E. S. Martin, \$10; D. McClung, \$10: John Lynch, \$10; George Murray, \$10; William Hussen, \$10; our late secretary, Jacob Young, \$10; Maxwell McClung, \$10; Joshua Meason, \$10; William Hall,\$10; A. Hows. \$10; David Hill,\$10; N. Dochstader,\$10; F. L. Beck,\$10; Hiram Lee,\$5; E. C. Campbell,\$5; A. Murray,\$5; Joseph McGowen,\$5; and James Mitchell, \$4. We feel justified in saying that the Society is in a prosperous condition, and with the same amount of energy on the part of the Directors for the ensuing year, as that manifested by those of the past, and with no probable expenditure to incur except the working expenses of the Society, we can meet the small balance of our indebtedness, and increase our prize list to a very considerable extent. Taking all things into consideration the large prize list of the past year, the amount paid on our liabilities, the general depression of trade throughout the country, the failure to a large extent of the staple grain crop of the farmer, Fall wheat, in this county for the last ten years, the unremunerative price of spring grain, especially barley, and oats, causing money to be less plentiful with the farming community, to whom agricultural associations are to a great extent to look for support, yet with all these drawbacks your Directors may say without egotism our position is truly encouraging, giving us sanguine hopes for the future, that this Society will ere long stand second to no County Society in the Province.

## Dunn and South Cayuga.

Dr.	\$	cts.	\$	cts.	\$	cts.	
To Balance in hand, as per last Annual Report	13	64					
" Members' Subscriptions	93	50					
" Admission Fees to Exhibition	4	50					
" Legislative Grant from Electoral Division Society	50	45					
" Municipal Grant	25	00					
" Micellaneous	19	05					
Cr.					206	14	
By Prizes for Horses, \$45; Cattle, \$33.25; Sheep, \$38.50;							
Pigs, \$4.50; Poultry, \$3.50	124	75					
" Prizes for Grains and Seeds, \$11.25; Roots and other hoed							
crops, \$6.50; Dairy Products, \$4; Agricultural Im-							
plements, \$4; General Manufactures, \$6.25; Ladies'							
Work \$7.25	47	75	•				
			172	50			
" Printing and Advertising			16	00			
"Working Expenses, including services of Secretary, Trea-							
surer and Assistants			17	64			
					206	14	

Rainham.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  Cr.	\$ ets. 34 68 93 00 2 70 54 50 25 00	\$ cts.	\$ cts.
"Prizes for Horses, \$47.50; Cattle, \$15.25; Sheep, \$28.50; Pigs, \$8.50  "Prizes for Grains and Seeds, \$8 25; Roots and other hoed crops, \$4.75; Dairy products, \$3.25; Fruits, \$3; Vegetables, \$3.25; Agricultural Implements, \$12.50; General Manufactures, \$1.25; Ladies' Work, \$5.60	99 75		200 05
Unpaid  By Prizes for previous years paid.  "Printing and Advertising "Working Expenses, including services of Secretary, Treasurer and Assistants.	141 35 20 90	120 45 7 70 12 00 14 88	
Balance in hand		<del></del>	155 03
Seneca, Oneida and N. Cayuga.			54 85
Dr.  "Members' Subscriptions  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous	\$ ets. 225 00 140 00 65 00 10 00	\$ cts.	\$ cts.
Cr.  By Balance due Treasurer, as per last Annual Report  "Prizes for Horses, \$69.50; Cattle, \$84; Sheep, \$39; Pigs, \$21; Poultry, \$3	216 50	55 05	440 00
eral Manufactures, \$14; Honey, \$2.50; Ladies' Work, \$20  "Printing and Advertising"  "Working Expenses, including services of Secretary, Treasurer and Assistants	119 00	335 50 23 50 31 45	
Balance due Treasurer			$\frac{445}{5}$ 50
Walpole.  Dr.  To balance in hand, as per last Annual Report  Members' Subscriptions  Admission Fees to Exhibition.  Legislative Grant from Electoral Division Society  Municipal Grant.	\$ ets. 121 43 327 50 177 95 140 00 25 00	\$ cts.	\$ cts.
*			791 88

Cr.  By Prizes for Horses, \$134; Cattle, \$89; Sheep, \$63.50; Pigs, \$33; Poultry, \$14.25  "Prizes for Grains and Seeds, \$29.50; Roots and other hoed crops, \$15; Dairy products, \$15.50; Fruits, \$9; Vegetables, \$8.25; Agricultural Implements, \$46; Geneeral Manufactures, \$26.75; Fine Arts, \$10; Ladies' Work, \$26.25; Miscellaneous, \$6  "Prizes for previous years paid  "Exhibition Buildings and Grounds  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants	\$ cts. 333 75  192 25	\$ ets.  526 00 5 00 4 09 29 80 59 00	\$ ets.  623 89  167 99
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant, \$700; Municipal Grant, \$100.  "Miscellaneous.	\$ ets. 54 03 292 00 522 60 800 00 64 25	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$170; Cattle, \$127; Sheep, \$86; Pigs, \$52; Poultry \$28	463 00	204 55	1732 88
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings and Grounds " Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants		884 75 70 00 420 00 122 27 35 50 243 00	1775 52
Balance due Treasurer			42 64
Esquesing.  Dr. To balance in hand	\$ cts. 89 14 282 25 186 82 98 35 18 25	\$ ets.	\$ ets.
By Prizes for Horses, \$86; Cattle, \$54; Sheep, \$36; Pigs, \$18; Poultry, \$12.25	206 25		0.4 01

Plants and Flowers, \$5; Vegetables, \$5; Agricultural Implements, \$16; General Manufacturers, \$45; Fine	\$ cts.	\$ cts.	\$ cts.
Arts, \$5.50; Ladies' Work, \$24.75; Ploughing Match, \$43	229 00	435 25	
By Exhibition Buildings and Grounds		18 68 31 50	
surer and Assistants		80 49	565 92
Balance in hand			108 89
Nassagaweya.			
Dr. To balance in hand, as per last Annual Report  "Members Subscriptions  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ cts. 24 05 156 00 78 00 25 00	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$75.50; Cattle, \$48; Sheep, \$21.75; Pigs, \$16; Poultry, \$5.50  "Prizes for Grains and Seeds, \$18.50; Roots and other hoed crops, \$16.75; Dairy Products, \$12; Fruits, \$8.25; Vegetables, \$4.50; Agricultural Implements, \$9.50;	166 75		283 08
General Manufactures, \$9; Fine Arts, \$4; Ladies' Work, \$6.75  "Printing and Advertising "Working Expenses, including services of Secretary, Treasurer and Assistants	83 25	250 00 11 00 9 50	270 50
Balance in hand			12 58
Nelson.			
Dr. To Members' Subscriptions	\$ cts. 437 50 89 50 140 00 30 00	\$ ets.	\$ cts.
Cr.  By balance due to Treasurer, as per last Annual Report  "Prizes for Horses, \$169; Cattle, \$159; Sheep, \$90; pigs, \$19; Poultry, \$18.50	455 50	12 18	697 00
"Prizes for Grains and Seeds, \$35; Roots and other hoed crops, \$23.75; Dairy Products, \$69.50; Fruits, \$23.25; Agricultural Implements, \$31; Ladies' Work, \$20.25  "Printing and Advertising, \$17.25; Musical Bands, \$25	203 25	658 75 42 00	
"Working Expenses, including services of Secretary, Treasurer and Assistants		22 15	735 08
Balance due Treasurer			38 08

$\_$			
Dr. To balance in hand, as per last Annual Report "*Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant "Miscellaneous Cr.	\$ cts 73 75 214 00 34 60 95 40 100 00 9 00	. \$ cts.	. S ets.
By Prizes for Horses, \$78; Cattle, 73; Sheep, \$63; Pigs, \$25; Poultry, \$19.25	258 25		
\$26.25; Fine Arts, \$7.50; Ladies Work, \$43.75	208 25	400	
By Prize for previous year paid		$\begin{array}{c} 466 & 50 \\ 1 & 25 \\ 10 & 00 \end{array}$	
"Working Expenses, including services of Secretary, Trea-			
surer and Assistants		48 06	
Secretary-Treasurer		70 00	595 81
Balance due Treasurer			69 06
HAMILTON.			
Dry To balance in hand, as per last Annual Report "173 Members' Subscriptions "Legislative Grant "Special Subscriptions "Interest	173 00 350 00 349 00	. \$ cts	. \$ cts.
" Interest " Our proportion of Surplus from Great Central Fair	1 403 76		
Cr.			4,244 30
By amount contributed to Great Central Fair fund		2,800 00 88 28	
			2,000 20
Balance in hand			1,356 02
NORTH AND SOUTH WENTWORTH AND CIT	Y OF H	AMILTO	N.
Central Fair			

# Contral Fair.

Dr. \$	cts.	S	cts.	8	cts.
To prize money unclaimed, 1874	00	"		-	
"Hamilton Electoral Division Agricultural Society 2.800	00				
" North Wentworth Agricultural Society 1.436	00				
" South Wentworth Agricultural Society	00				
" Admission at Gate 2,805	85				
" Great Western Railway Coupons 470	25				
" Members' Subscriptions 297	0.0				
54					

	_					
To Booth and Fruit Stands  " Horse Stalls and Locks.  " Forage  " Value of articles offered in Prizes.	\$ 240 0 115 3 43 0 271 0	75 00	\$	cts.		cts
Cr.  By Prizes unpaid 1874  "Prizes paid 1875.  "Judges' Expenses  "Printing, Advertising, and Stationery  "Sundries' Expense Account.  "Labour Account.  "Lumber Account.  "Forage Account.  "Superintendent's Expenditure  "Band Account.  "South Wentworth Pioneer Ploughing Club.  "Officers' Salaries.  "Hamilton Agricultural Society.  "North Wentworth Agricultural Society.  "South Wentworth Agricultural Society.  "South Wentworth Agricultural Society.	696 (	76 79 07	,211 298 599 102 412	00 25 24 98 03 25 62 82 13 00 00	),865	
HASTINGS, NORTH.	Ø.		es		\$	
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Legislative Grant.  Cr. By Prizes for Horses, \$35; Cattle, \$60; Sheep, \$24; Pigs, \$9.  "Prizes for Grains and Seeds, \$17; Roots and other hoed crops, \$21; Dairy Products, \$10; Fruits. \$10; Vegetables, \$8; Agricultural Implements, \$44; General Manufactures, \$26.10; Ladies' Work, \$7	\$ 325 £ 47 ( 700 ( 128 (	00	69	ets.	1072	
" Portions of Legislative Grants paid to Township Societies." Exhibition Buildings and Grounds.  " Paid for Agricultural or Horticultural Publications" Printing and Advertising		_	271 420 12 12 12 12	00 00 60 00		6
surer and Assistants			20		792	
Balance in hand					280	14
Dungannon and Faraday.  Dr. To balance in hand, as per last Annual Report  "54 Members' Subscriptions  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ 6 8 5 58 0 82 5 12 0	50 00 50	\$	ets.	\$ c	
Cr. By Prizes for Horses, \$9.25; Cattle, \$19.20; Sheep, \$6.75; Pigs, \$1.75	36 9	)5			101	

277 77

	S	ets.	S	cts.	\$	cts.
By Prizes for Grains and Seeds, \$29.70; Roots and other hoed crops, \$5; Dairy products, \$8.05; Vegetables, \$10;						
	66	<b>7</b> 5				
			103	70		
" Prizes for previous years paid			12	00		
" Printing and Advertising			3	35		
"Working Expenses, including services of Secretary, Trea-						
surer and Assistants			24	. 00		
					143	05
Balance in hand					17	95
7.6. 7						
Madoc.						
Dr.	\$	cts.	\$	cts.	\$	cts.
To balance in hand, as per last Annual Report	21	. 29				
Cr.					21	29
"Working Expenses, including services of Secretary and						
Treasurer	17	7 00				
					17	00
Balance in hand					1	29
Paramog III Hand					1	20

Note.—In consequence of a misunderstanding about arrangements with the North Hastings Society, the members, 51 in number, refused to pay their subscriptions; and the Directors urgently recommend the collection of the same, and increased efforts on behalf of the Society.

# Monteagle, McClun, Wicklow, Bangor and Herschell.

Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Legislative Grant from Electoral Division Society "Sale of Stock, \$108; Sale of Seeds, \$90.81	\$ cts. 123 50 50 00 79 25 198 81	\$ ets.	\$ cts.
Cr. By Prizes for Horses, \$31.50: Cattle, \$37.50; sheep, \$10.50; pigs, \$2.25 Prizes for Grain and Seeds, \$9.25; Roots and other hoed	81 75		
crops, \$5.75; Dairy Products, \$4.75; Vegetables, \$2.65; General Manufactures, \$10.45	32 85	114 60 11 10	
"Exhibition Buildings and Grounds "Paid on Purchase of Live Stock, \$165; on Purchase of Seeds, \$100.09 "Working Expenses, including services of Secretary, Trea-		2 00 265 09	
surer and Assistants  Balance in hand		49 01	$\frac{441}{9} \frac{80}{76}$
Rawlon.			
Dr. To Members' subscriptions " Legislative Grant from Electoral Division Society	\$ cts. 114 00 163 77	\$ cts.	\$ ets.

By Prizes for Horses, \$41.75; Cattle, \$42.25; Sheep, \$23.50;	\$ cts.	\$ cts.	\$ cts
Pigs, \$5.25; Poultry, \$4.80  Prizes for Grains and Seeds, \$19.30; Roots and other crops, \$13.40; Dairy Products, \$12.75; Fruits, \$1.80; Agricultural Implements, \$18.05; General Manufactures, \$19.30	117 55 84 60		
		202 15	
"Working Expenses, including services of Secretary, Treasurer and Assistants		48 62	250 77
Balance in hand			27 00
Diamo i mananii vivii iii			
Tudor and Wollastan.	© ata	© ata	e etc
Dr. To balance in hand, as per last Annual Report  " 53 Members' Subscriptions,  " Legislative Grant from Electoral Division Society  Cr.	\$ ets. 34 15 53 00 82 43	\$ ets.	\$ cts.
By Prizes for Horses, \$22; Cattle, \$31; Sheep \$14; Pigs,	<b>W</b> O 00		
" Prizes for Grains and Seeds, \$12 25; Roots and other hoed crops, \$2; Dairy Products, \$6; Vegetables \$10.75;	72 00		
General Manufactures, \$6.75; Ladies Work, \$0.50.	38 25	440.0	
By Exhibition Buildings and Grounds		110 25 6 30	
"On purchase of Seeds.  "Paid for Agricultural and Horticultural Publications"  "Working Expenses, including services of Secretary, Trea-		10 00 1 00	
surer and Assistants		21 18	140 79
			148 73
Balance in hand			20 85
HASTINGS, EAST.			
Dr.	\$ cts.	\$ cts.	\$ ets.
To Balance in hand, as per last Annual Report	115 57		
" 191 Members' Subscriptions"  " Admission Fees to Exhibition	$   \begin{array}{cccc}     195 & 00 \\     26 & 17   \end{array} $		
"Legislative Grant	700 00		
Cr.		1	,036 74
By prizes for Horses, \$90; Cattle, \$96; Sheep, \$50; Pigs, \$36; Poultry, \$6.25	278 25		
"Prizes for Grains and Seeds, \$54; Roots and other hoed crops, \$21; Dairy Products, \$29; Fruits, \$8.25;			
Vegetables, \$8.50; Agricultural Implements, \$56; General Manufactures, \$42; Ladies' Work, \$38	256 75		
	534 00		
Unpaid	67 95	467 05	
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings and Grounds " Paid for Agricultural or Horticultural Publications		40 65 140 00 6 00 177 85	
" Printing and Advertising		18 75	
57			

"Working Expenses, including services of Secretary, Treasurer and Assistants			S ets. $\frac{921 \ 30}{115 \ 44}$ hich the
	i manaoa	5400000	
Dr. To Members' Subscriptions Cr. By Printing and Advertising "Working Expenses, including services of Secretary and Treasurer	\$ ets. 66 79 1 00 11 25	\$ cts.	\$ ets. 66 79
Relence in hand			54 54
Balance in hand  Note.—The Society united with that of the Electoral D Show, which was quite a success.		holding	
Tyendinaga.  Dr. To balance in hand, as per last Annual Report	\$ ets. 13 64 71 00 140 00	\$ ets.	S ets.
Cr. By Prizes for Horses, \$32.75; Cattle, \$31.25; Sheep, \$22. 50; Pigs, \$9.75; Poultry, \$1.20  "Prizes for Grains and Seeds, \$28.25; Roots and other hoed crops, \$7.25; Dairy products, \$5.75; Fruits, \$2.35; Vegetables, \$1.95; Agricultural Implements, \$8.25; General Manufactures, \$16.80; Ladies' Work, \$6.65	97 45 7 <b>7</b> 25	174 70	224 64
"Exhibition Buildings and Grounds. "Printing and Advertising "Working Expenses, including services of Secretary, Treasurer and Assistants	8 20 4 50 24 00		211 40
Balance in hand			13 24
HASTINGS, WEST.  Dr.  To balance in hau l, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant  "Miscellaneous  Cr.  By Prizes for Horses, \$90; Cattle, \$141.75; Sheep, \$41.25;  Pigs, \$28.75; Poultry, \$15.75	\$ ets. 255 13 166 00 586 80 700 00 94 50 317 50		\$ cts.

Cr. By Prizes for Grains and Seeds, \$45.75; Dairy products, \$24.50; Agricultural Implements, \$83.50; General Manufactures, \$102.50; Fine Arts, \$10.50; Ladies'	\$ cts.	\$ cts.	\$ cts.
Work, \$34.40	301 15		
Unpaid	618 65 75 00		
" Prizes for previous years paid" " Portions of Legislative Grant paid to Township and Horti-		543 65 61 20	
cultural Societies  " Exhibition Buildings and Grounds  " Printing and Advertising		480 00 474 46 73 66	
"Working Expenses, including services of Secretary, Treasurer and Assistants		73 62	.,706 59
Balance in hand			95 84
Sidney.			
Dr. To Members' Subscriptions " Admission Fees to Exhibition" " Legislative Grant from Electoral Division Society	\$ cts. 109 00 23 24 103 48	\$ cts.	\$ cts.
" Miscellaneous	95 00		263 26
tures, \$24.25; Fine Arts, \$2.50; Ladies' Work, \$6.15  Unpaid	83 35 178 35 8 55		
" Printing and Advertising" Working Expenses, including services of Secretary and		169 80 22 50	
Treasurer		8 28	200 58
Balance in hand			62 68
Belleville Horticultural Society.			
Dr. To Members' Subscriptions  " Legislative Grant from Electoral Division Society."  " Miscellaneous	\$ ets. 154 00 187 48 60 00	\$ cts.	\$ cts,
Cr. By Prizes for Fruits, Flowers and Vegetables	$ \begin{array}{c cccc} \hline 194 & 05 \\ 10 & 50 \end{array} $	109 55	401 48
" Exhibition Buildings" " Printing and Advertising		183 55 56 88 39 39	279 82
Balance in hand			121 66

Dr. To Members' Subscriptions " Legislative Grant from Electoral Division Society	\$ cts. 106 00 129 05	\$ cts.	₩
Cr. By balance due the Treasurer, as per last Annual Report " Prizes for Fruit, Flowers, and Vegetables. " Exhibition Buildings. " Printing and Advertising		68 49 98 75 9 13 14 50	235 05
"Working Expenses, including services of Secretary, Treasurer and Assistants		5 20	196 07
Balance in hand			38 98
HURON, EAST.			
Dr. To Members' Subscriptions  "Admission Fees to Exhibition "Legislative Grant, \$700; Municipal Grant, \$75 "Miscellaneous	\$ ets. 136 00 231 49 775 00 74 20	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$123.50; Cattle, \$78; Sheep, \$40; Pigs, \$15; Poultry, \$8 "Prizes for Grains and Seeds, \$32; Roots and other hoed crops, \$9.75; Dairy products, \$10.50; Fruits, \$12.75; Vegetables, \$8.25; Agricultural Implements, \$12;	264 50		1216 69
General Manufactures, \$8.50; Fine Arts, \$2.50; Ladies' Work, \$29.25; Ploughing Match, \$50	176 50		
Unpaid	441 00 149 50	291 50	
By Portions of Legislative Grant paid to Township Societies  " Paid on purchase of Exhibition Grounds.  " Printing and Advertising  " Working Expenses, including services of Secretary, Trea-		252 54 375 00 32 25 29 75	
			981 04
Balance in hand  Grey.			235 65
Dr. To Members' Subscriptions Legislative Grant from Electoral Division Society. Miscellaneous	\$ ets. 65 97 71 00 18 00	\$ cts.	\$ cts.
Cr.			154 97
By Prizes for previous years paid  "Printing and Advertising		79 50 21 75	
surer and Assistants		20 53	121 78
Balance in hand			33 19
Nome The Society with I will II . III . I Division		TT . ~.	

Dr. To Members' Subscriptions	\$ ets. 184 00	\$ cts.	\$ cts.
" Admission Fees to Exhibition " Legislative Grant from Electoral Division Society	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		350 63
Cr. By balance due the Treasurer, as per last Annual Report Paid in premiums By Exhibition Buildings and Grounds 'Printing and Advertising 'While Expressional diagraphy of Secretary Tree		2 53 180 33 12 00 11 00	
"Working Expenses, including services of Secretary, Treasurer and Assistants		20 15	226 01
Balance in hand			124 62
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions	\$ ets. 44 84 96 00	\$ cts.	\$ cts.
"Admission Fees to Exhibition"  "Legislative Grant from Electoral Division Society"  "Municipal Grant Cr.  By Prizes for Horses, \$47; Cattle, \$31.25; Sheep, \$20.25;	7 25 53 10 15 00		216 19
Pigs, \$4.75; Poultry, \$1.50	104 75		/
General Manufactures, \$7.45; Ladies' Work, \$17.55  "Printing and Advertising	55 50	160 25 11 00	
surer and Assistants		44 19	215 44
Balance in hand			75
HURON, WEST.  Dr.  To Members' Subscriptions  " Legislative Grant, \$700; Municipal Grant, \$75	\$ ets. 122 00 775 00	\$ cts.	\$ cts.
" From late N. Riding Society"  " Ashfield and Wawanosh amalgamated"  " Miscellaneous	11 20 88 00 28 00	1	1,024 20
By Prizes for Horses, \$147; Cattle \$89.50; Sheep, \$58.50; Pigs, \$54; Poultry, \$6.25	355 25		
Agricultural Implements, \$90; General Manufactures, \$69; Fine Arts, \$65.50; Ploughing Match, \$50.00	428 25		
Unpaid	783 50 263 75	519 75	
0.4		320 10	

By Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds	\$ ets.	\$ ets. 363 25 8 00 34 75 77 04 ————————————————————————————————————	\$ cts.
Balance in hand			21 41
Ashfield and Wawanosh.  Dr. To Members' Subscriptions  " Legislative Grant from Electoral Division Society  Cr. By balance due Treasurer as per last Annual Report	\$ cts. 96 00 56 49	\$ ets.	\$ cts
" Electoral Division Society for Union Show "Working Expenses	$122  49 \\ 1  48$		
			153 97
Balance due Treasurer			1 48
Colborne.			
Dr. To Members' Subscriptions	\$ cts. 134 00 37 85 72 90	\$ cts.	\$ cts.
Cr. By balance due the Treasurer as per last Annual Report  "Prizes for Horses, \$36; Cattle, \$37; Sheep, \$19.25; Pigs, \$13; Poultry, \$7.25  "Prizes for Grains and Seeds, \$29.50; Roots and other hoed crops, \$5.50; Dairy products, \$16.25; Fruits, \$22.75; Vegetables, \$17.90; Agricultural Implements, \$19.75; General Manufactures, \$11.25; Ladies' Work, \$45.50	112 50 168 40	27 82	244 75
Unpaid	280 90 22 80	258 10 19 75	
"Working Expenses, including services of Secretary, Treasurer and Assistants		49 45	355 12
Balance due Treasurer			110 37
Wawanosh, East.  Dr. To 168 Member's Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ cts. 168 00 6 00 92 26 8 64	\$ ets.	\$ ets
Cr. By Prizes for Horses, \$44; Cattle, \$31.50; Sheep, \$21.50; Pigs, \$11; Poultry, \$2.75	110 75		274 90

Agricultural Implements, \$8.50; General Manufactures,	\$ cts.	\$ cts.	\$ cts.
\$6; Ladies' Work, \$9.50	82 75		
		193 50	
By Exhibition Buildings and Grounds		7 65	
surer, and Assistants		59 85	0.61 0.0
			261 00
Balance in hand			13 90
Goderich Horticultural Society.			
Dr. To balance in hand, as per last Annual Report	\$ cts.	\$ cts.	\$ cts.
" Members' Subscriptions	71 25		
" Admission Fees to Exhibition"  " Legislative Grant from Electoral Division Society	$76 85 \\ 30 07$		
" Municipal Grant	100 00		
Cr. By Prizes for Fruits, \$68.65; Plants and Flowers, \$31; Vege-			
tables, \$36.05	135 70		
By Prizes for Ladies' Work	26 25	161 95	
By Exhibition Building		27 30	
" Paid for Horticultural Publications		16 50	
" Printing and Advertising" " Working Expenses, including services of Secretary, Trea-		15 00	
surer and Assistants		36 50	~~
			257 25
Balance in hand			84 53

The Directors, in presenting their Annual Report, desire to thank the Council and the people of the Town of Goderich, and of the adjoining townships for the liberal support they have always extended to the Society since its organization. We are happy to be able to report that last season has been a successful one for the Society, as we never were in a better financial position.

The Exhibition this season was a complete success. The large hall was filled with visitors in the afternoon and evening with gratifying results to the financial department of the Society. The Exhibition in many respects was the most successful yet held under the

auspices of the Society.

The show of apples was the largest we have yet had, and the apples were of excellent quality, entirely free from worms or other defects.

The show of pears was also very good, and of excellent quality.

The show of peaches was not large, but there were some splendid plates of them shown, principally of the late and early Crawford varieties.

The show of plums was pretty large, but the season being so far advanced, they were

not in good condition for exhibiting.

The show of grapes was very good, especially those grown under glass. The grapes grown in the open air this season were not so good as in former years, on account of the late spring and cold wet fall.

The show of flowers was not so large as at some former Exhibitions, but there were some

splendid green-house plants on exhibition.

The spring-garden vegetables were all that could be desired, the largest and the best quality yet exhibited by the Society.

The show of ladies' work was not very large, but the articles shown were of excellent

quality, and very much admired by the visitors.

The Society continues to hold monthly meetings upon the first Tuesday in each month, when books on horticulture are distributed amongst the members, and occasionally discussions take place on horticulture.

## HURON, SOUTH.

Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant, \$700; Municipal Grant, \$75  "Sale of Stock, Seeds, &c  Cr. By Prizes for Horses, \$289.50; Cattle, \$145; Sheep, \$86; Pigs, \$23; Poultry, \$450  "Prizes for Grains and Seeds, \$86.50; Roots and other hoed crops, \$17; Dairy products, \$36; Fruits, \$25.75; Vegetables, \$24; Agricultural Implements, \$47; General	\$ cts, 94 09 75 00 775 00 649 00 548 00	\$ ets.	\$ cts.
Manufactures, \$35; Fine Arts, \$7; Ladies' Work, \$44; Ploughing Match, \$50.00; Special Prizes, \$23.60  By Portions of Legislative Grant paid to Townchip Societies  "Printing and Advertising	401 60	949 60 402 26 43 00 163 49	1,558 35
Balance in hand			34 74
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr.  By Prizes for Horses, \$62; Cattle, \$24.50; Sheep, \$42; Pigs, \$8; Poultry, \$3.25.  "Prizes Grain and Seeds, \$19.75; Roots and other hoed crops, \$5.25; Dairy products, \$10.50; Fruits, \$12.50; Vegetables, \$10.00; Agricultural Implements, \$9.50; General Manufactures, \$17.25; Ladies' Work, \$22.30.	\$ ets. 83 34 169 00 34 22 75 15 80 00 46 00 	\$ ets.	\$ cts.
By Prizes for previous year paid  "Exhibition Buildings and Grounds  "Printing and Advertising, Miscellaneous  "Working Expenses, including services of Secretary, Treasurer and Assistants		346 00 53 25 80 00 47 95 43 80	471 90
Balance in hand			15 90

	Stanley.			
cr. By	Prizes for Horses, \$45.50; Cattle, \$18.50; Sheep, \$21; Prizes for Grain and Seeds, \$27.75; Dairy Products, \$7.50;	\$ cts. 43 92 178 50 21 11 73 16 12 15 106 00	\$ cts.	\$ cts.
66	Fruits, \$14; Vegetables, \$11.75; Agricultural Implements, \$13; General Manufactures, \$22; Ladies' Work, \$6; Discretionary, \$16.50	124 50	230 50 11 25	
	urer and Assistants.		63 87	305 62
	Balance in hand			23 22
"	Stephen and Usborne.  Members' Subscriptions	\$ cts. 381 00 423 00 140 00 118 85	\$ cts.	\$ cts.
Cr. By	Prizes for Horses, \$160; Cattle, \$80; Sheep, \$38.50; Pigs, \$13; Poultry, \$7.75	299 25		1062 85
66	\$16.50; Fine Arts, \$5.75; Ladies' Work, \$27.35  Paid on purchase of Exhibition Grounds  Printing and Advertising, \$37.37; Musical Bands, \$26  Working Expenses, including services of Secretary, Treasurer and Assistants	130 10	429 35 214 50 63 37 199 00	906 22
	Balance in hand			156 63
	Tuckersmith.			
"	Miscellaneous	194 07 398 00 414 00 114 03 1,100 00 98 25		0.010.07
Cr. By	Prizes for Cattle, \$9; Sheep, \$3; Pigs, \$4; Poultry, \$3.  Grains and Seeds, \$47	19 00 47 00		2,318 35
	5 65		66 00	

By Prizes for previous years paid  " Paid on purchase of Exhibition Grounds  " S. Huron Society Grant for premiums  " Printing and Advertising  " Working Expenses, including services of Secretary, Treasurer and Assistants	\$ 103 1405 350 11 233	15 00 50	\$	cts.	2,169	96
Balance in hand					148	39
KENT, EAST.						
Dr. To balance in hand, as per last Annual Report	\$ 38 185 237 950 148	$\begin{array}{c} 00 \\ 52 \\ 00 \end{array}$	S	cts.	\$	cts.
Cr. By Prizes for Horses, \$96.50; Cattle, \$117.75; Sheep, \$112; Pigs, \$86; Poultry, \$12.50	424				1558	75
Ladies' Work, \$42.50	234	00	OF O	PT F		
Pro Doutions of the Toxislatine Count maid to Township			658	75		
By Portions of the Legislative Grant paid to Township Societies			407 49 56	10 06		
surer and Assistants			78	00	7010	7.13
		-			1249	13
Balance in hand				-	309	62

Note.—The Society is much improved, and the show was highly successful, and great interest was manifested by a large attendance of visitors. More extended accommodation will be provided another year.

Or ford.			
Dr.	\$ cts.	\$ cts.	\$ cts
To Members' Subscriptions	115 00		
" Admission Fees to Exhibition	21.15		
" Legislative Grant from Electoral Division Society	83 52		
" Miscellaneous	10 72		
Cr.			230 39
By balance due the Treasurer as per last Annual Report		5 72	
" Prizes for Horses, \$43; Cattle, \$42; Sheep, \$15; Pigs,			
\$20; Poultry, \$6	126 00		
" Prizes for Grains and Seeds, \$27; Roots and other hoed	1-0 00		
crops, \$15; Dairy products, \$9.70; Fruits, \$10;			
Vegetables, \$5; Agricultural Implements, \$8; General			
Manufactures, \$25	99 70		
Line was the control of the control		225 70	
		220 10	

6	y Prizes for previous years paid	\$ ets.	\$ cts. 56 35 2 00	\$ cts.
	surer and Assistants		16 76	306 53
	Balance due Treasurer			76 14
	Harwich.			
Di		\$ cts.	\$ ets.	\$ ots.
10	balance in hand, as per last Annual Report  Members' Subscriptions	$179 06 \\ 165 50$		
(	'Admission Fees to Exhibition	176 73		
6	Legislative Grant from Electoral Division Society	$106 55 \\ 25 00$		
6	Sale of Seeds	307 48		
6	' Miscellaneous ' Borrowed to purchase Seed Grain	$\begin{array}{cccc} 12 & 23 \\ 400 & 00 \end{array}$		
C			1	,372 55
B	y Prizes for Horses; \$33; Cattle, \$38; Sheep, \$31; Pigs, \$19.50	121 50		
6	Prizes for Grains and Seeds, \$27.50; Roots and other hoed crops, \$13; Dairy products, \$8; Fruits, \$10; Plants and Flowers, \$1.50; Agricultural Implements, \$13;	121 90		
	Ladies' Work, \$17.25	90 25		
	Unpaid	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.69 .00	
د	Prizes for previous years paid		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
6	' Paid on purchase of Exhibition Grounds		506 72	
6	' Paid on purchase of Secds		491 00 27 14	
6	Printing and Advertising		3 14	
	surer and Assistants		49 50	
				1,264 50
	Balance in hand	• • • • • • • • • •		108 05
	Howard.			
D T	r. o Members' Subscriptions.	\$ cts. 191 00	\$ cts.	\$ cts.
٤	'Admission Fees to Exhibition	109 75	,	
	Legislative Grant from Electoral Division Society	140 00		
6	Sale of Stock Miscellaneous	31 50 37 00		
C	r.		00 70	509 25
	y balance due the Treasurer, as per last Annual Report 'Prizes for Horses, \$61.75; Cattle, 45; Sheep, \$23; Pigs,		98 78	
	\$18; Poultry, \$1.25	149 00		
	cultural Implements, \$15.50: General Manufactures, \$11; Fine Arts, \$1.50; Ladies' Work, \$22.25	101 55		
	φει, επιστικώ, φιώσ, παιίος ποικ, φ22.20	<del></del>	250 55	
	07			

By Paid for Agricultural or Horticultural Publications "Printing and Advertising, \$17.25; Munical Bands, \$25 "Working Expenses, including services of Secretary, Treasurer and Assistants	\$ cts.	\$ cts. \$ cts 1 00 42 25
suiti and assistants		500 03
Balance in hand		9 22
NoreThe Exhibition was successful, and the prospects of	of the Soci	ety encouraging,
Zone.		
Dr. To bulance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Municipal Grant	\$ ets. 63 80 126 00 43 20 77 15 30 00	\$ cts. \$ cts.
Cr. By Prizes for Horses, \$38.25; Cattle, \$31; Sheep, \$20; Pigs,		340 15
\$16.50; Poultry, \$4.75	110 50	
\$21.25; Fine Arts, \$20.50; Ladies' Work, \$13	124 40	234 90
By Exhibition Buildings and Grounds  " Printing and Advertising		10 d7 12 68
surer and Assistants		30 75 289 00
Balance in hand		51 15
<del></del> -		
KENT, WEST.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant, \$700; Municipal Grant, \$100  "General Account  "Sale of Seeds, \$291.77; Miscellaneous, \$156.75	\$ cts. 318 87 202 00 654 58 800 00 486 00 448 52	\$ cts. \$ cts.
Cr. By Prizes for Horses, \$153; Cattle, \$100; Sheep, \$83; Pigs, \$105.50; Poultry, \$33.75  By Prizes for Grains and Seeds, \$110; Roots and other hoed crops, \$39; Dairy products, \$42; Fruits, \$22; Agricultural Implements, \$62; General Manufactures, \$42;	475 25	. 2,909 97
Fine Arts, \$36; Ladies' Work, \$79.75	432 75	908 00
"Prizes for previous years paid "Portions of Legislative Grant paid to Township Societies "Paid on purchase of Exhibition Grounds, or on the erection of buildings		25 00 280 00 588 95
of buildings		376 00

By Working Expenses, including services of Secretary, Trea-	\$ cts.	\$ ets.	S	ets.
surer and Assistants		 00	2,30	7 95
Balance in hand			60:	2 02

The President and Directors of the West Kent Agricultural Society, beg leave to submit

the following report:

That the Society held its annual Spring Fair for the exhibition of Entire Horses, at which a greater number were exhibited than at any previous fair held by this Society, and your directors must congratulate the members of the agricultural community at large upon the yearly improvement in this class of stock, and cannot urge too strongly upon farmers and others the desirability of raising their stock from their best brood mares and the best horses, regardless of cost.

In the spring a quantity of seed grain was purchased, and although the Society's funds suffered a little by the operation, the policy of a change of seed cannot be questioned, and while on the subject of seed, your Directors would recommend to the Directors of 1876, a renewal of seed of the Scott wheat, as it is generally admitted to be one of the best wheats grown

in this section of the country.

The annual Fall Fair was held, and taking everything in consideration was a marked success. The first day of the Fair was, financially, a bad one, it having rained nearly all day, and being a wet disagreeable night, nothing was taken either at the gate during the day, or at the drill shed in the evening. However, the second day was more projitious, and a greater number of visitors were admitted to the grounds and building then on any two days of any previous fair. The exhibition outside was remarkably good, and a marked improvement in stock of all kinds. The exhibition inside the building, though not so large as in 1874, was very good.

Your Directors have the disagreeable duty to report to the Society the burning of the agricultural building together with its contents: there was an insurance of \$+60 on the building which has been paid. The contents, upon which there was no insurance, consisted of a large quantity of lumber, pens and other appurtenances for the exhibition building, which was a great loss to the Society, in fact your Directors had no idea of the value of this accumu-

lation of lumber, until they were compelled to replace the same with new.

In consequence of this great extra expense, and of the fact that the grant of the County Council was \$50 less the past year than formerly, your Directors deemed it prudent not to have the usual annual Ploughing Match, which no doubt disappointed many of the Society's most liberal patrons, as well as a class of competitors that should by all means be encouraged

by every agricultural society.

Notwithstanding the severity of the winter of 1874-75, the cereal and fruit crops of the County of Kent have been good throughout. It is true that many fields of fall wheat were entirely winter-killed, in consequence of the snow drifting off them and leaving them exposed to the severe frosts which prevailed, and your Directors cannot leave this subject without calling the attention of the members of the Society to the recommendation made by the Directors of 1874, of the planting of trees. It is a well known fact that all fields of fall wheat grown during the past year which were protected on the north-west by belts of trees, turned out good. These belts of woods prevented the snow drifting from the fields, and it matters not how severe the winters are, if well covered with snow the wheat will remain uninjured. Your Directors would therefore earnestly urge upon farmers the recommendation of the Directors of 1874, that is, of planting trees.

If the County Council could acquire from the Government the Rond Eau Point, which is well covered with just the sort of young trees for this purpose, and have a keeper appointed to dispose of them for a small consideration to the farming community, good results would

inevitably follow.

Your Directors would strongly recommend that efforts should be made by every Electoral Society to introduce within its limits improved cattle every year. Efforts should be

made to induce the Government to either dispose of, for a consideration, or present to County Societies its disposable stock of thoroughbreds, instead of to those who permit them to be of no use to the country at large, your Directors believing that the introduction yearly of improved breeding stock to be as essential as seed grain.

Circulars from the Ontario Advisory Board, requesting each County Society to collect and forward for exhibition at Philadelphia samples of grain and other products, have been received, and will be submitted to the incoming Directors. We trust that a hearty response may

be made to the invitation, and a good collection of samples forwarded.

In conclusion, your Directors have great pleasure in congratulating the county upon the manifest benefits which have resulted from the Drainage Act. There are now thousands of acres in the county under cultivation, which a few years ago were totally unfit for any purpose. The resources of the county must therefore necessarily increase, and its wealth and importance become much greater.

Raleigh.				
Dr.	\$ cts.	\$ cts.	8	cts.
To balance in hand, as per last Annual Report	163 91	77	П	
" Members' Subscriptions	58 00			
" Legislative Grant from Electoral Division Society	140 00			
" Sale of Seeds	545 38			
" Borrowed for purchase of Seeds	350 00			
Ĉr.			1257	29
By Prizes for Horses, \$22; Cattle, \$30; Sheep, \$18.50; Pigs,				
\$22.50; Poultry, \$4.50	97 50			
" Prizes for Grain and Seeds, \$18.50; Roots and other hoed				
crops, \$4.50; Dairy Products, \$8.75; Fruits, \$1.70;				
Plants and Flowers, \$2.60; Vegetables, \$4.50; General				
Manufactures, \$8.05; Ladies' Work, \$8	<b>5</b> 6 60			1
77.111.4		154 10		
" Exhibition Buildings		7 40		
"On purchase of Seeds		483 26		
" Paid on loan		531 55		
"Working Expenses		50 94	7.000	05
			1227	25
Balance in hand			30	04

### REPORT.

That the Society is in a sound condition, having cash on hand to the amount of \$30.04. Notes due and uncollected, \$273.82. The only liability is cash borrowed for payment of seed grain, \$175.00. Leaving a balance to the credit of the Society of 128.86.

In the beginning of the year your Directors purchased a large quantity of seed Peas, Oats and Barley, which were given to the members at cost, giving the purchasers credit till after the harvest to pay therefor. This we found very beneficial to a number of its members.

Your Directors held their show at the Township Hall. The number of entries exceeded

that of former years, and the show in many of the classes was very good.

We think for Sheep and Pigs we can surpass any Township in the County.

We have some excellent butter makers in the Township, many of the samples shewn were extra good.

A very fine sample of Potter's-ware made from the clay of our low lands, was shown by

Geo. H. Johnson, who deserves great credit in his enterprise.

Our crops for the past year were on the whole very good, although the drought in the beginning of the summer hurt them very much. Potatoes were extraordinarily good. Your Directors in conclusion would strongly urge a more lively interest taken by its members, and we firmly believe that the Society may be a great good to the farming community.

Tilbury, East.  Dr. To balance in hand, as per last Annual Report	\$ cts.	\$ ets.	\$ cts.
" 78 Members' Subscriptions " Legislative Grant from Electoral Division Society	78 00 140 00		323 56
By Prizes for Horses, \$40.50; Cattle, \$41.75; Sheep, \$16; Pigs, \$9.75;  " Prizes for Grains and Seeds, \$18; Roots and other hoed	108 00		
crops, \$9.75; Dairy Products, \$4: Fruits, \$5.75; Agricultural Implements, \$6; General Manufactures, \$5.50; Ladies' Work, \$18.50; Ploughing Match, \$20	87 50	195 50	
" Live Stock Working Expenses		101 90 42 00	339 40
Balance due Treasurer			15 84
KINGSTON.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.	\$ cts. 155 87 176 50 38 05	\$. ets.	\$ ets.
Or.			720 42
3y Prizes for Poultry	31 50		
Vegetables, \$34.75; General Manufactures, \$14.50; Fine Arts, \$15.50; Ladies' Work, \$53.50	191 75		
	223 25		
Unpaid		210 00	
" Prizes for previous years paid	2 50	219 00	
"Contribution to the Midland Exhibition "Printing and Advertising, \$47.78; Musical Bands, \$15	250 00 62 <b>7</b> 8		
"Working Expenses, including services of Secretary, Treasurer and Assistants	73 63		649.00
			643 98
Balance in hand			76 44

The Directors for the past year beg to report that, owing to the holding of the Midland District Fair here, last Fall, they deemed it expedient to dispense with the usual Autumn Exhibition. For that purpose a general meeting of the Society was called, having been duly advertised in the city papers, on the 2nd day of September last, when a resolution was unanimously passed not to hold that exhibition.

A second resolution was also passed, to subscribe from the Society funds, a sum of \$250 towards the Midland Fair. Your Directors are pleased to report that the Midland Fair, held under the auspices of the Local Societies, was eminently successful.

It is manifestly desirable to place the same on a permanent basis; and unless the other sections of the Province evince more fairness to us than heretofore in the location of the Provincial Exhibition, your Directers think Legislation is required to make a more equitable ar-

rangement than the one now existing.

The Spring Exhibition in all departments, except Fruits and Vegetables, was up to the usual standard. In these, owing to the backwardness of the season, a great falling off was inevitable. Your Directors have to complain of the usual meagre display in the departments of Fine Arts and Manufactures.

Your Society is to be congratulated on the fine display in all the other departments, viz: Flowers, Poultry, and Ladies' Work. Your Directors are pleased to observe that the leading exhibitors in these departments have been successful in the larger arena for competition offered

at the Midland Central Fair and the Provincial Exhibition.

In conclusion, your Directors trust that more public interest may be manifested in the

Society's operations.

The approaching Centennial Exhibition to be holden at Philadelphia, will exercise a beneficial interest in making the utility of such societies more obvious, whilst doubtless it will stimulate the indifferent to greater exertions by its exhibitions of numerous triumphs achieved by our fellow-men in all quarters of the globe.

LAMBTON, EAST.			
Dr.  " Members' Subscriptions  " Admission Fees to Exhibition  " Legislative Grant, \$700; Municipal Grant, \$150  Cr.	\$ cts. 301 00 179 80 850 00	\$ cts.	\$ cts,
By Prizes for Horses, \$113.50; Cattle, \$98.50; Sheep, \$71.50; Pigs, \$37; Poultry, \$6.75	327 25	572 25 419 46 129 58 80 47	,,,,,,,,,
surer and Assistants		131 91	222 67
		]	,,000 04
Balance due Treasurer			2 87
Euphemia and Dawn.  Dr. To balance in hand, as per last Annual Report  "Members Subscriptions  Admission Fees to Exhibition  "Legislative Grant from Electoral Divisional Society.	\$ ets. 127 69 92 50 31 25 63 24 30 00	-	
Euphemia and Dawn.  Dr. To balance in hand, as per last Annual Report  "Members Subscriptions  Admission Fees to Exhibition	127 69 92 50 31 25 63 24 30 00 	-	2 87

72

By Exhibition Buildings  " Printing and Advertising  " Working Expenses.	\$ cts.	\$ ets. 82 9 75 22 15	\$ cts. 232 27
Balance in hand			112 41
LAMBTON, WEST.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition	\$ ets. 336 57 190 70 30 97 850 00	\$ cts.	\$ ets.
" Miscellaneous Cr.  By Prizes for Horses, \$113; Cattle, \$107.50; Sheep, \$90; Pigs, \$15; Poultry, \$4.49  " Prizes for Grains and Seeds, \$51.50; Roots and other hoed crops, \$23; Dairy products, \$23; Fruits, \$22.05; Plants and Flowers, \$4.75; Vegetables, \$9.93; Agri-	329 99	1	502 24
cultural Implements, \$39; General Manufactures, \$27.36; Ploughing Match, \$47	266 09		
Un paid	596 08 37 11	558 97	
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings and Grounds " Paid for Agricultural or Horticultural Publications " Printing and Advertising " Working Expenses, including services of Secretary, Trea-		7 95 262 72 137 60 52 95 34 37	
surer and Assistants		132 30	,186 86
Balance in hand			315 38
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grants.	\$ cts. 215 13 110 00 11 60 122 72 150 00	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$28.20; Cattle, \$36.75; Sheep, \$48.50; Pigs, \$12; Poultry, \$4	129 45		609 45
Work, \$34.40 " Prizes for previous years paid	148 45	277 90 6 55	

By Exhibition Buildings  " Printing and Advertising  " Working Expenses	\$ ets.	\$ ets. 20 50 10 66 83 50	\$ cts.
Balance in hand			210 34
Moore,			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr.	\$ ets. 15 16 132 00 12 35 140 00 25 00 2 13	\$ cis.	\$ cts.
By prizes for Horses, \$24.25; Cattle, 56.50; Sheep, \$28.50; Pigs, \$6.75; Poultry, \$1.82  "Prizes for Grains and Seeds, \$18.90; Roots and other hoed crops, \$7.07; Dairy products, 13.95; Fruits, 3.05; Agricultural Implements, \$17.50; General Manufac-	117 82		
tures, \$7	67 47	185 29	
"Prizes for previous year "Exhibition Buildings "Paid for Agricultural or Horticultural Productions "Printing and Advertising "Working Expenses, including services of Secretary, Trea-		20 57 10 60 21 42 1 00	
surer, and Assistants		82 38	321 26
Balance in hand			5 38
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  Admission Fees to Exhibition  "Legislative Grant	\$ cts. 144 68 346 75 399 80 700 00	\$ ets.	\$ ets.
" Miscellaneous Cr.	58 85	1	,650 08
By Prizes for Horses, \$101; Cattle, \$64.75; Sheep, \$35.75; Pigs, \$18; Poultry, \$54	274 50	1,	030 08
\$4.50; Ladies' Work, \$36.50	484 75		
Deduct as per Rules	759 25 209 00		
" Portions of Legislative Grant paid to Township Societies  " Exhibition Buildings and Grounds  " Paid for Agricultural or Horticultural Productions		550 25 40 <b>9</b> 50 38 <b>7</b> 12 60 50	

By Printing and Advertising	₩	cts. \$ cts. \$ cts. 67 25  185 12  1,659 74
Balance due Treasurer		9 66

Our Society is in good working order, and clear of debt. Our annual exhibitions keep increasing from year to year, both in number of entries and visitors—over 4,000 tickets having been sold for entrance at our last exhibition.

We have now excellent accommodation on our exhibition grounds, the most of which

have been made within the last three years, at an outlay as follows:-

1873	\$956	00
1874		00
1875	00=	00
Total	\$1,471	00

We will require to expend during this year about \$150 in making some other necessary

improvements on the Agricultural Hall.

We had an abundant harvest the past year notwithstanding that we experienced a severe drought up to the 24th June—and during that time great damage was done by fires running through the bush.

A number of our farmers are taking a lively interest in improving their stock, and in

the selection of the best seeds.

Dalhousie,			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions	146 50		В
" Legislative Grant from Electoral Division Society	140 00		
"Sale of Stock, \$19; Sale of Seeds, \$401.35	420 35		
	160 00		
" Borrowed	100 00		866 85
	4 00		000 00
By Rent of Building			
" Live Stock, \$60.50; On purchase of seeds, \$428.72	489 22		
" Paid for Agricultural or Horticultural Publications	7 00		
"Working Expenses	15 90		
" Keep of Bull	57 14		
" For procuring seeds, &c	26 71		
" Money borrowed and interest	162 48		
v			$762 \ 45$
Balance in hand			104 40
Lanark.			
Dr.	\$ cts.	\$ ets.	\$ cts.
To balance in hand, as per last Annual Report	71 25	45 6.000	46
" Members' Subscriptions	148 60		
"Admission Fees to Exhibition	23 00		
	$135 \ 75$		
"Legislative Grant from Electoral Division Society	273 29		
" Sale of Stock and Seeds	415 49		651 89
75			001 00

Cr.	Prizes for Horses, \$30.50; Cattle, \$22.75; Sheep, \$9.75;	\$ ets.	\$ ets.	\$ cts.
	Pigs, \$5.50; Poultry, \$3	71 50 100 30	171 80	
66	Prizes for previous years paid  Exhibition Buildings.  Paid on purchase of Live Stock and Seeds  " " For Agricultural or Horticultural Pub-		20 20 5 60 302 23	
"	lications.  Printing and Advertising  Working Expenses, including services of Secretary, Treasurer, and Assistants.		41 30 11 75 75 65	
			_ /	628 53
	Balance in hand			23 36
D	Pakenham.			
Dr. To	balance in hand, as per last Annual Report	\$ cts.	\$ cts.	S ets.
66	Members' Subscriptions	132 40		
66	Legislative Grant from Electoral Division Society	133 75 25 00		
- "	Miscellaneous	3 00		
Cr.	Prizes for Horses, \$45.75; Cattle, \$20.75; Sheep, \$8.50;			305 98
	Pigs, \$6; Poultry, \$2.50	83 50 <sub>.</sub>	400.0	
٤٤	Paid for Agricultural or Horticultural Publications		198 37 59 00	
66	Printing and Advertising.  Working Expenses		9 00 32 39	298 76
	Balance in hand			7 22
Dr.	LANARK, SOUTH.			
	balance in hand, as per last Annual Report	\$ ets.	S cts.	S ets.
- 6	Members' Subscriptions	210 00		
66	Admission Fees to Exhibition. Legislative Grant	140 17 700 00		
66	Proceeds of Note discounted	219 87		
6.	For advertisements in Prize list	$92 00 \\ 21 60$		
- 66	Viscellaneous	21 50		
Cr. By	Prizes for Horses, \$79; Cattle, \$56.50; Sheep, \$25.50; Pigs, \$6.50; Poultry, \$4.75	172 25	1	,447 30
	76			

Cr. By Prizes for Grains and Seeds, \$38.50; Roots and other hoed crops, \$30.75; Dairy Products, \$35; Plants and Flowers, \$10.75; General Manufactures, \$23.25; Ladies' Work, \$52.75; Ploughing Match, \$18; Mis-	\$ ets.	\$ cts.	\$ cts.
cellaneous, \$31.75	240 75		
- Unpaid	413 00 16 65		
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings " Paid on purchase of Exhibition Grounds " Cash paid for Note discounted " Printing and advertising, \$70; Musical Bands, \$12 " Working Expenses, including services of Secretary, Trea-		396 35 43 75 280 00 17 57 350 33 225 00 82 00	
surer and Assistants		95 41	,490 41
Balance due Treasurer		-	43 11
Drummond.			
Dr. "To balance in hand, as per last Annual Report. "Members' Subscriptions. "Legislative Grant from Electoral Division Society. "Sale of Stock.	\$ cts. 58 90 48 50 140 00 15 50	\$ cts.	\$ cts.
Cr.			262 90
By Exhibition Buildings  " Keep of Live Stock  " Printing and Advertising  " Working Expenses	4 00 98 60 6 00 11 80		
			120 40
Balance in hand			142 50
Montague.			
Dr.  "To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	\$ cts. 98 36 138 50 42 22 140 00	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$33.50; Cattle, \$19.75; Sheep, \$23 75; Poultry, \$2.25  "Prizes for Grain and Seeds, \$28.50; Roots, and other hoed crops, \$15; Dairy products, \$11; Fruits, \$3.50; Vegetables, \$5.75; Agricultural Implements, \$33.50; General	79 25		419 08
Manufactures, \$7.75; Fine Arts, \$3; Ladies' Work, \$21.15.	129 15	000 10	
" Paid for Agricultural or Horticultural Publications " Printing and Advertising		208 40 25 40 16 00 54 17	
			303 97
Balance in hand 77			115 11

77

LEEDS, SOUTH.			
Dr.	\$ cts.	\$ cts.	S cts.
To Members' Subscriptions	196 00		#
" Admission Fees to Exhibition	220 20		
" Legislative Grant, \$700; Municipal Grant, \$100	800 00		
" Donations	115 00		
" Miscellaneous	42 00		
Cr.	42 00		1,373 20
By Prizes for Horses, \$66; Cattle, \$77.50; Sheep, \$26; Pigs,			1,515 20
\$12; Poultry, \$14	105 50		
" Prizes for Grains and Seeds, \$32; Dairy products, \$31;	195 50		
Verestables \$20 . Assigntantal Implements \$67 Occ			
Vegetables, \$29; Agricultural Implements, \$67; Gen-	202 50		
eral Manufactures, \$83; Ladies' Work, \$50.50	292 50	400 00	
"Destinant Terilain Contact of Management of the		488 00	
"Portions of Legislative Grant paid to Township Societies		418 50	
"Exhibition Buildings		50 00	
"Paid on purchase of Exhibition Grounds		307 17	
" Printing and Advertising		$76 \ 03$	
"Working Expenses, including services of Secretary, Trea-			
surer, and Assistants		130 88	
			1,563 82
Balance due Treasurer			190 62
Bastard and Crosby.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	115 89		
" Members' Subscriptions	140 00		
" Miscellaneous	6 03		
Cr.			261 92
By Prizes for Horses, \$20.40; Cattle, \$29.10; Sheep, \$16;			
Pigs, \$4	69 50		
" Prizes for Grains and Seeds, \$15.25; Roots and other hoed			
crops, \$2.78; Dairy products, \$2; Growing crops, \$30;			
Fruits, \$1.50; Agricultural Implements, \$20; Ladies			
Work, \$5	76 53		
			146 03
Balance in hand			115 89
C. 7 N 12			
Crosby, North.			
Dr.	\$ cts.	\$ 048-	\$ cts.
To balance in hand, as per last Annual Report	81 41		
" Members' Subscriptions	182 73		
"Sale of Stock, \$18; Proceeds of services, \$3	$21 \ 00$		
" Miscellaneous	15 00		
Cr.			300 14
By Prizes for Horses, \$41; Cattle, \$52; Sheep, \$58; Pigs,			
\$8	159 00		
" Prizes for Grain and Seeds, \$60.50; Roots and other hoed			
crops, \$16.50; Dairy Products, \$23; Growing crops.			
\$91; Fruits, \$13; Vegetables, \$15; General Manufac-			
tures, \$30; Ladies' Work, \$19.58	268 58		
, , , , , , , , , , , , , , , , , , , ,		427 58	
" Exhibition Buildings		12 45	
" Keep of Live Stock		12 00	
" Printing and Advertising		1 59	
78		1 00	
1.7			

By Working Expenses	\$ ets.	. \$ ets. 26 25	\$ cts.
Balance due Treasurer	\$ cts. 107 65 105 60 102 50 50 00 25 00	\$ ets.	182 64 \$ cts.
By Prizes for Horses, \$24.25; Cattle, \$16.50; Sheep, \$13.75; Pigs, \$6.25; Poultry, \$4  "Prizes for Grains and Seeds, \$9.75; Roots and other hoed crops, \$10.94; Dairy products, \$14.25; Agricultural Implements, \$7.50; General Manufactures, \$13.92;  "Exhibition Buildings and Grounds	64 75	121 11	T10 40
" Live Stock. " Agricultural or Horticultural Publications " Working Expenses		379 44 48 75 16 00 39 63	604 93 
			120 10
LEEDS, NORTH, AND GRENVII	LLE.		
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant, \$700; Municipal Grant, \$100  "Sale of Land  "Sale of Scode, \$5.05; Miscellaneous, \$17.	\$ cts. 18 69 29 00 168 10 800 00 45 00	\$ ets.	\$ ets.
"Sale of Seeds, \$5.95; Miscellaneous, \$17	22 95 	1	,083 74
Ladies' Work, \$36.20  "Prize for previous year paid "Portions of Legislative Grant paid to Township Societies "Exhibition Buildings "Printing and Advertising "Working Expenses, including services of Secretary and Treasurer	184 21	403 66 1 47 419 50 24 24 30 00 117 75	996 62
Balance in hand70			87 12

Gower, South.			
Dr. To Members' Subscriptions	\$ cts. 53 00 63 00	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$19.15; Cattle, \$13.05; Sheep, \$3.70; Pigs, \$2.30; Poultry, \$1.45  "Prizes for Grains and Seeds, \$11.40; Roots and other hoed crops, \$2.20; Dairy products, \$6.05; Fruits, 35 ets.;	39 65		116 00
Vegetables, \$3.11; Fine Arts, \$16.90; Ladies' Work, \$8.05	48 06	87 71	·
" Printing and Advertising" " Working Expenses		8 00 15 50	111 21
Balance in hand			4 79
Kitley and Elmsley.			_
Dr. To balance in hand, as per last Annual Report "Members' subscriptions "Legislative Grant from Electoral Division Society Cr.	\$ cts. 4 88 91 62 106 00	\$ cts.	\$ ets.
By Prizes for Horses, \$23.25; Cattle, \$23; Sheep, \$18.75; Pigs, \$4.75  "Prizes for Grain and Seeds, \$26.50; Roots and other hoed crops, \$12.50; Dairy Products, \$6; Fruits, \$3.75; Vegetables, \$6; Ladies' Work, \$3.50	70 75 58 25		402 50
" Exhibition Buildings " On purchase of Seeds " Paid for Agricultural or Horticultural Publications " Printing and Advertising " Working Expenses.		129 00 5 50 42 00 7 00 6 75 17 50	207 75
Balance due Treasurer			5 25
Oxford.			
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society	\$ cts. 77 30 40 00 34 00 116 50	\$ ets.	\$ cts.
Cr " Prizes paid " Printing and Advertising " Working Expenses, including services of Secretary		197 20 13 00 48 52	267 80 258 72
Balance in hand			9 08
Wolford.			, 30
Dr. To balance in hand, as per last Annual Report	\$ ets. 58	\$ cts.	\$. ets.
"Members' Subscriptions	116 46 134 00		

To Cr.	Sale of Stock	\$ ets. 21 50	\$ ets. \$	ets.
	Prizes for Horses, \$45.75; Cattle, \$24.50; Sheep, \$13; Pigs, \$7; Poultry, \$5	95 25		
**	Prizes for Grains and Seeds, \$17.00; Roots and other hoed crops. \$16.00; Dairy products, \$6.30; Fruits, \$3.35; Vegetables, \$2.00; Agricultural Implements, \$1.00; General Manufactures, \$12.50; Fine Arts, \$2.00; Ladies' Work, \$22.35	82 50	100 05	
"	Exhibition Buildings Paid on purchase of Live Stock " For Agricultural or Horticultural Publications Printing and Advertising Working Expenses.	,	$   \begin{array}{ccccccccccccccccccccccccccccccccccc$	
				71 20
	Balance in hand			1 34
	LENNOX.			
66	balance in hand, as per last Annual Report	\$ cts. 56 93 274 00 700 00	\$ cts. \$	cts.
Cr.	Miscellaneous	13 00	1,0	43 93
	Prizes for Horses, \$116.50; Cattle, \$108.50; Sheep, \$84; Pigs, \$40.30; Poultry, \$10.25	359 55	ŕ	
	Agricultural Implements, \$118.30; General Manufactures, \$47; Fine Arts, \$14; Ladies' Work, \$52.88	292 88		
	Unpaid	652 43 68 40	584 03	
"	Prizes for previous years paid		$ \begin{array}{cccc} 23 & 00 \\ 211 & 00 \\ 23 & 00 \end{array} $	
••	Working Expenses, including services of Secretary, Treasurer and Assistants		100 20	41 23
	Balance in hand		1	02 70
Dr.	$Amherst\ Island.$	\$ cts.	\$ cts. \$	a ka
	balance in hand, as per last Annual Report	7 37 60 00	\$ cts. \$	cts.
Cr	Legislative Grant from Electoral Division Society	60 00	1:	27 37
Ву	Prizes for Horses, \$19.75; Cattle, \$19.50; Sheep, \$21.50; Pigs, \$13; Poultry, \$4.50	78 25		

81

By Prizes for Grains and Seeds, \$12.25; Roots and other hoed	\$	cts.	. \$	cts.	\$ cts.
crops, \$9.25; Dairy products, \$4.50; Vegetables, \$1.50; Ladies' Work, \$7	34	50			
" Working Expenses			112 5	75 03	117 78
Balance in hand					9 59
Ernestown.					
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous  Cr.	51 85 74 10	cts. 30 00 60 00	\$	ets.	\$ ets.
"Prizes for Horses, \$29.60; Cattle, \$13.34; Sheep, \$21.25; Pigs, \$8.99; Poultry, \$3.72  "Prizes for Grains and Seeds, \$10.45; Roots and other heed crops, \$9.47; Dairy products, \$2.81; Fruits, \$4.41; Plants and Flowers, \$10; Agricultural Implements \$8.41; General Manufactures, \$14.64; Fine Arts,	76	80			220 00
\$3.63; Ladies' Work \$3.92  " Prizes for previous years sold  " Exhibition Buildings.  " Printing and Advertising  " Working Expenses, including services of Secretary, Trea-	58	75	11	65 65 50	
surer and Assistants				80	179 15
Balance in hand					46 15
Fredericksburg, North.					
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions.  "Grant from Electoral Division Society  "Miscellaneous.	14 78 77	00	\$ 0	ets.	\$ cts.
Cr. By Prizes for Horses, \$34.50; Cattle, \$24.75; Sheep, \$18.00; Pigs, \$9.75; Poultry, \$4.50	91				172 66
" Exhibition Buildings " Printing and Advertising " Working Expenses, including services of Secretary, Trea-	_	_	138 3 9 4 4 9	00	
surer and Assistants			16 (	00	168 32
Balance in hand					4 34

LINCOLN.				
Dr.	\$	cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	52			π
"Members' Subscriptions		25		
"Admission Fees to Exhibition				
" Legislative Grant, \$700; Municipal Grant, \$475	1,175			
" Miscellaneous	760	00		
Ur. Dy Dyiggs for Horosa 2000. (Sattle 2100. Sheep 100.50.				3,671 30
By Prizes for Horses, \$288; Cattle, \$128; Sheep, 182.50;	790	00		
Pigs, \$79; Poultry, \$51.50	729	UU		
crops, \$23.75; Dairy products. \$22.50; Fruits, \$126.75;				
Plants and Flowers, \$28.75; Vegetables, \$23.50; Agri-				
cultural Implements, \$23; General Manufactures, \$57;				
Fine Arts, \$12; Ladies' Work, \$87.25; Special Prizes,				
\$13.75	480	<b>25</b>		
			1,209 25	
" Prizes for previous years paid			18 50	
"Portions of Legislative Grant paid to Township Societies			419 99	
"Exhibition Buildings.			162 07	
"Paid on purchase of Exhibition Grounds			1,412 14	
" Printing and Advertising, \$66; Musical Bands, \$40 " Working Expenses, including services of Secretary and			106 00	
Assistants			345 60	
##NNTN ##11 0N				3,673 53
Balance due Treasurer				2 25
Clinton.				
Dr.	\$	cts.	\$ cts	\$ cts
To balance in hand, as per last Annual Report		45		
" Members' Subscriptions	277			
"Admission Fees to Exhibition"	161			
" Legislative Grant from Electoral Division Society " Municipal Grant	81			
" Miscellaneous	50 2 <b>5</b>			
Cr.				652 71
By Prizes for Horses, \$137; Cattle, \$46.50; Sheep, \$69.20;				002 11
Pigs, \$14.50; Poultry, \$13.50	280	70		
" Prizes for Grains and Seeds, \$26.35; Roots and other hoed				
crops, \$23.25; Dairy products, \$21.25; Fruits, \$37.50;				
Agricultural Implements, \$3; General Manufactures,				
\$20.75; Ladies' Work, \$63.05	195	15		
( Dalibira Daillia			475 85	
" Exhibition Buildings			19 88	
" Printing and Advertising "Working Expenses, including services of Secretary, Trea-			26 00	
surer and Assistants			189 99	
			100 00	711 72
D.1 1 m				
Balance due Treasurer				<b>5</b> 9 01
Dr. Grantham.	(P)	- 4	<b>.</b>	.ть
To balance in hand, as per last Annual Report	\$ 37	cts.	\$ cts.	\$ cts.
" Members' Subscriptions	875			
" Legislative Grant from Electoral Division Society	258			
, and the second		_		1,171 04
0.2				/

Cr. Paid to County Society for Union Show	\$ ct 1,133 2		\$ cts.
Balance in hand			37 79
Note.—The Society merged its funds with the County	Society	for holdi	ng a Fall
Exhibition.	J		8
Grimsby.	0 -4	- 6 -4-	O aka
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous.	\$ ct 25 9 54 5 22 60 29 50 50 00	8 0 0 2 0	\$ ets.
Cr. By Prizes for Horses, \$25.65; Cattle, \$10.57; Sheep, \$34.			183 40
20; Pigs, \$4.05; Poultry, \$3.19	77 60	3	
crops, \$10.30; Dairy products, \$6.07; Fruits, \$15.70; Agricultural Implements, \$2.92; Ladies' Work, \$10.34.	62 20	) - 139 86	
" Exhibition Buildings " Printing and Advertising " Working Expenses		5 50 4 00 31 86	181 22
Balance in hand			2 18
Louth.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Legislative Grant from Electoral Division Society	\$ ct 35 50 134 60 50 40	)	\$ cts.
" Municipal Grant	40 00	) -	260 56
By Prizes for Horses. \$73.50; Cattle, \$33.75; Sheep, \$22.25; Pigs, \$6.25; Poultry, \$8.25	144 00	)	
crops, \$6; Fruits, \$15.75; General Manufactures, \$17.12; Ladies' Work, \$14.75	60 62	2	
" Working Expenses		- 204 62 30 75 ———	235 37
Balance in hand			25 19
Баганоо ш паналити			20 10
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions.  "Legislative Grant.  "Miscellaneous.	\$ cts 259 63 1,064 00 350 00 27 29	3	\$ cts.
-		•	1,700 97

Cr. \$ By Western Fair Association 1,500 " Printing and Advertising 9 " Working Expenses 110	00 00	\$ 0	1,619	
Balance in hand			81	97

Note.—This Society united with that of East Middlesex for holding a great Western Exhibition.

## WESTERN FAIR ASSOCIATION.

Dr.	\$	cts	. \$	cts.	\$	cts.
To balance in hand, as per last Annual Report	4,895	76				
" Members' Subscriptions						
"Admission Fees to Exhibition						
" East Middlesex Agricultural Society						
" London Electoral Division Society						
" Miscellaneous						
Cr.				15	,639	22
By Prizes for Horses, \$1,258; Cattle, \$1,319; Sheep, \$780;					,	
Pigs, \$394; Poultry, \$254		00				
" Prizes for Grain and Seeds, \$189; Roots and other hoed	-,					
crops, \$127.50	316	50				
" Prizes for Dairy products	349					
" " Fruits, \$492; Plants and Flowers, \$285; Vege-	010	00				
tables, \$155.50	932	50				
" " Agricultural Implements, \$300.50; General	002	00				
Manufactures, \$1187	1.497	50				
" " Fine Arts, \$597; Ladies' Work, \$269	866	00				
Pine zires, \$551, Dadies Work, \$205	000					
	7,956	50				
Unpaid						
			7.835	00		
" prizes for previous years paid			,	50		
" Exhibition Buildings and Grounds			868			
"Expenses of Judges			341			
" Sundry amounts for 1874			223			
" Forage, &c., \$324.03; Sundries, \$369.04			693			
			613			
" Printing and Advertising" " Working Expenses, including services of Secretary, Trea-			013	99		
surer and Assistants			1,531	20		
surer and Assistants			1,991	16	110	70
				1	,112	
Balance in hand				3	,526	52
					,	_
Treasurer's Detailed Statement.						
D						
Dr.		cts.	\$	cts.	\$	cts.
To Balance from 1874						
"Cash of Thos. Partridge						
"Sale of Tickets						
" G. W. R. Coupons	1,725	38				

						-
	S	cts.	S	ets.	\$	cts.
To W. McBride, Secretary, fees	762		77"		Я	
"W. Belton, Superintendent	404					
"A. S. Emery, booths	332					
"J. B. Lane, Treasurer of East Middlesex Society	700					
"C. W. Andrus, Treasurer of City Society						
" Prize Money returned	4	00				
"Interest to 31st December, 1875	234					
Cr.				13	5,639	22
By Sundries from 1874	229	90			,	
" Construction Account	868					
" Judges	341					
" Prizes						
" Advertising, Printing, &c	613	93				
" Superintendent and Assistants	432					
" Forage Accounts	324	03				
"Gatekeepers	115					
"Poultry Department	35					
" Palace Department	95	00				
" Horticultural Department	90	63				
" Secretary and Assistants	564	25				
"Treasurer and Assistants	199	50				
" Sundry Accounts	369	04				
"Balance in Bauk	3,526	52				
				1	5,639	22
Balance, January, 1876					${3,526}$	52
======================================					,0=0	

The Directors have much pleasure in presenting to the friends and patrons of the Western Fair a Report of the proceedings of the Association for the past year, as well as its present financial position.

That the Western Fair has supplied a want long felt by the agricultural and manufacturing community is evident from the increased interest taken in its welfare by exhibitors and visitors—both classes increasing in number annually, and thus guaranteeing success.

The receipts for the past year are considerably in excess of the preceding one, thus proving that the elements of success are still in our hands, and the opening of the L. H. and B. Railway will, no doubt, conduce very materially to the number of visitors, affording, as it does, facilities to a very large number of our northern friends, who will now possess an easy means of access to the City of London.

The total number of entries for the past year was 7,491, and this number would, no doubt, have been considerably increased had not similar fairs to our own been held in Toronto and Hamilton on the same days, thus intercepting, as it were returning exhibitors from the Provincial Exhibition, held in Ottawa during the preceding week.

The amount of prizes offered was \$12,000. Of this amount, a much larger proportion was paid in prizes than in any former year. And a large additional outlay has been incurred—first, by putting up new fencing to a portion of the grounds; secondly, by erecting new stabling in the place of those unfortunately destroyed by fire.

One source of disquietude has happily been removed—viz., the retention of our present grounds, the City Council having passed a By-law closing the intersecting streets, thus leaving the grounds intact for exhibition purposes.

The Directors thank the various Railway Companies for the facilities afforded by them

in bringing in stock, implements, &c., at reduced rates.

The Treasurer's statement of accounts is annexed, duly audited, giving the receipts and disbursements for the year. There may be some small liabilities not yet in, but nothing of consequence.

MIDDLESEX, EAST.		
Dr.	\$ cts.	\$ cts. \$ cts.
To balance in hand, as per last Annual Report	325 99	
" Members' Subscriptions	264 00	
" Legislative Grant	700 00	
" Interest of Mortgage of Talbot Street Grounds	281 11	
" Interest of balance in Treasurer's hands	15 00	
Cr.		1,586 10
By portions of Legislative Grant paid to Township Societies	420 00	,
" Exhibition Buildings and Grounds, on Western Fair ac-		
count	700 00	
"Printing and Advertising	9 50	
"Working Expenses, including services of Secretary, Trea-		
surer and Assistants	138 00	
		1,267 50
Balance in hand		318 60
" Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants  Balance in hand		

NOTE.—This Society, as heretofore, united in sustaining the great Western Fair in London, the report of which contains full particulars.

#### REPORT.

We have great reason to be thankful for the abundant crops that have rewarded the labour of the Farmers in this county in 1875. Fall Wheat was injured in exposed situations by the severe cold winds of last winter; but taken altogether our crops will show a higher average than for many years past.

It is worthy of consideration whether some plan could be adopted by planting belts of evergreens or otherwise to shelter our fields from the cutting winds of winter, as it is certain that the necessity will be still more severely felt, as the country becomes more cleared.

There is no doubt that belts of evergreens at each line fence would amply repay the trouble and expense of raising them by the increased products of our fields, and besides would add immensely to the beauty of the landscape. If there were belts of evergreen trees between each farm, what a contrast the appearace of our country would present in winter, to the bleak and desolate prospect of miles of bare clearing, where the winds unchecked, sweep the snow from our fields, where if undisturbed it would protect the roots of vegetation, and drifts it into the roads making them often difficult to travel, if not impassable. Anyone who visited our Exhibitions last Fall and paid attention to the live stock, would be convinced that the quality of every class is constantly improving. Indeed from the number of first-class animals that are annually imported from the old country, we have reason to believe that our Canadian stock is rapidly approaching that standard of excellence, to which long continued effort, combined with skill and capital, has raised the farm stock of Great Britain. But while we fully appreciate the benefits derived from the importation of superior stock, we cannot shut our eyes to the danger of importing those infectious diseases that have made such havoc amongst the flocks and herds of Europe; and if importation is not entirely prohibited, we think it absolutely necessary that the Government should take such precautionary measures in the shape of strict inspection or quarantine as would be judged sufficient to protect our Canadian cattle from the infection. The Western Fair of 1875 was a complete success as an Exhibition; every department was well filled and in some classes especially, in those in the Horticultural Hall, and in machinery and implements, we believe it was the finest display ever seen in Ontario. We might have had a few more cattle and other stock on the ground if the Show at Toronto and Hamilton had not occurred in the same week, but the difference was scarcely perceptible, and it has given us the satisfaction of proving that the Western Fair can hold its own no matter how many rival Shows may be held at the same time. While the effect on the shows in those cities that placed themselves in the competition with us has been such, that they will scarcely venture to repeat the experiment.

\* \* The only difficulty that threatens the existence of the Western Fair in London, is with regard to the possession of the Exhibition Grounds. We have repeatedly

called your attention to this matter in our former reports, and last year we congratulated you on the prospect of a permanent settlement of the affair, 'as the citizens had voted nearly unanimously that the grounds should be kept intact. Well, Gentlemen, our hopes, as expressed to you, have not been entirely realized. True, we stand in a better position than last year. After a great deal of procrastination, and in spite of the evasions and opposition of a large minority, who seemed to assume that the whole wisdom of the City was concentrated in their craniums, and that five-sixths of the citizens who voted on this question one year ago had not sufficient sense to know what they were doing, the City Council did pass a by-law to close the streets and so keep the Grounds intact. This, Gentlemen, is all right as long as it lasts, but we believe the by-law was only passed by a majority of one or two. And we cannot regard our possession as very secure as long as we are at the mercy of a few votes in the City Council.

Gentlemen, in conclusion we will again express the hope that any further trouble about the Exhibition Grounds may be long averted, but we must acknowledge that the future is uncertain. But of of one thing we feel confident, there must be an Annual Exhibition in Western Ontario. When the Western Fair was established it was but the fulfilment of a long cherished idea, and only satisfied a want that had long been felt. otherwise it could never have succeeded as it has done.

And since it was established the benefits derived from it have been too widely distributed and too keenly appreciated to be tamely relinquished. So that under whatever name, in whatever locality, or whatever new combinations may be necessary to carry it on, a Grand Central Exhibition for Western Ontario must and will be maintained.

And we pray that the Directors of this Society may be endowed with wisdom to guard your interests through the viscissitudes of the future with the same success that has so eminently crowned their endeavours in the past.

Dorchester, North.			
Dr. To Balance in hand, as per last Annual Report "Members' Subscriptions "Legislative Grant from Electoral Division Society	\$ cts. 138 0 <b>9</b> 122 50 71 72	\$ cts.	\$ ets.
Cr.  "Prizes for Horses, \$48; Cattle, \$44.75; Sheep, \$32.50;  "Pigs, 5.50  "Prizes for Grains and Seeds, \$18; Roots and other hoed	130 75		327 31
crops, \$9; Dairy products, \$8.75; Fruits, \$3; Vegetables, \$1.50; Ladies' Work, \$10	50 25	181 00	
" Printing and Advertising " Working Expenses, including services of Secretary, Treasurer, and Assistants		14 34 26 80	222 14
Balance in hand			$\frac{222}{105}$ 17
London.			
Dr. To Members' Subscriptions " Legislative Grant from Electoral Division Society " Municipal Grant	\$ ets. 261 00 140 00 20 00	\$ ets.	\$ cts.
Cr. By balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$100; Cattle, \$78.50; Sheep, \$35.50;		26 78	42

223 00

Pigs, \$9.....

By Prizes for Grains and Seeds, \$17; Roots and other hoed	\$ ets.	\$ cts.	\$ cts.
erops, \$5; Dairy products, \$2; Fruits, \$5.50; Vegetables, \$3.25; Agricultural Implements, \$11; Ladies' Work, \$20	63 <b>7</b> 5		
" Exhibition Buildings" " Printing and Advertising		286 75 2 00 13 50	
"Working Expenses		29 34	358 37
Balance in hand			62 63
Nissouri, West.	\$ cts.	\$ cts.	\$ cts.
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Legislative Grant from Electoral Division Society	50 00 100 00 70 00	ψ <b>0</b> 15.	<b>V</b> 0321
Cr. By Prizes for Horses, \$25; Cattle, \$25; Sheep. \$25; Pigs,			220 00
"Prizes for Grains and Seeds, \$30; Roots and other hoed crops, \$10; Dairy products, \$5; Growing Crops,	85 00		
\$15; Fruits, \$5; Agricultural Implements, \$10; General Manufactures, \$15; Ladies' work, \$10	100 00	185 00	
" Working Expenses		15 00	200 00
Balance in hand			20 00
Westminster.	\$ cts.	\$ cts.	\$ cts.
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society	23 68 297 75 138 80	ψ 003.	φ, σου.
Cr. By Prizes for Horses, \$126; Cattle, \$88.50; Sheep, \$69.25;			460 23
Pigs, \$16.75  "Prizes for Grains and Seeds, \$55; Roots and other hoed crops; \$13.25; Dairy Products, \$14.75; Fruits, \$14.;	300 35		
Agricultural Implements, \$4; Ladies Work, \$21.00	121 90	422 25	
" Exhibition Buildings. " Printing and Advertising " Working Expenses.		6 00 13 00 30 75	
			472 00
Balance due Treasurer			11 77
MIDDLESEX, WEST.			
Dr. To Members Subscriptions  "Admission Fees to Exhibition  "Legislative Grant "Miscellaneous	\$ ets. 244 00 183 23 700 00 25 75	\$ cts.	\$ cts.
200			1,152 98

Cr.	\$	cts.	\$		\$	cts.
By balance due the Treasurer, as per last Annual Report			129	13		
" Prizes for Horses, \$75.75; Cattle, \$56.50; Sheep, \$79.25;						
Pigs, \$38.95; Poultry, \$23	273	45				
" Prizes for Grains and Seeds, \$20.50; Roots and other hoed	210	10				
erops, \$16.30; Dairy products, \$18.45; Fruits, \$24.55;						
Agricultural Implements, \$45.55; General Manu-						
factures, \$22; Fine Arts, \$28.90; Ladies' Work,						
\$12.85	189	1.0				
W.L. C.	100	10				
	1.00	~ ~				
T7 13	462					
Unpaid	45	35				
			417	20		
By Prizes for previous years paid			12	20		
" Portions of Legislative Grant paid to Township Societies			409			
"Exhibition Buildings and Grounds						
Exhibition Dunatings and Glounds			125			
" Printing and Advertising			28	00		
"Working Expenses, including services of Secretary, Trea-						
surer and Assistants			120	19		
					1,242	4.4
					1,442	44
Balance due Treasurer					20	4.0
Dalance due Treasurer					89	46

Your Directors have much pleasure in reporting another very prosperous year in the Society's operations. The Society has undoubtedly been stronger, and they trust also, more useful, than at any previous period of its history.

In accordance with the action taken at the last Annual Meeting, a Spring Show for the awarding of prizes to Bulls and Stallions was held on the 23rd of April. That Show was as successful as could be reasonably expected, and your Directors would recommend that

it be continued in the spring of 1876.

The Fall Show, held on the 8th October last, was generally admitted to be the best ever held under the Society's auspices. The greatly increased membership, the keen competition in almost every department, the increasing public interest, and the large attendance, are all

so many encouraging proofs of the Society's growth and progress.

Your Directors would again recommend that the in-coming Board be requested to consider the advisability of making the next Fall Show a two days' Show. This change seems indeed to have become almost an absolute necessity. It is difficult, if not impossible for the Judges and officials of the Society to perform their duties satisfactorily with the hum and bustle inevitably connected with a one day's Show, while the public have only a very limited opportunity of seeing the articles on exhibition in the two halls. Your Directors believe that

the change suggested would be a step in the right direction.

At last Annual meeting power was given to your Directors to sell the rear fourteen and three-fourth acres of the Agricultural Grounds, if they could do so advantageously. Owing to the general depression which prevailed, and the consequent difficulty of selling at a fair price, no steps were taken to sell the land beyond the bare announcement that it was in the market. Your Directors are, however, of opinion, that the sale of the said portion of the grounds would be a benefit to the Society, as the remaining portion would be ample for the Society's purposes for all time to come, and the money realized could be applied to clear off the debt which is now such an incumbus on the Society's growth, as well as to improve the buildings and increase the Prize List. Your Directors recommend that the power given to the present Board in this matter, be continued to their successors.

One of the features of the Society's operations during the past year was the giving of Special Prizes, a large number of which were awarded, adding greatly to the interest and success of the Fall Show. Your Directors trust that this feature may be continued and ex tended, and that the Society may be increasingly prosperous during the coming year.

		=====	
Caradoc.			
$D_{\mathbf{r}}$	\$ cts.	\$ ets.	\$ cts.
To balance in hand, as per last Annual Report	60 41		
" Members' Subscriptions  " Admission Fees to Exhibition	$104 00 \\ 12 50$		
" Legislative Grant from Electoral Division Society	105 40		
" Miscellaneous	<b>5</b> 00		
Cr.			287 31
By Prizes for Horses, \$36.50; Cattle, \$41.75; Sheep, 15.75;	121 25		
Pigs, \$18; Poultry, \$9.25 "Prizes for Grains and Seeds, \$12.75; Roots and other hoed	121 20		
erops, \$12.30; Dairy Products, \$10.50; Fruits, \$13.50;			
Vegetables, \$8.25; Agricultural Implements, \$24.75;	0 = 00		
Ladies' Work, \$12.95	95 00		
	216 25		
Unpaid	44 20		
•		172 05	
"Special Prizes		13 75	
"Working Expenses, including services of Secretary and Treasurer		47 90	
2.0000000000000000000000000000000000000			233 70
			FO 01
Balance in hand			53 61
$\it Ekfrid.$			
Dr	\$ cts.	\$ cts.	\$ cts.
To Balance in hand, as per last Annual Report	49 25		
" Members' Subscriptions Division Society	$117 00 \\ 101 10$		
" Legislative Grant from Electoral Division Society Cr.	101 10		267 35
By Prizes for Horses, \$51.25; Cattle, \$32.60; Sheep, \$20.50;			
Pigs, \$9; Poultry, \$2,50	115 85		
"Prizes for Grains and Seeds, \$15.25; Roots and other hoed crops, \$11.30; Dairy Products, \$6.75; Fruits, \$3.55;			
Agricultural Implements, \$8; Ladies' Work, \$22.15	67 00		
• , , ,		182 85	
"Exhibition Buildings		6 25	
" Printing and Advertising" " Working Expenses, including services of Secretary, Trea-		14 50	
surer, and Assistants		23 30	
,			226 90
D.1 . 1 . 1			40 45
Balance in hand			40 49
Met calfe.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions	155 47		
" Admission Fees to Exhibition"  " Legislative Grant from Electoral Division Society	113 50 105 40		
Cr.			374 37
By Prizes for Horses, \$37; Cattle, \$32.25; Sheep, \$27.75;			
Pigs, \$2.50; Poultry, \$1.65	101 15		
" Prizes for Grain and Seeds, \$13.55; Roots and other hoed crops, \$5.85; Dairy Products, \$6; Fruits, \$3.90: Agri-			
cultural Implements, \$4.25; Ladies' Work, \$12.50;			
Ploughing Match, \$19.50	65 55	100 70	
91		166 70	

By Prizes for previous years paid  " Printing and Advertising  " Working Expenses	\$ ets.	\$ cts. 9 20 11 50 26 50	\$ ets
			213 90
Balance in hand			160 47
Mosa.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society Cr.	\$ cts. 18 64 112 00 98 06	\$ cts.	\$ cts.
By Prizes for Horses, \$41.50; Cattle, \$28.25; Sheep, \$20.25; Pigs, \$11.75; Poultry, \$4  "Prizes for Grain and Seeds, \$18.50; Roots and other hoed crops, \$7.05; Dairy Products, \$13.75; Fruits, \$8.15; Plants and Flowers, \$2; Vegetables, \$3.40; Agricultu-	105 75		
ral Implements, \$2, General Manufactures, \$8.50; Fine Arts, \$1.50; Ladies' Work, \$15.65	80 50		
" Printing and Advertising " Working Expenses		186 25 12 50 31 09	229 84
Balance due Treasurer			1 14
MIDDLESEX, NORTH.			
Dr To Members' Subscriptions  "Admission Fees to Exhibition "Legislative Grant	\$ cts. 98 00 328 79 700 00	\$ ets.	\$ cts.
" Special Prizes . " Township Lobo Society, 171 members .	485 00		
" Government Grant	180 00 92 60		
" " Government Grant	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
By balance due to Treasurer, as per last Annual Report  "Prizes for Horses, \$173 : Cattle, \$180 : Sheep, \$78 : Pigs		75 <b>7</b> 8 2	,225 14
\$45; Poultry, \$20.25 "Prizes for Grains and Seeds, \$52; Dairy Products, \$20; Fruits, \$25; Vegetables, \$42; Agricultural Implements,	496 25		
\$92; Fine Arts, \$48; Ladies' Work, \$88	367 00		
77	863 25		
Unpaid	165 75	697 50	
" Paid for Special Prizes " Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings " Omission Account and Miscellaneous		485 00 113 00 420 00 71 40 54 25	
92			

By Printing and Advertising "Working Expenses, including serv surer, and Assistants	ices of Secretary, Trea-		\$ cts. 104 85 248 26	\$ cts.
				2,270 04
Balance due Treasurer	• • • • • • • • • • • • • • • • • • • •		-	\$44 90
	Adelaide.			
Dr. To Balance in hand, as per last Annual "Members' Subscriptions "Legislative Grant from Electoral Di "From Mr. Miller "Miscellaneous	vision Society	\$ cts. 71 00 100 00 46 50 40 00 13 25	\$ cts.	\$ ets.
Cr.				270 75
By Prizes for Horses, \$28.75; Cattle, Pigs, \$3.50; Poultry, \$5.80  "Prizes for Grains and Seeds, \$8.90	**********************	62 30		
erops, \$6.15; Dairy products, 56.45	70 ets.; Fruits, \$2.60;	28 00	90 30	
" Prizes for previous years paid " Exhibition Buildings	blications		67 55 1 60 71 00 1 45 9 10 20 75	
or o	***************************************			261 75
Balance in hand				9 00
	Biddulph.			
Dr. To Members' Subscriptions " Admission Fees to Exhibition " Legislative Grant from Electoral Div		\$ ets. 128 50 11 60 62 60	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$54; Cattle, \$5	42 · Sheen \$45 · Pios			202 70
" Prizes for Grains and seeds, \$9.75; crops, \$2; Dairy products, \$Agricultural Implements, \$14.7 tures, \$6.75; Ladies' Work, \$18	Roots and other hoed 3.25; Fruits, \$5.25; 5; General Manufac-	145 50 53 45		
, , ,				
Unpaid	••••••	$   \begin{array}{r}     198 & 95 \\     42 & 40 \\     \hline     \end{array} $	156 55	
By Prizes for previous years paid "Printing and Advertising			$\begin{array}{ccc} 13 & 25 \\ 7 & 50 \end{array}$	
" Working Expenses	*************************		11 21	188 51
Balance in hand				14 19

Lobo.			
Dr. To Members' Subscriptions  " Legislative grant from Electoral Division Society  " Miscellaneous	\$ cts. 180 00 92 60 12 00	\$ ets.	\$ cts.
Cr. By Exhibition Buildings " Paid Treasurer of County Society for Union Show. " Working Expenses.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		284 60
			284 60
Dr. McGillivray.		45	45.
To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society	\$ ets. 25 07 75 50 35 10	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$28.75; Cattle, \$25; Sheep, \$10; Pigs, \$6; Poultry, \$2  " Prizes for Grains and Seeds, \$7; Roots and other hoed	71 75		135 67
crops, \$5; Dairy products, \$1.50; Fruits, \$2; Vegetables, \$5; General Manufactures, \$3; Ladies' Work, \$1.50	25 00	00 75	
" Prizes for previous years paid" " Working Expenses		96 75 25 00 9 50	131 25
Balance in hand			4 42
Dr. Williams, East.		_	
To Members' Subscriptions  " Legislative Grant from Electoral Division Society  " Miscellaneous	\$ ets, 227 00 113 75 10 00	\$ cts.	\$ cts.
Cr. By Exhibition Buildings " County Society for union Exhibition " Working Expenses	- Annual of the second of the	113 75 227 00 10 00	350 75
			350 75
Dr. To Balance in hand, as per last Annual Report "Members' Subscriptions	\$ ets. 21 15 172 00	\$ cts.	\$ cts.
" Admission Fees to Exhibition " Legislative Grant from Electoral Division Society " Miscellaneous Cr.	83 78 68 75 3 00		240 60
By Prizes for Horses, \$79; Cattle, \$30.50; Sheep, \$38; Pigs, \$8; Poultry, \$2.00	148 50 91 50		348 68
By Prizes for previous years paid " Exhibition Buildings and Grounds		$\begin{array}{ccc} 240 & 00 \\ 11 & 75 \\ 51 & 62 \end{array}$	

By Printing and Advertising " Working Expenses	,	\$ ets. 27 00 28 00	\$ cts.
Balance due Treasurer.			9 69
			0 00
MONCK.			
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant  "Borrowed  "Miscellaneous  Cr.  By Prizes for Horses, \$79; Cattle, \$64; Sheep, \$68; Pigs, \$47; Poultry, \$16.00  "Prizes for Grains and Seeds, \$38.00; Roots and other hoed	\$ ets. 35 16 168 00 245 84 700 00 62 00 30 00 274 00	\$ cts.	\$ ets.
crops, \$14.00; Dairy products, \$9.25; Fruits, \$32; Vegetables, \$10.00: General Manufactures, \$30.00; Ladies' Work, \$31.53  "Prizes for previous year paid "Portions of Legislative Grant paid to Township Societies "Paid on purchase of Exhibition Grounds "Printing and Advertising "Working Expenses, including services of Secretary, Treasurer and Assistants	164 78	438 78 3 15 419 46 261 66 17 50 117 81	
Balance due Treasurer			$\frac{1,258 \ 36}{17 \ 36}$
Note.—The weather was unfavourable on the day of the standing, was successful, and the quantity of Live Stock and Poccasious.	Exhibitio	n, which, ter than o	notwith-
Canborough.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Miscellaneous.	\$ ets. 2 52 75 25 10 65 88 12 25 00 2 00	\$ ets.	\$ cts.
Cr. By Prizes for Horses, \$31.25; Cattle, \$22.25; Sheep, \$20.75; Pigs, \$8.50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$11.80; Roots and other hoed crops, \$9.65; Dairy products, \$5.25; Fruits, \$2.70; Agricultural Implements, \$8.25; Ladies' Work, 10.60	87 25	135 50	203 54
" Printing and advertising" " Working Expenses		11 00 12 <b>25</b>	158 75
Balance in hand95			44 79

2				
	Caistor.			
		\$ cts 37 16 84 00	. \$ cts.	\$ cts.
"	Admission Fees to Exhibition	14 70 89 30 40 00		
"	Miscellaneous	7 00		070 18
•	Prizes for Horses, \$32.50; Cattle, \$43.40; Sheep, \$3150; Pigs, 11.50; Poultry, \$5.25	124 00		272 16
	\$14.20	31 80	155 00	
"	Printing and Advertising		155 80 4 00 27 91	187 71
	Balance in hand		•••••	84 45
	DAIALOO IL LALIA III III III III III III III II		•	01 10
Dr.	$\it Gainsborough.$	\$ cts.	\$ cts.	\$ cts.
	balance in hand, as per last Annual Report	19 21	ψ 0 ω.	ψ CEB.
66	Members' Subscriptions	$64 00 \\ 10 45$		
"	Legislative Grant from Electoral Division Society	72 85		
~	Municipal Grant	60 00		006 E1
Cr. Bv	Prizes for Horses, \$32; Cattle, \$19; Sheep, \$25.25; Pigs,			226 51
	\$7; Poultry, \$5.22	88 47		
	eral Manufactures, \$5.04; Ladies Work, \$17.19	72 03	100 50	
"	Exhibition Bnildings		160 <b>5</b> 0 8 73	
"	Printing and Advertising		9 00	
64	Working Expenses.		16 60	194 83
	Balance in hand			
	Databee in Haut,			31 68
T)	$Pelham.$ $\cdot$	0 -1-	<b>(</b> )	
Dr. To	balance in hand, as per last Annual Report	\$ cts. 10 83	\$ cts.	\$ cts.
((1	Members' Subscriptions	105 50		
	Legislative Grant from Electoral Division Society  Miscellaneous	$ \begin{array}{cccc} 102 & 17 \\ 3 & 00 \end{array} $		
Cr.				221 50
·	Prizes for Horses, \$50.50; Cattle, \$21.25; Sheep, \$16; Pigs, \$7.75; Poultry, \$4.75	100 25		
	Vegetables, \$6.84; Agricultural Implements, \$4.50; Ladies' Work, \$21.88	79 25		
			179 50	

By Exhibition Buildings.  " Printing and Advertising  " Working Expenses	\$4	ots.		ets. 00 75 24		ets.
				_	212	<del></del>
Balance in hand					9	01
Wainfleet.						
Dr.	\$	cts.	\$	cts.	\$	cts.
To balance in hand, as per last Annual Report		38	#	0000	₩	O CD.
" Members' Subscriptions		00				
" Admission Fees to Exhibition"  " Legislative Grant from Electoral Division Society		$\frac{00}{67}$				
negistative draft from Electronal Division coolery					138	05
Cr.						
By Prizes for Horses, \$23.75: Cattle, \$22.35; Sheep, \$21.25; Pigs, \$4.75; Poultry, \$1.55	73	65				
" Prizes for Grains and Seeds, \$11.55; Roots and other hoed crops, \$4.65; Dairy products, \$5; Fruits, \$4; Vege-	10	00				
tables, \$4; General Manufactures, \$5; Ladies' Work,						
\$5		20	110	05		
" for Agricultural or Horticultural Publications			112			
" Printing and Advertising				58		
"Working Expenses			5	75	100	10
					133	18
Balance in hand					4	87
MUSKOKA AND PARRY SOUT	ND.					
Dr.	S	cts.	S	cts.	S	ets.
To Members' Subscriptions	103		Ψ	005.	Ψ	Cin.
" Admission Fees to Exhibition		40				
" Legislative Grant. \$700, Municipal Grant, \$200  "Amalgamation of Union of Townships	900	00 80				
"Miscellaneous		10				
				1	,165	30
Cr. By Prizes for Horses, \$55; Cattle, \$54; Sheep, \$43; Pigs,						
\$17; Poultry, \$3.50	172	50				
" Prizes for Grains and Seeds, \$35; Roots and other hoed						
crops, \$24.50; Dairy products, \$17; Fruits, \$2.50;						
Wantables Old Ammigultonal Involutionate CO. Cons		00				
Vegetables, \$14; Agricultural Implements, \$8; General Manufactures, \$15.50; Ladies' Work, \$44.50	161					
ral Manufactures, \$15.50; Ladies' Work, \$44.50	161		333	50		
ral Manufactures, \$15.50; Ladies' Work, \$44.50  " portions of Legislative Grant paid to Township Societies	161		419	52		
ral Manufactures, \$15.50; Ladies' Work, \$44.50  " portions of Legislative Grant paid to Township Societies  " Exhibition Buildings and Grounds	161		$\frac{419}{300}$	$\begin{array}{c} 52 \\ 00 \end{array}$		
ral Manufactures, \$15.50; Ladies' Work, \$44.50  " portions of Legislative Grant paid to Township Societies  " Exhibition Buildings and Grounds	161	<del></del>	$419 \\ 300 \\ 45$	$\begin{array}{c} 52 \\ 00 \end{array}$		
ral Manufactures, \$15.50; Ladies' Work, \$44.50  " portions of Legislative Grant paid to Township Societies  " Exhibition Buildings and Grounds	161		419 300 45 32 39	52 00 06 50 60		
ral Manufactures, \$15.50; Ladies' Work, \$44.50  " portions of Legislative Grant paid to Township Societies  " Exhibition Buildings and Grounds	161		419 300 45 32 39	52 00 06 50 60	,170	18

Humphrey,	Cardwell,	Monteith	and	Christie.
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Humphrey, Caraweii, Monteith and Chi	ristie.		
Dr To Members' Subscriptions  'Admission Fees to Exhibition  Legislative Grant from Electoral Division Society	\$ cts. 59 00 0 90 46 90	\$ cts.	
Cr. By Prizes for Horses, \$10.75; Cattle, \$12.50; Sheep, \$2.50; Pigs, \$2	27 75		106 80
Work, \$11.75  Exhibition Buildings  Printing and Advertising  Working Expenses, including services of Secretary, Treasurer, and Assistants	35 ±5 ——	63 00 15 75 16 62 6 13	98 50
Balance in hand			8 30
Dr. To balance in hand, as per last Annual Report  "Members' Subscription  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society Cr. By Prizes for Horses, \$2; Cattle, \$29.25; Sheep, \$4.50; Pigs, \$3 50; Poultry, \$4.50  "Prizes for Grains and Seeds, \$19.75; Roots and other hoed crops, \$11.25; Dairy products, \$4.75; Vegetables, \$8.25; General Manufactures, \$1.25; Extra Prize, \$1.75; Ladies' Work, \$6  "Printing and Advertising  "Working Expenses  Balance in hand	\$ cts. 6 43 61 75 4 11 53 36 	96 75 3 50 19 36	\$ cts. $125 65$ $\frac{119 61}{6 04}$
Morrison.  Dr. To balance in hand, as per last Annual Report	\$ cts. 2 54 64 00 53 36	\$ ets.	\$ ets.
Pigs, \$4.50; Poultry, \$2.50  "Prizes for Grain and Seeds, \$2.50; Roots and other hoed crops, \$7.90; Ladies' Work, \$11.00  By Printing and Advertising "Working Expenses	52 60	76 50 6 00 7 85	90 35
Balance in hand			29 55

McDougall, Foley and Carling.  Dr. To Members' Subscriptions  "Admission Eees to Exhibition "Legislative Grant	\$ cts. 63 00 11 44 47 84	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$9; Cattle, \$24; Sheep, \$7; Pigs, \$9; " Prizes for Grain and Seeds, \$10; Roots and other hoed crops, \$6.75; Dairy products, \$11; Fruits, \$2; Vegetables, \$4.50; Agricultural Implements, \$2; Ladies' Work, \$9.50	49 00	94 75	
By Exhibition Buildings		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	120 80
Balance in hand			1 48
McKellur.	\$ cts.	\$ cts.	\$ cts.
Dr. To Members' Subscriptions  " Legislative Grant from Electoral Division Society Cr.	64 00 57 03	ψ Cus.	121 03
By Prizes for Horses, \$7.50; Cattle, \$19.75; Sheep, \$9.25; Pigs, \$8.25; Poultry, \$2.75	47 50 41 25		
" Printing and Advertising " Working Expenses	11 20	88 75 12 96 18 51	120 51
Balance in hand			52
Stephenson.  Dr.  To Members' Subscriptions  " Admission Fees to Exhibition " Legislative Grant from Electoral Division Society	\$ cts. 55 00 4 62 50 40	\$ cts.	\$ ots.
Cr.  By Prizes for Horses, \$7.50; Cattle, \$17.75; Sheep, \$11;  Pigs, \$3.50; Poultry, \$1.25	41 00		110 02
\$0.50; Vegetables, \$1.50; General Manufactures, \$5;  "Exhibition Building	29 75	70 75 7 15 6 25	84 15
Balance in hand			25 87
Watt.	\$ ata	C ata	
Fo Members' Subscriptions  " Legislative Grant from Electoral Division Society  " Municipal Grant	\$ ets. 57 75 50 60 5 00	\$ ets.	\$ cts
00			113 35

Cr.	\$ ets.	\$ cts.	\$ cts.
By Prizes for Horses, \$8; Cattle, \$22; Sheep, \$9; Pigs, \$7; Poultry, \$2.75	48 75		
" Prizes for Grains and Seeds, \$10; Roots and other hoed crops, \$11; Dairy products, \$4; General Manufactures, \$6.25; Ladios' Work, \$6	37 25	20.00	
" Printing and Advertising" " Working Expenses		86 00 6 00 6 17	00 17
			98 17
Balance in hand			15 18
Note.—The Society's first exhibition in this new section of garded as successful.	of country	might jus	tly be re-
NIAGARA.			
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Admission Fees to Exhibition	\$ cts. 128 83 122 00 26 10 510 00	\$ cts.	\$ ets.
" Legislative Grant, \$350; Municipal Grant, \$160 Cr.	<del></del>		786 93
By Prizes for Horses, \$84; Cattle, \$85; Sheep, \$50; Pigs, \$27.75; Poultry, \$18	264 75		
Plants and Flowers, \$20; Vegetables, \$30; Agricultural Implements. \$7; General Manufactures, \$24; Fine Arts, \$12; Ladies' Work, \$16	242 75		
" Exhibition Buildings"  Paid for Agricultural or Horticultural Publications  Printing and Advertising		507 50 38 15 8 23 33 00	
" Working Expenses		61 25	648 13
Balance in hand			138 80

The past season has been one of an exceptional character, being the third year of severe consecutive drouth, and also an average of five degrees colder than any season since records have been kept in Canada. The early summer rains gave us good crops of oats, barley, and potatoes, but were not early enough to give a large yield of hay. The corn crop was very fair, much better than was at one time expected, while the wheat was almost a failure, be-

ing partly killed by the severe winter, followed by a particularly ungenial spring.

In view of the great loss to our crops, especially to our wheat, caused by the high winds which come down on us from the higher lake level, and sweep unopposed over our Niagara peninsula, your Committee would recommend the planting of belts of evergreen or other trees, to break the severity of the blast. Those who wish to leave a legacy to their children could not do so in a cheaper or better manner than by planting belts of pine, walnut, or other fast growing trees of valuable wood. At your last exhibition, the department in which your society always excels, the pomological, still stands unrivalled, and even unapproached by any other society in Canada. And your Committee would desire to call especial attention to the show made by Henry Paffard, Esq., of Niagara, of grapes, hitherto considered as only to be grown under glass, but which he raised to perfection in his open garden, only giving the vines a slight eovering in winter.

It is also with pleasure that we can point to the fact that the members of your society,

who exhibited at other shows, almost completely swept the list in this department. It is also a source of gratification to see the annual increase in the quantity of fruit shipped from this place, so much so that ship-owners are seeing it worth their while to compete for the carrying trade. While much of a satisfactory nature exists in our midst, we must not think there is no room for improvement. Possessed of a genial climate and an excellent soil, we have not yet attained to the highest system of cultivation, nor does our land produce all that it is capable of doing. Better and cleaner cultivation, deeper and more frequent ploughings, more efficient surface, or better still, under drainage, larger surface to grass, more and better stock, would effect a wonderful change in the right direction, and which we hope may soon be witnessed.

In conclusion, your Committee would remark, that our country has during the past year been passing through one of these periodical periods of depression in trade that affects all classes, and on this occasion all countries. It has pressed with less weight on 'This Canada of ours," than on any other country; and on the farming class lighter than any other class. We trust the worst is past, that trade will soon resume its wonted activity, and that the in-

coming season will be one of prosperity and happiness to you all.

## NORFOLK, NORTH.

Dr.	\$ cts.	\$ cts. \$ cts.
To Members' Subscriptions	$140 00 \\ 262 40$	
"Legislative Grant, \$700; Municipal Grant, \$400		
"Sale of Land	200 00	
"Rents	28 00	
"South Riding Society	391 50	
Cr,		2,121 90
By balance due the Treasurer, as per last Annual Report		268 71
" Prizes for Horses, \$203; Cattle, \$181; Sheep, \$190; Pigs,	700 05	
\$108; Poultry, \$38.25	720 25	
crops, \$50.25; Dairy products, \$16.50; Fruits, \$30.25;		
Plants and Flowers, \$7.75; Vegetables, \$22.75; Agri-		
cultural Implements, \$106.75; General Manufactures,		
\$41.50; Fine Arts, \$10.50; Ladies' Work, \$35.45	389 95	
	]	,110 20
By Portions of Legislative Grant to Township Societies		358 00
" Exhibition Buildings " Paid on purchase of Exhibition Grounds		44 50 497 50
"Working Expenses, including services of Sccretary, Trea-		401 00
surer and Assistants.		264 13
		2,543 04
Balance due Treasurer		421 14
35.137		
Middleton.		
Dr.	\$ cts.	\$ cts. \$ cts.
To balance in hand, as per last Annual Report	<b>25 7</b> 5	
" Members' Subscriptions	172 00	
"Admission Fees to Exhibition	90 35	
" Legislative Grant from Electoral Division Society" "Miscellaneous.	$140 00 \\ 34 00$	
Cr.	34 00	462 10
By Prizes for Horses, \$54.00; Cattle, \$42.40; Sheep, \$24.75;		102 10
Pigs, \$16; Poultry, \$5.50	142 65	

		-	
By Prizes for Grains and Seeds, \$35; Roots and other hoed crops, \$14; Dairy products, \$2.25; Fruits, \$9; Vegetables, \$10; Agricultural Implements, \$15.50; General Manufactures, \$20; Fine Arts, \$5.37; Ladies' Work,	\$ cts.	\$ cts.	\$ cts.
\$13	124 12		
" Exhibition Buildings " Paid on purchase of Exhibition Grounds " Printing and Advertising " Working Expenses	3,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	266 77 22 50 96 00 18 75 54 68	458 70
Balance in hand			3 40
Townsend.			
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions "Admissson Fees to Exhibition "Legislative Grant from Electoral Division Society "Miscellaneous Cr.	\$ cts. 108 17 240 50 156 00 140 00 9 00	\$ cts.	\$ ets.
By Prizes for Horses, \$63.00; Cattle, \$56.50; Sheep, \$75.50; Pigs, \$16; Poultry, \$3.25	244 25		
Ladies' Work, \$24.25	93 70		
Unpaid	337 95 48 \$5		
	40 60	289 10	
" Interest " Printing and Advertising " Working Expenses.		28 51 20 00 28 51	3 <b>6</b> 6 12
Balance in hand			287 35
TT: . 11			
Windham.	6 oto	co ata	© ata
To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  Cr.	\$ ets. 19 75 78 00 6 00 78 00	Ç UIS.	\$ cts.
By Prizes for Horses, \$28.50; Cattle, \$24.75; Sheep, \$20.50; Pigs, \$16.25; Poultry, \$3  "Prizes for Grains and Seeds, \$20.75; Roots and other hoed crops, \$20.75; Dairy Products, \$6; Fruits, \$6.50; Plants and Flowers, \$1.75; Agricultural Implements,	93 00		181 75
\$9; General Manufactures, \$16; Fine Arts, \$2; Ladies' Work, \$11.75	94 50	187 50	

By Exhibition Buildings  " Printing and Advertising  " Working Expenses	\$	cts	. \$ ets. 5 75 3 50 3 75	\$ ets.
				200 50
Balance duc Treasurer				18 75
Commandation of the Comman				
NORFOLK, SOUTH.				
Dr. To Balance in hand, as per last Annual Report "Members' Subscriptions "Legislative Grant "Miscellaneons	\$ 124 94 700 4	98 00	\$ ets.	\$ ets.
Cr. By Paid N. Riding Society for Union Show.  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings.  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer, and Assistants.		00 00 00		923 12
				912 86
Balance in hand				10 26
Note—The two Electoral Division Societies of Norfolk hibition.	united	for	holding a	Fall Ex-
Charlotteville,				
	0	- 1	0 -1	(Pa
To Members' Subscriptions	90 90		\$ cts.	\$ cts.
Cr. By balance due the Treasurer, as per last Annual Report  Prizes for Horses, \$20.75; Cattle, \$26; Sheep, \$17.50; Pigs, \$11; Poultry, \$3	78	25	<b>3</b> 2 23	180 00
tures, \$3.57; Fine Arts, \$9.87; Ladies' Work, \$2.19.	54	73	190.00	
" Printing and Advertising " Working Expenses			132 98 10 80 23 28	199 29
Balance due Treasurer				19 29
Houghton.				
Dr. To balance in hand as per last Annual Report  "Members' subscriptions  "Legislative grant from Electoral Division Society	\$ 10 91 87	00	\$ ets.	\$ cts.
Cr. By Prizes for Horses, \$50.75; Cattle, \$19.25; Sheep, \$9; Pigs, \$1.75; Poultry, \$1.40	82	15		188.36

By Prizes for Grain and Seeds, \$13.70; Roots and other hoed crops, \$8.40; Dairy Products, \$3.10; Fruits, \$6.95; General Manufactures, \$2.50; Ladies' Work, \$6.50	\$ cts.	\$ ets.	\$ cts.
" Printing and Advertising " Working expenses	Triggs i generalization value en	123 30 5 88 23 71	<b>152</b> 89
Balance in hand			35 47
Walsingham.			
Dr. To Members' subscriptions	\$ ets. 97 50 83 00	\$ cts.	\$ cts.
By Prizes for Horses, \$26.50; Cattle, \$20.75; Sheep, \$15; Pigs, \$3; Poultry, \$1.75	67 00		
ments, \$6; General Manufactures, \$12; Fine Arts, \$2; Ladies' Work, \$12.25.  "Miscellaneous "Printing and Advertising "Working Expenses.	79 50	146 50 11 50 10 00 12 59	180 59
Balance due Treasurer			0 09
			" "
Woodhouse.	@ oto	O ata	C. ota
Dr. To Members' Subscriptions	\$ cts. 105 00 9 00 105 00	\$ ets.	\$ cts
By Prizes for Horses, \$30; Cattle, \$43; Sheep, \$30; Pigs, \$9; Poultry, \$2.45	114 45		
Arts, \$3; Ladies' Work, \$7.44	58 54	172 99 12 78 28 58	214 38
Balance in hand			4 68
NORTHUMBERLAND, EAST.			
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant	\$ cts. 92 00 5 30 700 00	\$ cts.	\$ ets

" Cash Agricultural Joint Stock Company " Miscellaneous	\$ cts. 40 00 24 21	\$ cts.	\$ cts.
Cr.		20.01	861 51
By balance due the Treasurer, as per last Annual Report "Prizes for Horses, \$70.75; Cattle, \$64; Sheep, \$63; Pigs,		30 01	
\$15.50; Poultry, \$9.55	222 80		
"Prizes for Grains and Seeds, \$25.75; Dairy products, \$9.75; Fruits, \$18.45; Agricultural Implements, \$1.50;			
General Manufactures, \$21; Ladies' Work, \$57.25	133 70		
		356 <b>5</b> 0	
Unpaid		7 00	
		349 50	
" Prizes for previous years paid		14 50	
" Portions of Legislative Grant paid to Township Societies		366 50	
" Printing and Advertising		14 00	
"Working Expenses		87 00	
Totalig Haponsoo.			861 51

Your Directors are pleased to have the satisfaction to state that the arrangements made by the Agricultural Joint Stock Company for the accommodation of exhibitors gave good and general satisfaction, so far as your Directors can learn, and are further pleased to add that the Joint Stock Company have materially improved their grounds since the exhibition of 1874, having at a very large expense made a good and wide driving course upon their ground, of one half-mile in length.

The Directors are happy to state that the show of horses in their several grades of draught and general purposes as well as brood mares with foals at foot, and the colts of one, two, and three years old were a very great improvement upon former exhibitions, and which upon this branch of the exhibition, your Directors feel called upon particularly to call attention to the young entire horses exhibited by Mr. Hugh McQuoid, for John W. Jones, and

Mr D Collins

The show of cattle, though not as great in numbers as at some former exhibitions, was satisfactory, and included some well-bred animals. The display of sheep and pigs was rather limited, but some choice animals were shown. The display within the large hall was all that the most fastidious could desire. The specimens of the different kinds of grain were excellent. The vegetables were large and of excellent quality. In carriages and agricultural implements a fair supply, and in keeping with the usual interest taken by manufacturers in all of those branches. In the domestic manufactures the exhibition of articles manufactured from wood particularly excelled. The dairy productions were excellent, and the exhibitors thereof deserve great credit. Several cheese factories in our riding exhibited their productions, and which were equal to the productions of any factories in our young Dominion, or in neighbouring States. The display in the ladies' department was exceedingly good, and reflected great credit on the ladies of our riding, who certainly exhibited a taste for home manufacture of ornamental as well as useful articles for their homes and families.

The fruit crops, especially apples and pears, were exceedingly good, and numerous varieties were exhibited which for beauty, size, or quality it would be difficult to surpass, and we would therefore call attention to the adaptability of the soil of our Riding generally for fruit-growing, and as the demand for fruit is on the increase, no more profitable branch of

farming could be entered upon.

Your Directors, before closing their report, mention, with satisfaction and pleasure the fact that several of our enterprising farmers continue to manifest a great interest regarding the improvement of horses, cattle, and sheep, and are continually bringing valuable animals into our midst, whereby very great and beneficial strides have been made, and are making in the improvement of those classes of animals throughout our Riding.

Brighton.			
Dr. To Balance in hand, as per last Annual Report " Members' Subscriptions	\$ cts. 83 32 57 00	\$ cts.	\$ ets
Cr. By Printing and Advertising " Working Expenses		1 00 18 00	140 3:
Balance in hand			$\frac{19}{121} \frac{00}{00}$
Cramahe,			
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	\$ cts. 24 31 127 00 19 00 109 25	\$ ets.	\$ cts
Cr.  By Prizes for Horses, \$16.50; Cattle, \$21.25; Sheep, \$17.00;  Pigs, \$5.50  Prizes for Grains and Seeds, \$8.50; Roots and other hoed crops, \$3.20; Dairy products, \$4.00; Fruits, \$3.30; Vegetables, \$4.90; Ladies' Work, \$12.50	60 25		279 56
" Paid for Agricultural or Horticultural Publications " Working Expenses		$\begin{array}{c} 114 & 45 \\ 96 & 00 \\ 22 & 75 \\ \\ \end{array}$	233 20
Balance in hand			46 36
Note.—The Exhibition was not quite equal in a few delecessors, but may be considered on the whole quite an average.	partments	to some of	its pre
Murray.			
Dr. To balance in hand, as per last Aunual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society	\$ cts. 0 72 98 00 17 40 80 00	S ets.	\$ ets.
By Prizes for Horses, \$24.28; Cattle, \$30.62; Sheep, \$8.75; Pigs, \$8.97; Poultry, \$3.18	75 80		196 12
\$5,25; Fruits, \$3.90; Vegetables, \$12.35; General Manufactures, \$32.04; Ladies' Work, \$14.90	85 50	$   \begin{array}{cccc}     161 & 30 \\     2 & 00 \\     7 & 00 \\     15 & 00   \end{array} $	
			185 30
Balance in hand			10 82

The state of the s			
Percy.  Dr. To Members' subscriptions	\$ cts. 122 00 15 65 103 25	\$ cts.	\$ cts.
Cr  By balance due the Treasurer as per last Annual Report  "Prizes for Horses, \$25.36; Cattle, \$55.80; Sheep, \$15; Pigs, \$5  "Prizes for Grains and Seeds, \$11.92; Roots and other hoed crops, \$11.40; Dairy products, \$3.80; Agricultural Implements, \$6.20; General Manufactures, \$8; Ladies'	101 16	00 39	240 90
Work, \$18.16  " Exhibition Buildings  " Paid for Agricultural or Horticultural Publications  " Printing and Advertising  " Working Expenses	62 48	163 64 10 15 35 10 7 00 21 95	238 23
Balance in hand			2 67
Dr. To balance in hand, as per last Annual Report " Members' subscriptions " Legislative Grant from Electoral Division Society	\$ cts. 61 46 93 00 74 00	cts.	\$ ets.
Cr. By Prizes for Horses, \$19; Cattle, \$15.50; Sheep, \$8.50; Pigs, \$3.  Prizes for Grains and Seeds, \$13; Roots and other hoed crops, \$5.25; Dairy Products, \$8.25; Fruits, \$2.75; Vegetables, \$4.50; Agricultural Implements, \$10.25; General Manufactures, \$4; Ladies Work, \$1.50;	46 00		220 40
Ploughing Match, \$13.50  Unpaid	109 00 24 00	85 00 17 00 2 50 60 90 17 30	
" Working Expenses  Balance in hand			$\frac{182 \ 70}{45 \ 70}$

Note.—The Fall Show, notwithstanding unfavourable weather, was a success, as was also the ploughing match.

# NORTHUMBERLAND, WEST.

Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand as per last Annual Report	209 66		
" Members' Subscriptions	212 00		
" Admission Fees to Exhibition			

To Legislative Grant  "Hamilton Society for Union Exhibition  "Miscellaneous  Cr.  By Prizes for Horses, \$142.25; Cattle, \$183.50; Sheep, \$78.25; Pigs, \$23.50; Poultry, \$15  "Prizes for Grains and Seeds, \$107; Roots and other hoed crops, \$25.50; Dairy products, \$20; Fruits, \$43;	\$ cts. 700 00 199 50 36 45 	\$ cts.	\$ cts.
Vegetables, \$20; Agricultural Implements, \$88.25; General Manufactures, \$18.75; Fine Arts, \$8.50; Ladies' Work, \$95.50	426 50	869 00	
" Portions of Legislative Grant to Township Societies " Exhibition Buildings and Grounds " Paid on purchase of Exhibition Grounds " Miscellaneous payments " Printing and Advertising " Working Expenses, including services of Secretary, Treasurer		403 17 113 00 80 00 120 00 49 35	
and Assistants		116 09	,750 61
Balance in hand			87 15
Alnwick.			
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	\$ cts. 43 14 64 00 30 80 72 48	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$30.75; Cattle, \$19.25; Sheep, \$7.11; Pigs, \$5.12; Poultry, \$2.20	68 45		210 12
821.75	69 52	137 97	
" Exhibition Buildings. " Printing and Advertising		10 00 3 00 26 78	177 78
Balance in hand			32 67
${\it 'Haldimand.}$			
Dr. To Balance in hand, as per last Annual Report	76 00 84 38	\$ ets.	\$ cts
Cr. By Prizes for Horses, \$32.00; Cattle, \$32.75; Sheep, \$30.00; Pigs, \$12.50; Poultry, \$7.50			

By Prizes for Grains and Seeds, \$24.00; Roots and other hoed	\$ ets.	\$ cts.	\$ ets.
crops, \$21.00; Dairy products, \$14.00; Fruits, \$3.50; Agricultural Implements, \$18.25; General Manufactures, \$12.00; Ladies' Work, \$50.75			
" Prizes for previous years paid " Exhibition Buildings		258 25 20 75 9 00	
" Paid on Insurance" Printing and Advertising		9 50 13 50	
"Working Expenses		25 81	336 81
Balance due Treasurer			6 20
Dr. Hamilton.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions	158 72	ψ Cts.	\$ cts.
" Admission Fees to Exhibition  " Legislative Grant from Electoral Division Society  " Union Exhibition Surplus	133 00 140 00 70 00		
Cr. By Prizes for growing crops		30 00	501 72
" Grant to County Society " Grant to Central Exhibition.		199 <b>5</b> 0 50 00	
" Printing and Advertising		3.50	
" Working Expenses		22 75	305 75
Balance in hand			195 97
Cobourg Horticultural Society.	<b>*</b>	Δ.	
Dr. To balance in hand, as per last Annual Report	\$ cts. 3 85	\$ ets.	\$ ots.
" Members' Subscriptions " Admission Fees to Exhibition	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
" Legislative Grant from Electoral Division Society Cr.	103 96		กรย ๑๑
By Prizes for Fruits, Flowers, and Vegetables	191 75		258 32
" Exhibition Buildings" " Printing and Advertising, \$10.50; Musical Bands, \$5	15 50 $15 50$		
" Working Expenses	9 00		231 75
D l			
Balance in hand			26 57
ONTARIO, NORTH,			
Dr.	\$ ets.	\$ cts.	\$ cts.
" Members' Subscriptions	262 50		
	375 25 700 00		
" Miscellaneous	95 75	6	2 108 57
01,		2	,100 01
By Prizes for Horses, \$147; Cattle, \$150; Sheep, \$62; Pigs, \$16; Poultry, \$14	389 00		
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant.	675 07 262 50 375 25 700 00		\$ et:

By Prizes for Grains and Seeds, \$89.50; Roots and other hoed crops, \$20; Dairy products, \$17; Growing Crops, \$13; Fruits, \$27; Vegetables, \$18.50; Agriculural Implements. \$58.50; General Manufactures, \$55.50; Fine Arts, \$15; Ladies' Work, \$63.75; Miscellaneous, \$81	\$ cts.  458 75  847 75  12 00	\$ cts. 835 75 33 27 420 00 140 56 40 00 282 47	\$ ets.
surer, and Assistants		]	759 05
Balance in hand.,			356 52
Brock.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Proceeds from Concert  "Donations  Cr.  By Prizes for Horses, \$85; Cattle, \$44; Sheep, 31; Pigs,	\$ cts. 30 12 132 50 108 50 53 34 27 35 94 50	\$. cts.	\$ cts.
\$12.50.  "Prizes for Grains and Seeds, \$45.50; Roots and other hoed crops, \$6.75; Dairy products, 16.50; Fruits, \$8.75; Vegetables, \$10.25; Agricultural Implements, \$24; General Manufactures, \$7.00; Fine Arts, \$2.50; Ladies' Work, \$45  "Prizes for previous years paid  "Exhibition Buildings  "Printing and Advertising, \$21.75; Musical Bands, \$12	166 25	338 75 2 50 10 98 33 75	
" Working Expenses		58 40	444 38
•			
Balance in hand			\$1 93
37			
(4.7)	\$ cts. 6 25 136 00 200 00 52 49 40 00 40 50	\$ cts.	\$ cts.
	137 00		

	4-		
By Prizes for Grains and Seeds, \$22; Roots and other hoed crops, \$14.25; Dairy Products, \$10; Fruits, \$2.25; Vegetables, \$8.50; General Manufactures, \$7.25; Ladies' Work \$15.25	\$ ets.		S ets.
" Exhibition Building  " Live Stock  " Printing and Advertising  " Working Expenses.		216 50 9 05 231 75 10 40 27 14	494 84
			10.00
Balance due Treasurer			19 60
Dr. Reach and Scugog.	\$ ets.	\$ cts.	\$ ets.
To Balance in hand, as per last Annual Report  'Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society	54 83 348 00 224 12 134 45		et .
Cr. By Prizes for Horses, \$204; Cattle, \$77; Sheep, \$19; Pigs, \$14; Poultry, \$12.50.  Prizes for Grains and Seeds, \$9; Roots and other hoed crops, \$12.50; Dairy Products, \$19.25; Fruits, \$10.50;	326 50		761 40
Vegetables, \$2,50; Agricultural Implements, \$36; General Manufactures, \$26; Fine Arts, \$3, Ladies'			
Work, \$71.25; Discretionary, \$16.25	206 25		
Unpaid	532 75 35 00	497 75	
" Working Expenses		87 69	585 44
Balance in hand			175 96
Scott.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Donations.	\$ ets. 53 16 185 25 26 96 73 72 31 00	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$74; Cattle, \$48; Sheep, \$46.75; Pigs, \$10; Poultry, \$2.25  "Prizes for Grains and Seeds, \$25; Roots and other hoed	181 00		370 09
crops, \$7.50; Dairy Products, \$22; Fruits, \$3.75; Vegetables, \$12.75; Agricultural Implements, \$20; General Manufactures, \$11.75; Ladies' Work, \$3.75; Miscellaneous, \$9	115 50	296 50	
" Printing and Advertising" " Working Expenses		15 70 38 16	350 36
Balance in hand			19 73
111			10 10

Thora.						
Dr.	8	cts	. 8	cts.	\$	cts.
To balance in hand, as per last Annual Report	70			0000	~	0.10
"Members' Subscriptions	140					
"Admission Fees to Exhibition	31					
Admission rees to Exhibition Society	52	_				
" Legislative Grant from Electoral Division Society		00				
" Miscellaneous	0	00			207	7 64
Cr. C. H. Picc. Cottle Clo. Cheen Clo. Picc.					<i>□ ∪</i> (	01
" Prizes for Horses, \$36; Cattle, \$19; Sheep, \$10; Pigs,	77.1	50				
\$7; Poultry, \$2.50	14	50				
" Prizes for Grains and Seeds, \$13.75; Roots and other hoed						
crops, \$10.50; Dairy products, \$8.25; Fruits, \$6.25;						
Plants and Flowers, \$15.50; General Manufactures,	0.1	E 0				
\$16.75; Ladies' Work, \$10.50	91	50				
	100	0.0				
77 13	166					
Unpaid	24	75	1.47	2 ==		
		_	141			
" Prizes for previous years paid				50		
" Exhibition Buildings				39		
"On purchase of Seeds				00		
" Printing and Advertising				85		
"Working Expenses			25	11		
					270	5 10
Balance in hand					21	54
ONTARIO, SOUTH.						
	S	ets.	S	ets.	\$	ets:
Dr.		cts.	\$	cts.	\$	cts.
Dr. To balance in hand, as per last Annual Report	13	68	. \$	cts.	69	cts.
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions	13 437	68 50	\$	cts.	\$	cts.
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition	13 437 616	68 50 41	. \$	cts.	\$	ets.
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	13 437 616 700	68 50 41 00	. \$	ets.	\$	ets.
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls	13 437 616 700 129	68 50 41 00 90	. 8	ets.	\$	ets.
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest	13 437 616 700 129 2,881	68 50 41 00 90 68	. \$	ets.	<b>69</b>	ets.
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous	13 437 616 700 129 2,881	68 50 41 00 90	. \$	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.	13 437 616 700 129 2,881	68 50 41 00 90 68	\$	ets.	\$ 4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs,	13 437 616 700 129 2,881 7	68 50 41 00 90 68 00	\$	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00	13 437 616 700 129 2,881	68 50 41 00 90 68 00	. 8	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55;	13 437 616 700 129 2,881 7	68 50 41 00 90 68 00	. 8	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Im-	13 437 616 700 129 2,881 7	68 50 41 00 90 68 00	. 8	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts,	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	. 8	ets.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Im-	13 437 616 700 129 2,881 7	68 50 41 00 90 68 00			4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490	25	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25.  "Prizes for previous years paid.	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12	25 50	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25  "Prizes for provious years paid.  "Portions of Legislative Grant paid to Township Societies	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280	25 50 00	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25.  "Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds.	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92	25 50 00 38	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55;  Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25  "Prizes for previous years paid  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds."  "Paid on account of 1874.	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120	25 50 00 38 85	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25  "Prizes for previous years paid  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds  "Paid on account of 1874  "Insurance, \$7.50; Discount on notes, \$31.74	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39	25 50 00 38 85 24	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25.  "Prizes for provious years paid.  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds.  "Paid on account of 1874.  "Insurance, \$7.50; Discount on notes, \$31.74.  "Notes retired.	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39 2,375	25 50 00 38 85 24 50	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$1\$7; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25.  "Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds  "Paid on account of 1874  "Insurance, \$7.50; Discount on notes, \$31.74  "Notes retired  "Printing and Advertising, \$60; Musical Bands, \$10	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39 2,375	25 50 00 38 85 24	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25  "Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  Exhibition Buildings and Grounds  "Paid on account of 1874  "Insurance, \$7.50; Discount on notes, \$31.74  "Notes retired  "Printing and Advertising, \$60; Musical Bands, \$10  "Working Expenses, including services of Secretary, Trea-	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39 2,375 70	25 50 00 38 85 24 50 00	4,780	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$1\$7; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25.  "Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings and Grounds  "Paid on account of 1874  "Insurance, \$7.50; Discount on notes, \$31.74  "Notes retired  "Printing and Advertising, \$60; Musical Bands, \$10	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39 2,375 70 293	25 50 00 38 85 24 50 00 42	4,786	6 17
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Rent of Booths and Cattle Stalls  "Proceeds of notes discounted and interest  "Miscellaneous  Cr.  By Prizes for Horses, \$379; Cattle \$222; Sheep, \$137; Pigs, \$39; Poultry, \$38.00  "Prizes for Grains and Seeds, \$124; Dairy products, \$55; Fruits, \$32.50; Vegetables, \$39.50; Agricultural Implements, \$148; General Manufactures, \$85; Fine Arts, \$30; Ladies' Work, \$161.25  "Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  Exhibition Buildings and Grounds  "Paid on account of 1874  "Insurance, \$7.50; Discount on notes, \$31.74  "Notes retired  "Printing and Advertising, \$60; Musical Bands, \$10  "Working Expenses, including services of Secretary, Trea-	13 437 616 700 129 2,881 7 815	68 50 41 00 90 68 00	1,490 12 280 92 120 39 2,375 70 293	25 50 00 38 85 24 50 00 42	4,780	6 17

Pickering.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society.  "Special Prizes.  "Borrowed.  "Miscellaneous.  Cr.	$\begin{array}{c} 66 & 25 \\ 150 & 00 \\ 67 & 25 \\ \hline \end{array}$	\$ cts.	\$ ets.
By Prizes for Horses, \$158; Cattle, \$83; Sheep, \$57; Pigs, \$26; Poultry, \$24	348 00		
" Special Prizes " Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants		795 75 52 50 40 00 102 43	
50001 404 215515040105		102 40	990 68
Balance in hand			17 53
Whitby, and East Whitby.			
Dr. To Balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society	\$ cts. 132 14 194 00 194 94 140 00 223 25	\$ ets.	\$ cts.
crops, \$1; Dairy Products. \$18; Growing Crops, \$26, Fruits. \$8; Vegetables, \$2; Agricultural Implements, \$10; General Manufactures, \$19.50; Fine Arts, \$13; Ladies' Work, \$58.50; Equestrianship, \$22	241 00	464 25 30 50 44 00 20 00	558 75
Balance in hand			139 33
OTTAWA.			
Dr. To Members' Subscriptions  " Legislative Grant  " Municipal Grant	3,500 00	\$ ets.	\$ ets.

A. 1877

To Money loaned on Mortgage 1	\$ cts. \$ cts. \$ cts.
" Money advanced by Treasurer	768 61
Cr. —	37,898 83
By balance due the Treasurer, as per last Annual Report	204 - 57
" Exhibition Buildings and Grounds	2,517 40
" Paid on purchase of Exhibition Grounds, or on the erection	34,254 58
of Buildings	
"Insurance, &c	454 00
"Working Expenses, including services of Secretary, and	468 28
Treasurer	
	37,898 83
"Balance of Liabilities on Exhibition Buildings, and improvements, to the end of Financial year	10,56 <b>5</b> 68

NOTE.—The Society had no show during the year, in consequence of the Provincial Exhibition being held in the City of Ottawa.

#### REPORT.

Your Directors, during the past year, having held no local Fair, have little to present in matters of detail in connection with your Society; but they have pleasure in congratulating the members and all concerned, upon the fact that the Ontario Provincial Exhibition was held as forshadowed in last year's Report, on the grounds of your Society. You are all well aware that, after much effort, the selection of Ottawa was decided upon by a large majority of the Provincial Board in 1874, and great interest was consequently felt by your Directors in the success of this Exhibition. Accordingly, a Joint Building Committee composed of equal numbers of the members of the City Council and citizens, was formed to make the necessary preparations; the City Council having liberally guaranteed to the Board of Agriculture and Arts, the necessary buildings and accommodation. These improvements were begun on the first of May last, by the employment of a foreman and day hands. The principal buildings, however, being erected by Mr. Robert White under contract. The total cost of the improvements thus made on the Society's grounds was thirty thousand dollars, twenty-one thousand of which has been paid, the balance remaining still due, as appears more fully in the accounts of the Joint Committee.

In February last, your Board, believing that the Society's grounds were too limited for the Provincial Exhibition, purchased the brick house and nearly four acres of land, known as the O'Connor property. To carry out this object a loan of \$10,000 was obtained for a period of five years. With the addition thus made, and the buildings having been completed, your Directors are happy to say the accommodation was all that could be desired, a fact amply attested by the Board of Arts, and by many of the distinguished visitors attending the Exhibition. In truth, the general opinion of strangers was that Ottawa, in the ample preparations made, and in the general hospitality offered visitors, had done herself

honour.

In concluding, your Board express the hope that the Joint Committee will take such steps as may be thought desirable, to pay off the present debts. The property is now a valuable one, from a city point of view, and for the purposes intended is not inferior to any in the Dominion. That it may be protected and further improved, is the wish of those who have thus far assisted in the work.

OXFORD, NORTH.				
$\mathrm{Dr}_{ullet}$	8	cts.	\$ cts.	\$ ctis.
To balance in hand, as per last Annual Report	119	14		
" Members' Subscriptions				
"Admission Fees to Exhibition	352	64		
" Legislative Grant	700	00		

		\$ cts.	\$ cts.	S	cts.
To	Sale of old Agricultural Hall	500 00		-	
"	Proceeds of Notes discounted	1.221 81			
	Rent of Fair Ground.	75 00			
66	Fees for Stands	9 00			
66	Donations to building fund	15 00			
Cr.		15 00		3,317	50
	Prizes for Horses, \$267; Cattle, \$142; Sheep, \$100; Pigs,			0,011	00
Бу	\$46; Poultry, \$35.75	590 75			
		330 13			
	Prizes for Grains and Seeds, \$38.50; Roots and other hoed				
	erops, \$11; Dairy Products, \$33.50; Plants and				
	Flowers, \$37.75; Vegetables, \$10.50; Agricultural Im-				
	plements, \$46.50; General Manufactures, \$19.25; Fine	240 75			
	Arts, \$5.50; Ladies' Work, \$44.25	246 75			
			837 50		
66	Portions of Legislative Grant paid to Township Societies		419 00		
66	Exhibition Buildings		41 28		
46	Paid on purchase of Exhibition Grounds, or on the erection				
	of buildings		1,379 35		
66	Inclined Action		500 00		
66	Printing and Advertising		69 72		
66	Working Expenses, including services of Secretary, Trea-				
	surer and Assistants		132 65		
				3.379	50
				-,0,0	
	Balance due Treasurer			61	1.6

In submitting, for the consideration of the members of the Society, a statement of the receipts and expenditures for the year 1875, it will be necessary to furnish such information as will enable gentlemen present to understand fully why such a large amount has been expended. It will be remembered that, at the last annual meeting, it was reported that the Directors had purchased a new ground for \$1,600, paid \$800 of the same, and partly fenced it; that the old buildings had been sold for \$500, having been deemed unfit for the large demands of the Society. Your Directors, then, in order to provide the space required, erected a one story building 40 x 132, substantial, and emineutly adapted for the purposes required, This building was let by contract to Mr. W. H. Bradley for the sum of \$875. To this sum was added, for interior fittings, erecting the horse and cattle rings, and about thirty rods of close board fence, seven feet high, intended for the rear part of a cattle shed, a further sum of \$325, making in all \$1200 for buildings and fences. The only other large item of expenditure we need refer to is the amount paid for prizes, which is largely in excess of previous years. In revising the prize list, your Directors felt that, to enable the Society to hold its justly acquired and admittedly high position in its class, it was necessary to extend the list of premiums to keep pace with the enlarged premises They therefore increased the amount one-third. This, no doubt, was a correct movement, but unfortunately the extremely wet weather during the time of holding the exhibition, disarranged the plans and expectations of the board to such an extent that a heavy loss was sustained, which has added to the debt already incurred for the grounds and buildings Up to the evening prior to the first day of the exhibition, our membership was larger, and entries more numerous than ever before at the same time; but the damp and threatening weather on the first day prevented very many from exhibiting, and the second day, when we usually book about one hundred members, very few, if any, were enrolled. Probably the greatest loss sustained was in the gate fees. Notwithstanding the continuous downpour during the afternoon, the handsome sum of \$352 The desire to see the new grounds was so general that, had the weather been fine, no doubt but that nearly double this sum would have been realized. Other sources of revenue, such as rents for booths and itinerant traders, were entirely lost.

As to the exhibition itself, many of you, no doubt, will bear testimony with us as to the

excellence of the display. Those who had the courage to inspect the fine herds of cattle, the choice sheep and pigs, and superior horses, state that the quality exceeded the usual average. The in-door display of fruits, vegetables, grain, dairy produce, ladies' work, and mechanical

productions, was not only very large but very superior.

With the exception of adding the roof and partition to the cattle and sheep sheds. and erecting a shed for the protection of carriages and poultry, the grounds and accommodations are now complete. Our successors, therefore, may not look forward to a very large outlay for the future; and their energies may be more fully devoted to the reduction of the debt incurred, which, as we have already admitted, is much larger than we had hoped or expected it would have been at this time.

Blenheim.				
Dr.		\$ cts.	\$	cts.
To balance in hand, as per last Annual Report	175 07			
" Members' Subscriptions	295 00			
" Admission Fees to Exhibition	234 44			
" Legislative Grant from Electoral Division Society	136 00			
" Miscellaneous	230 70		1071	อา
Cr			1071	41
By Prizes for Horses, \$149; Cattle, \$91.50; Sheep, \$53.50;	240 00			
Pigs, \$26.50; Poultry, \$27.50	348 00			
crops, \$17.50; Dairy products, \$26.50; Fruits, \$19;				
Plants and Flowers, \$4.75; Agricultural Implements,				
\$12; General Manufactures, \$9.50; Fine Arts, \$3.50;				
Ladies' Work, \$36.00	179 75			
1244105 17 013, 400.00 300.00		527 75		
" Prizes for previous years paid		46 25		
" Exhibition Buildings		39 00		
" Paid on purchase of Exhibition Grounds		163 24		
" Dividend on Shares		85 00		
" Printing and Advertising		12 - 00		
" Working Expenses		122 25		
			995	49
Balance in hand			75	72

## REPORT.

Your Directors, in presenting you with the 22nd Annual Report of your Society, beg leave to state that we have had another very successful year, as our financial report will abundantly show. Our Spring Fair was a good success, as far as regards the exhibition of stallions; but we regret to state that the show of grain was scarcely an average.

Our pic-nic, held on Dominion Day, owing to events over which we had no control, was

hardly a success, considered financially.

The Fall Exhibition was probably superior to any ever held in the Township; the show of horses was in advance of previous years, especially the teams shown for agricultural purposes. The cattle, though not numerous, were very good. It would be almost superfluous to mention the sheep, as Blenheim and neighbouring townships have always stood foremost in rearing that class of stock.

The swine were a fair average. The poultry show has been steadily growing each year, and the last was far in advance of any ever held in the Township. We would recommend to our successors to arrange some shelves for the coops, so that the different classes of poultry may be placed separate, and thus avoid considerable confusion. The grain was a very good average; the display of implements was much greater than in 1874. The roots were of excellent quality, and many of them of enormous size.

The fruit was scarcely up to an average, owing, no doubt, to the classification. We would recommend that the Fall and Winter Apples be classified into as many as five or six

varieties of each, and two or three varieties of Pears. The exhibition in the dairy department was superior to any before held in Blenheim. The ladies' department was good, and probably in excess of previous years. We would recommend that articles exhibited in this department be allowed to compete each year until a superior article is exhibited. The financial prospects of the society are in a flourishing condition, considering the heavy expenditure which your Directors incurred during the last two years, and our successors in office must expect to meet some unpaid bills not yet presented. We regret to say that during the past year only 280 tickets had been sold, and we would respectfully urge that our successors use every endeavour to sell more tickets, as we consider that the amount of our prize list deserves a better patronage.

	Nissouri, East.			
66	balance in hand, as per last Annual Report  Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society	\$ ets. 32 00 121 50 26 50 62 00	\$ cts.	\$ ets.
Ву	Prizes for Horses, \$46.00; Cattle, \$38.00; Sheep. \$24.75; Pigs, \$5.25  Prizes for Grains and Seeds, \$9.75; Roots and other hoed crops, \$6.00; Dairy products, \$3.75; Fruits, \$2.25; Agricultural Implements, \$3.50; Ladies' Work, \$16.75;	124 00 41 50	165 50	
4.	Printing and Advertising		165 50 14 00 41 13	220 63
	Balance in hand			21 37
	Zorra, East.			
"	Members' Subscriptions	\$ ets. 210 00 15 00 140 00	\$ ets.	\$ cts.
Cr.	Miscellaneous	2 00		367 00
By	Prizes for Horses, \$101.00; Cattle, \$61.00; Sheep, \$32.50; Pigs, \$20.50; Poultry, \$2.75	217 75		
	\$12.75	85 75		
46	Prizes for previous years paid		303 50 18 25 24 35 10 77	356 87
	Balance in hand			10 13
				20 20
	Zorra, West.			_
66	balance in hand as per last Annual Report  Members' Subscriptions	\$ ets. 45 50 167 25 23 23 81 00	\$ ets.	\$ cts.

To Municipal Grant	\$ ct 15 0 100 0	0	S_cts.
Cr.		_	431 98
By Prizes for Horses, \$86.50; Cattle, \$37; Sheep, \$51; Pigs, \$10	184 5	0	
Vegetables, \$12.50; Agricultural Implements, \$10; Genecral Manufactures, \$11.50; Ladies' Work, \$38.00	164 9	5	
" Prizes for previous years paid" Exhibition Buildings" Printing and Advertising	104 2	348 75 23 25 15 50 15 50 18 94	
" Working Expenses,		10 34	421 94
			441 01
Balance in hand			10 04

Note.—This Society is reported as progressing, and the Fall Show as very successful.

# OXFORD, SOUTH.

OAFORD, EGG III.					
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant  "Donations  "Dercham Society for Union Exhibition  "Miscellaneous  Cr.	\$ ets, 36 43 145 00 271 41 700 00 15 00 392 17 60 00	\$	ets.	,620	ets.
By Prizes for Horses, \$160.50; Cattle, \$158; Sheep, \$101; Pigs, \$36; Poultry \$25.25	480 75 304 75	=0£		,020	Va
" Dereham Society, gate fees and rent  " Portions of Legislative Grant paid to Township Societies  " Printing and Advertising  " Working Expenses  Balance in hand		32	41 00 00		76 
Dalance in nand				11	20
Dereham.					
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Sale of Stock	\$ cts. 804 00 271 41 140 00 100 00 10 00	9	ets.	CS:	cts

To Rents	\$ cts.	\$ cts.	\$ cts.
" Bills, &c	195 00	1	,595 41
Cr.  By Balance due the Treasurer, as per last Annual Report  "Paid on purchase of Exhibition Grounds.  "Printing and Advertising  "County Society for Union Show.  "Insurance."  "Working Expenses.		$\begin{array}{c} 9 & 63 \\ 913 & 83 \\ 73 & 00 \\ 467 & 17 \\ 20 & 25 \\ 106 & 75 \\ 1 \end{array}$	
Balance in hand			4 78
Norwich, North.			
Dr.  " Members' Subscriptions  " Admission Fees to Exhibition  " Legislative Grant from Electoral Division Society  " Miscellaneous.	\$ cts. 355 50 217 25 102 95 65 55	\$ cts.	\$ cts.
Miscenaneous.			741 25
Cr. By Balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$112.50; Cattle, \$87.25; Sheep, \$53; Pigs, \$22.25; Poultry, \$14.50	289 50	6 63	
hoed crops, \$11.75; Dairy products, \$17.25; Plants and Flowers, \$19.75; Agricultural Implements, and General Manufactures, \$44.25; Fine Arts, \$3.50; Ladies' Work, \$38.25.	159 75	449 25	
By Prizes for previous years paid.  "Exhibition Buildings.  "Printing and Advertising.  "Working Expenses, including services of Secretary, Trea-		10 50 28 85 47 50	
surer and Assistants		102 74	645 47
Balance in hand			95 78
Norwich South.			
Dr To balance in hand, as per last Annual Report "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society	\$ ets 32 47 318 00 232 00 72 25	)	\$ ets.
" Miscellaneous	99 00	)	753 72
" Prizes for Horses, \$137; Cattle, \$109; Sheep, \$53; Pigs, \$35; Poultry, \$14"  " Prizes for Grains and Seeds, \$25.25; Roots and other hoed crops, \$12.25; Dairy products, \$27.25; Fruits, \$16; Plants and Flowers, \$8; Vegetables, \$10; Agricultural Implements, \$17.50; General Manufactures, \$18.25; Fine Arts, \$13; Ladies' Work, \$41.75; Extras,		-	193 12
\$4.75	196 0	0 544 00	

By Insurance and Pump	\$ cts.	\$ cts. 37 15 62 92 99 75	\$ ets.
Balance in hand			9 90
Oxford, North and West.		46.	
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Refreshment Booths  "Special Prizes  "Micellaneous	\$ cts. 15 92 435 00 360 00 80 00 70 00 13 00 45 00	\$ cts.	ets.
Cr. By Prizes for Horses, \$114; Cattle, \$76; Sheep, \$63; Pigs,		1	,018 92
\$26; Poultry, \$13.50  "Prizes for Grains and Seeds, \$36; Roots and other hoed crops, \$18.75; Dairy Products, \$34.75; Plants and Flowers, \$15.75; Agricultural Implements, \$39; General Manufactures, \$7; Fine Arts, \$10; Ladies' Work,	292 50		
\$27	188 25	480 75	
"Prizes for previous years paid. "Exhibition Buildings. "Paid on Purchase of Exhibition Grounds. "Paid on Purchase of Seeds. "Printing and Advertising. "Refunded to Members. "Working Expenses.		8 00 72 75 139 25 7 65 101 25 7 32 141 93	958 90
Balance in hand			60 02
Oxford, East.			
Dr. To Members' Subscriptions "Legislative Grant from Electoral Division Society "Miscellaneous	\$ cts. 90 50 24 09 23 62	.\$ ets.	
Cr. By balance due Treasurer, as per last Annual Report "Cash to N. Norwich Society for Union Show "Extra Prizes "Stationery, &c		22 29 93 09 15 50 5 49	138 21
			136 37
Balance in hand			1 84
PEEL.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  120	\$ ets. 104 62 408 00 530 92	\$ cts.	S ets.

To Legislative Grant, \$700; Municipal Grant, \$290.00  "Rent of Grounds and Booths  "Miscellaneous	\$ ets. 990 00 166 00 73 77 627 00  553 75 1		\$ cts.
"Prizes for previous years paid "Portions of Legislative Grant paid to Township Societies "Exhibition Buildings	1	171 50 280 00 24 50 122 86 282 77 	062 38
Toronto.			
Dr. To balance in hand, as per last Annual Report	\$ ets. 274 86 200 40 69 05 140 00 100 00 17 25 208 50	\$ ets.  382 00 136 06 37 62 57 01	\$ ets. 801 56
Balance in hand			188 87
Toronto Gore.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  Cr.  By Prizes for Horses, \$100; Cattle, \$42; Sheep, \$43; Pigs, \$22; Poultry, \$6.	\$ cts. 2 00 138 30 60 00 140 00 15 00	\$ ets.	\$ cts.
ψ=2; I outtry, φ0	223 00		

	\$ ets.	s ets.	\$ cts.
By Prizes for Grains and Seeds, \$20.50; Roots and other hoed crops, \$15.75; Dairy products, \$3.75; Fruits, \$10; Agricultural Implements, \$40.75; Ladies' Work, \$33.50	124 25	4 1	
\$55.50		347 25	
" Printing and Advertising. " Working Expenses		17 00 5 00	369 25
Balance due Treasure			13 95
PERTH, NORTH.			
Dr.	\$ . cts.	\$ cts.	\$ cts
To balance in hand, as per last Annual Report	72 70	Ψ οτο.	Ψ 000
" Members' Subscriptions	322 00		
"Admission Fees to Exhibition	425 66		
" Legislative Grant, \$700; Municipal Grant, \$150" Sale of Seeds	$850 \ 00$ $120 \ 30$		
" Canada Company's Grant	39 75		
" Rent of Show Grounds, &c	108 00		. 000 41
Cr.			1,938 41
By Prizes for Horses, \$130.50; Cattle, \$159; Sheep, \$86.50;			
Pigs, \$12; Poultry, \$26	414 00		
"Prizes for Grains and Seeds, \$160; Roots and other hoed			
crops, \$17.50; Dairy products, \$19; Fruits, \$32.50; Vegetables, \$28.50; Agricultural Implements, \$34.50;			
General Manufactures, \$55.50; Fine Arts, \$3; Ladies'			
Work, \$48.50	399 00		
" Driver Committee of the committee of t		813 00 63 00	
" Prizes for previous years paid" " Portions of Legislative Grant paid to Township Societies		509 47	
" Printing and Advertising		84 58	
"Working Expenses, including services of Secretary, Trea-			
surer and Assistants		295 69	1,765 74
Balance in hand			172 67
Elma.			
Dr.	8 cts.	S ets.	8 cts.
To balance in hand, as per last Annual Report	11 84		
" Members' Subscriptions " Admission Fees to Exhibition	$     \begin{array}{ccccccccccccccccccccccccccccccccc$		
" Legislative Grant from Electoral Division Society	98 00		
" Municipal Grants	31 00		
" Rent of Show Ground	10 00		330 91
Cr.			55U 81
By Prizes for Horses, \$50.25; Cattle, \$34.25; Sheep, \$25;			
Pigs, \$5.50; Poultry, \$2.50	117 50		
122			

By Prizes for Grains and Seeds, \$7; Roots and other hoed crops, \$4.50; Dairy products, \$8; Fruits, \$3.50; Vegetables, \$8; Agricultural Implements, \$5.50; General Manufactures, \$7.25; Ladies' Work, \$22	\$ ets.	\$ cts. \$ cts
Unpaid  " Prizes for previous years paid " Printing and Advertising " Working Expenses  Balance in hand	183 25 77 25	106 00 11 50 17 00 60 22 ———————————————————————————————————
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous  Cr. By Prizes for Horses, \$169.25; Cattle, \$72; Sheep, \$29.50;  Pigs, \$13; Poultry, \$38.50  "Prizes for Grains and Seeds, \$89.25; Roots and other hoed crops, \$30.25; Dairy Products, \$38; Fruits, \$20; Plants and Flowers, \$9.25; Vegetables, 15.50; Agricultural Implements, \$58.50; General Manufactures, \$122; Fine Arts, \$34.25; Ladies' Work, \$40  "Prizes for previous years paid  "Exhibition Buildings  "Prize Medals  "Prize Medals  "Prize Medals  "Working Expenses, including services of Secretary, and Treasurer	\$ cts. 79 11 552 46 400 13 170 00 189 15  322 25	\$ cts. \$ cts  1,390 85  779 25 16 25 94 72 100 00 70 00 151 69  161 59 1,373 50 17 35
Logan.  Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grants  "Miscellaneous  Cr. By Prizes for Horses, \$16.75; Cattle, \$6.50; Sheep, \$13.50;  Pigs, \$8.50	\$ ets. 5 95 76 00 13 80 66 27 34 00 8 25	\$ ets. \$ ets

	(P) 04-	(D) -4-0	ф - <u>+</u> -
By Prizes for Grains and Sceds, \$8.50; Roots and other hoed	\$ cts	s. \$ cts.	\$ cts
crops, \$8; Dairy products, \$4.50; Fruits, \$2.50;			
Vegetables, \$6.25; Ladies' Work, \$16.50	55 0	)	
	100 0		
Unpaid	100 28 $18 78$		
Oupata		81 50	
" Prizes for previous year paid		17 00	
"Exhibition Buildings		4 00 7 50	
" Printing and Advertising Working Expenses, including services of Secretary and		7 30	
Treasurer		<b>56 28</b>	
			166 28
Balance in hand			38 19
Datance in hand			30 13
Mornington.			
Dr.	\$ cts		\$ cts.
To Members' Subscriptions	135 00 $17 00$		
" Legislative Grant from County Society	140 53		
" Municipal Grant	20 00		
Cr.	-	25 25	312 53
By balance due to Treasurer, as per last Annual Report  "Prizes for Horses, \$29.50; Cattle, \$35; Sheep, \$28; Pigs,		35 27	
\$14; Poultry, \$2.25	108 75		
" Prizes for Grains and Seeds, \$22.50; Roots and other hoed			
crops, \$7; Dairy Products, \$4; Fruits, \$2.50; Vege-			
tables, \$10; Agricultural Implements. \$15; General Manufactures, \$13.50; Ladies' Work, \$11	85 50		
industrial of the state of the		194 25	
" Printing and Advertising, \$12; Musical Bands, \$15		27 00	
"Working Expenses, including services of Secretary Treasurer and Assistants		20 65	
surer and Assistants.		32 65	289 17
Balance in hand			23 36
Account Home Halling			
PERTH, SGUTH.			
Dr.	\$ ets	. \$ ets.	\$ cts.
To balance in hand, as per last Annual Report	882 14	T 0 -10 *	* ******
" Members' Subscriptions	312 00		
" Admission Fees to Exhibition "Legislative Grant, \$700; Mnnicipal Grant, \$537	354 05 $1237 00$		
"Borrowed	1281 39		
" Mortgage	1800 00		
"Sale of seeds \$100.32; Miscellaneous, \$16.60	116 92		000 =0
Cr. By Prizes for Horses, \$159; Cattle, \$160; Sheep, \$75; Pigs.		Đ	,983 50
\$14; Poultry, \$20	428 00		
\$14; Poultry, \$20			
erops, \$8; Dairy Products, \$25; Fruits, \$15; Plants			
and Flowers, \$15; Vegetables, \$13.35; Agricultural Implements, \$38; General Manufactures, \$50; Fine			
Arts, \$16; Ladies' Work, \$49	361 35		
		789 35	
404			

90 mm			
By Prizes for previous years paid  "Portions of Legislative Grant paid to Township Societies  "do County do do  "Exhibition Buildings, fencing, fitting up, etc  "Paid on purchase of Exhibition Grounds  "Notes  "Printing and Advertising, \$60; Insurance, \$11.60  "Working Expenses, including services of Secretary, Treasurer and Assistants	\$ cts.	8 cts. 63 00 417 51 112 50 2093 19 655 00 1300 00 71 60	\$ cts.
Balance in hand			324 82
Dr. To balance in hand, as per last Annual Report. "Members' Subscriptions "Admission Fees to Exhibition "Legislative Grant from Electoral Division Society "Municipal Grant. "Miscellyneous	\$ cts. 167 02 297 00 40 20 140 00 95 00 8 00	\$ cts.	\$ ots.
"Miscellaneous Cr. By Prizes for Horses, \$76.50; Cattle, \$69.50; Sheep, \$48; Pigs, \$17; Poultry, \$5  "Prizes for Grains and Seeds, \$19.75; Roots and other hoed crops, \$12.50; Dairy products, \$11.25; Growing crops, \$9.00; Fruits. \$9.75; Agricultural Implements, \$21; General Manufactures, \$22.50; Ladies' Work, \$20.25.	216 00 126 00 342 00		747 22
Unpaid  " Prizes for previous years paid  " Exhibition Buildings  " Paid on purchase of Exhibition Grounds  " Printing and Advertising  " Working Expenses  Balance in hand	128 75	213 25 61 50 37 37 318 00 22 00 39 88	$\frac{692\ 00}{55\ 22}$
Dr. To Members' Subscriptions  " Admission Fees to Exhibition	\$ cts. 93 00 34 10	8 ets,	\$ ets.
" Legislative Grant from Electoral Division Society	60 60 22 50	2 <b>0</b> 41	210 20
Pigs, \$13; Poultry, \$3.25	64 00	191 75 5 5 )	

By Printing and Advertising	\$ cts.	\$ cts 20 75 33 63	\$ cts.
Working Expenses			272 04
Balance due Treasurer			61 84
Hibbert,			01 04
Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report "Members' Subscriptions	$\frac{4}{169} \frac{01}{50}$		
" Admission Fees to Exhibition	22 10		
" Legislative Grant from Electoral Division Society " Municipal Grants	$8288 \\ 4250$		
Cr.			320 99
By Prizes for Horses, \$80.25; Cattle, \$42.50; Sheep, \$15; Pigs, \$4.50; Poultry, \$3.10	145 35		
General Manufactures, \$9.40; Ladies' Work, \$14.45;	58 55		
	203 90		
Unpaid	71 35	190 55	
" Prizes for previous years paid		132 <b>55</b> 9 65	
" Printing and Advertising " Working Expenses		13 00 45 97	
Hotaling Dapolisos		40 01	201 1
Balance in hand			119 8:
Mitchell Horticultural Society.			
Dr. To balance in hand, as per last Annual Report	\$ ets. 232 78	\$. cts.	\$ cts
" Members' Subscriptions  " Legislative Grant from Electoral Society  " Municipal Grant	256 75 134 03 45 00		
Cr.			668 56
By Prizes for Fruit, \$22: Plants and Flowers, \$31.50; Vegetables, \$35,50	89 00		
"General Manufactures	19 00		
" Fine Arts, \$9.25; Ladies Work, \$23.50	32 75	140 75	
"Exhibition Buildings		7 00	
" Printing and Advertising, \$38.60; Musical Bands, \$5 " Working Expenses, including services of Secretary and		43 60	
Treasurer		147 84	0.00 1
			339 1
Balance in hand			329 3
PETERBOROUGH EAST.			
Dr.	\$ cts.	\$ cts.	\$ cts
To balance in hand, as per last Annual Report	$     \begin{array}{r}       12 & 83 \\       59 & 00 \\       700 & 00     \end{array} $		
lag			771 8

Cr.  By portions of Legislative Grant paid to Township Societies  "Ploughs awarded at Ploughing Match "Central Exhibition "Working Expenses	\$ cts.	\$ ets. 420 00 46 00 200 00 44 10	\$ ets.
Balance in hand			61 73
4-1-11 D.L 1 D			
Asphodel, Belmont and Dummer.  Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society  "Municipal Grant.  "Sale of Seeds  "Miscellaneous	\$ ets. 4 26 108 00 77 30 108 85 60 00 503 35 1 75	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$14.75; Cattle, \$5.25; Sheep, \$8.75; Pigs, \$11.50; Poultry, \$100  "Prizes for Grains and Seeds, \$10.37; Roots and other hoed crops, \$8.63; Dairy products, \$11; Fruits, \$1.62; Vegetables, \$14.25; Agricultural Implements, \$5.00;	41 25		863 51
General Manufactures, \$18.50; Ladies' Work, \$15.25	84 62		
" Exhibition Buildings.  " On purchase of Seeds.  " For Agricultural or Horticultural Publications.  " Musical Bands.  " Working Expenses.  " Borrowed money and Interest.		125 87 12 90 543 35 51 00 35 00 9 50 78 50	
			856 12
Balance in hand			7 39
Burleigh.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Subscriptions retained  "Miscellaneous.  Cr.	\$ cts 5 45 52 00 6 90 56 25 25 00 15 75	\$ ets.	\$ cts.
By Prizes for Horses, \$16.25; Cattle, \$17.50; Sheep, \$7.50; Pigs, \$5.75; Poultry, \$4.07	51 07		
erops, \$11.75; Dairy products, \$7.25; Fruits, \$1.25; Agricultural Implements, \$1.25; Ladies' Work, \$11.75.	47 90		
" By Prizes for previous years paid. " Printing and Advertising " Working Expenses.		98 97 23 00 2 50 8 73	133 20
Balance in hand			28 15
197			20 10

Dummer and Douro.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions.  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ cts. 69 10 208 00 140 00 6 46	\$ cts.	\$ cts
Cr. By Paid on purchase of Seeds " Central Exhibition " Working Expenses	193 00 50 00 26 16		423 56
			269 16
Balance in hand			154 40
Otonabee,			
Dr. To Members' Subscriptions " Legislative Grant from Electoral Division Society " Sale of Seeds " Sale of Plaster	\$ cts. 85 00 114 90 20 07 215 00	\$ cts.	\$ ets
Cr. By Balance due Treasurer  "Prizes for previous year paid  "Paid for Plaster  "On purchase of seeds  "Paid for Agricultural or Horticultural Publications  "Printing and Advertising  "Working Expenses.		4 85 46 37 270 00 100 00 40 36 5 70 53 86	<ul><li>434 97</li><li>521 14</li></ul>
Balance due Treasurer			86 17
PETERBOROUGH, WEST.	S cts.	S cts.	S cts.
To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Legislative Grant	141 27 72 00 700 00	ψ cts.	c Cts
Cr. By Prizes for previous years paid Portions of Legislative Grant paid to Township Societies Central Exhibition Fund Working Expenses.		129 50 420 00 200 00 65 25	913 27
o -1			814 75
Balance in hand			98 52

In presenting their annual report for the year 1875, your Directors have much pleasure in being able to congratulate the members of the Society upon the unexpected success which has attended their efforts to bring about a Central Exhibition for the United Counties of Northumberland and Durham, and the Counties of Peterborough and Victoria. Immediately after the last annual meeting of the Society, your Directors appointed a committee, consisting of Messrs. Joseph Walton, Rev. V. Clementi, and J. Carnegie, to see what could be done in the way of holding an exhibition in Peterborough last autumn which would be likely to secure the support and patronage of the surrounding ridings, as well as that of the one in

which it was to be held, and at the same time determined to dispense with the usual spring show in order that every possible dollar might be made available for the larger exhibition

proposed

This committee, feeling that as this Town and County would be chiefly benefited by the holding of such an exhibition in Peterborough, directed their efforts in the first place, to securing grants from the Municipal Councils of the Town and County, and were so successful as to get these two bodies to contribute \$250 each, upon condition that the prize list for the exhibition should amount to not less than \$2,000, or such smaller sum as would equal onefourth of the same, provided that it should not be less than \$1,500, a minimum which many thought at the time could never be reached. Having secured these grants, the committee next directed their attention to the local Societies in the riding, and the Smith Branch Society, and the Peterborough Horticultural Society at once generously agreed to contribute towards the funds of the exhibition the sums of \$140 and \$200 respectively. With this much accomplished, combined with the facilities which they possessed in the Drill Shed and the old burying ground, a lease of which had already been procured, for the holding of the first really "Central" Exhibition, the committee felt that the time had arrived when they could with some show of reason and some prospect of success, appeal to the several Agricultural Societies in the four counties, for their aid and countenance in the undertaking. Circulars were accordingly issued by the Secretary to all the surrounding Agricultural Societies, asking them to send representatives to a meeting to be held in Peterborough early in the month of June. and in response thereto, the Societies of East Peterborough, East Durham, South Victoria, Townships of Hope, Verulam, Asphodel, Otonabee, Cavan, South Monaghan, Smith, and the Peterborough Horticultural Societies, sent representatives, who entered most heartily into the scheme, and at which meeting the following resolutions were passed :-

1st — That the General Committee for the proposed Exhibition be organized on the following basis, viz.: That besides the Warden and Mayor of the County and Town of Peterborough, each Society contributing to the funds of the Exhibition shall have a representative

for every fifty dollars contributed.

2nd.—That the members of the Societies contributing shall be entitled to exhibit at the Exhibition free of charge. A list of such members to be furnished to the Secretary of the Exhibition on or before the 1st of September, by the Secretaries of the several contributing societies.

3rd.—That the Exhibition be open to the Province of Outario, on the payment of \$2.00

by exhibitors who are not members of contributing societies.

4.—That the surplus funds (if any) remaining after the Exhibition shall be held as a reserve fund for the next Central Exhibition, held in any of the ridings contributing to this year's one.

5th.—The Committee would recommend that these Central Exhibitions should be held

alternately in the rear and front of the District.

Having once succeeded in getting the scheme into a workable shape, and placed the exhibition beyond doubt, the greatest interest was manifested therein by the press and people of the district for which it was designed, and it was at once felt that that portion of the old Burying Ground under the control of the Society would be quite inadequate for the purposes of the exhibition. The difficulty, however, was easily surmounted through the kindness of the Rev. Mr. Lynch, and the trustees of the Roman Catholic school, placing the three acres adjoining and belonging to them not only at the disposal of the committee, but, in dismissing the school during the days of the exhibition. With no experience to guide them as to the probable financial result of the show, it was with no little trepidation that the local committee faced the expenditure necessary for fencing, shedding, and other requisite improvements, for the proper accommodation of exhibitors, without any previous substantial provisions having been made to meet the same. Feeling, however, that without proper accommodations the exhibition must be a failure, and feeling that in a matter of that kind they might almost as well be hung for a sheep as a lamb, they decided to incur the responsibility of making the improvements which they deemed absolutely necessary, and it is almost needless to add that it is highly gratifying to them, that after paying for these improvements, the success of the exhibition was so great-so much beyond their most sanguine expectations-that more than \$1,000 remains to be carried forward to the exhibition of the present year to be held in Port. Hope.

9

Gratifying, however, as has been the success of the exhibition financially, notwithstanding bad weather in the early part of it, and an accident on the Midland Railway which prevented many who would have otherwise visited it from doing so, it was still more gratifying in the character of the articles and animals exhibited, and which we have been informed compared most favourably with, in several departments, the Western Fair at London, this year, and in the beneficial results which must inevitably follow from such a commingling of the people of the four counties.

The total number of entries made was 2,600 and from the amount of money taken at the gates, there can be no doubt that at least 10,000 persons must have visited the exhibition. Before passing on to the future, it may be not amiss to mention that the first Agricultural Exhibition ever held in Peterborough, was held just thirty-two years previously, and that, although the district represented in the exhibition extended from Asphodel in the east to Mariposa in the west, and from Cavan in the south to the North Pole, yet the prize list amounted to just \$127, and the number of entries to fifty-eight—from such small things have

our Agricultural exhibitions grown,

While your Directors are most anxious that every member of this Society should do his utmost to render the coming Exhibition at Port Hope a decided success, they are of opinion that the current year will be an opportune time for placing the annual Exhibitions of the Society upon a broader and healthier basis. With grounds and buildings affording every facility which can be desired, your Directors are of opinion that your Exhibitions, instead of being limited to exhibitors resident within the riding, should be thrown open to competitors no matter where they come from, believing that the true way to promote improvement is by letting the people see the best. Another question which might be fairly raised in view of the Central Exhibition scheme having become a fixed fact, is one as to how far it might be desirable at the Riding Exhibitions to give particular prominence to some one department, instead of putting the money of the Society into prize lists which should be largely copies of the Central Exhibition one. Were such a course pursued, a different department could be given prominence to in each successive year.

Having obtained a lease of the old burying grounds on most favourable terms, your Directors would recommend their successors to, if possible, devise some scheme for rendering it an ornament to the town, and at the same time self-sustaining, so far as the proper care of the

same may be concerned.

Appended herewith is a copy of the Auditor's Report of the Central Exhibition accounts; also, the Auditor's report of your Treasurer's accounts for the current year, showing a balance on hand of \$98 50. All of which is respectfully submitted.

# PETERBOROUGH CENTRAL EXHIBITION.

Dr.		Ş	cts.	\$	cts.	\$ cts.
To Donations of	West Northumberland Society	50	00			
4.6	East Peterborough Society		00			
**	West Peterborough Society		00			
44	Peterborough Horticultural Society		0.0			
46	Township of Smith Society	140	0.0			
6.0	East Durham Society	150	00			
**	South Victoria Society	100	00			
4.5	Township of Hope Society	100	00			
4+	Township of Hamilton Society	50	00			
4.6	Township of Manvers Society		00			
**	Township of Dummer Society	50	00			,
+6	County of Peterborough					
4.	Town of Peterborough	250	00			
				76.	1.11.7	

To Receipts at Gates	$ \begin{array}{r}   3 \\   160 \\   44 \\   100 \\ \hline   197 \\   13 \end{array} $	00 00 50 00 00 50	2,494	50	\$ cts
By Payments as per Statement	365				
" Prizes for Durham Cattle, \$122; Devon Cattle, \$47; Ayrshire Cattle, \$100; Grade Cattle, \$51	320	00			
"Prizes for Leicester Sheep, \$66; Cotswold Sheep, \$33; South Down Sheep, \$35; Fat Sheep, \$6	14.0	00			
" Prizes for Swine—Small Breed, \$40; Swine—Large Breed, \$15" Prizes for Poultry, \$82	82	00		. 62	
"Prizes Grains and Seeds, \$126; Roots, \$40  "Prizes for Dairy, \$67; Fruit, \$44.75; Garden Vegetables, \$40.50; Agricultural Implements, \$154; Domestics, \$60.50; Ladies' Work, \$116; Fine Arts, \$52.50; Leather Work, &c., \$39; Plants and Flowers, \$32; Miscellaneous, \$52			2,607 166 658 2	00	3,432 08
Balance in hand				***	1,062 74
Smith, Ennismore and Lakefield.  Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society	42 58	cts 26 3 00	\$	cts.	\$ cts.
Cr. By Prizes for previous year paid. " Central Exhibition. " Printing and Advertising. " Working Expenses.			140 3	9 00 9 00 8 50 6 00	240 26
					167 50
Balance in hand					72 76
PRESCOTT.  Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant.  "Amount of loan on Buildings.  "Miscellaneous	129 57 131 700 175	$00 \\ 72 \\ 00$	. \$		\$ cts.
					1,226 85

Cr.		\$	cts.	\$	cts.	\$	cts.
	Prizes for horses, \$73.80; Cattle, \$60.65; Sheep, \$26.10; Pigs, 12.60	173	15				
66	Prizes for Grain and Seeds, \$15.53; Roots and other hoed crops, \$8.55; Dairy products, \$39.15; Agricultural						
	1mplements, \$3.60; General Manufactures, \$13.73; Fine Arts, \$5; Ladies' Work, \$45.33	130	89				
				304			
46	Prizes for previous year paid			420			
66	Exhibition Grounds, for draining			$\frac{49}{275}$	75 00		
"	Interest on Loan				66 00		
66	Insurance Printing and Advertising			6	00		
6.6	Working Expenses					1,155	54
	. Balance in hand				-	71	31

NOTE.—The Society continues steadily to pursue its important objects, and with the Township Societies in connection with it, the Agricultural interest of the county is greatly promoted.

# Caledonia.

Cateaonac.			
To balance in hand, as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society  Cr.  By Paid in Premiums  "Working Expenses	\$ ets. 7 72 100 00 112 00	212 00 12 00	\$ cts. 219 72 224 (0
Balance due Treasurer			4 28
Longueil, East and West Hawkesburg	//•		
Dr. To Members' Subscriptions	\$ cts. 126 00 217 28	\$ ets.	\$ ets.
By balance due Treasurer, as per last Annual Report.  " Prizes for growing crops  " Working Expenses	,	8 29 269 18 60 00	337 47
Balance in hand			5 81
Plantaganet, South.			
To balance in hand, as per last Annual Report	\$ cts. 8 58 81 00 90 72	\$ cts.	\$ cts.
By Prizes for Horses, \$27.20; Cattle, \$21.20; Sheep, \$16.50; Pigs, \$7.30	72 20		

	-	
By Prizes for Grains and Seeds, \$21.50; Roots and other hoed	\$ cts.	\$ cts. \$ cts.
crops, \$19; Dairy products, \$20.80; Fruits, \$1; General Manufactures, \$5.20; Ladies' Work, \$3.40	70 90	143 10
" Working Expenses		30 <b>75</b> ————————————————————————————————————
Balance in hand		6 45
PRINCE EDWARD.		
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant.  "Miscellaneous  Cr. By Prizes for Horses, \$74.75; Cattle, \$72.75; Sheep, \$52.75;  Pigs, 17.50; Poultry, \$13.95.	\$ cts 158 64 265 00 366 15 700 00 108 80 	\$ cts. \$ cts <sup>1</sup>
" Prizes for Grains and Seeds, \$32.75; Dairy products, \$20.75; Fruits, \$10.50; Vegetables, \$18; Agricultural Implements, \$15; General Manufactures, \$10; Fine Arts, \$6; Ladies' Work, \$4.39	117 40	349 10 65 75 420 00 144 00
" Printing and Advertising " Working Expenses, including services of Secretary and Treasurer.		36 64 166 92 — 1,182 41
Balance in hand		416 18
Amelias burgh.		
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions.  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society.  "Municipal Grant.  "Borrowed	\$ ets. 35 75 156 00 243 15 107 16 100 00 300 00	\$ cts. \$ cts.
Cr. By Prizes for Horses, \$68.50; Cattle, \$36; Sheep, \$15; Pigs, \$9.75; Poultry, \$4.55	133 80 92 90	942 06
"Exhibition Buildings and Grounds" Paid for Agricultural or Horticultural Publications		226 70 317 32 105 <b>25</b>

By Printing and Advertising, \$27.84; Musical Bands, \$18 "Working Expenses		\$ ets. 45 84 58 70	\$ ets.
Balance in hand			188 25
Hillier.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report  "Members' Subscriptions	41 95 110 00 8 75 78 05	φ Our.	238 75
By Prizes for Horses, \$24.20; Cattle, \$29.60; Sheep, \$26.75;			200 10
Pigs, \$9.25	89 70		
\$5.05; Discretionary, \$6.15	72 85	100 55	
" Printing and Advertising" " Working Expenses		162 55 7 00 32 01	201 56
Balance in hand			37 19
Hollowell.			
Dr. To Members' Subscriptions "Admission Fees to Exhibition "Miscellaneous Cr.	\$ cts. 88 00 62 43 32 54	\$ ets.	\$ cts.
By Prizes for Horses, \$32; Cattle, \$35.75; Sheep, \$15.50; Poultry, \$3.60  "Prizes for Grain and Seeds, \$14.25; Dairy products, \$9; Fruits, \$2.40; Vegetables, \$4.15; Agricultural Implements, \$1; General Manufactures, \$2.50; Ladies' Work,	86 85		102 31
\$4; Discretionary, \$12.72	$50 \ 02$	100	
" Printing and Advertising. " Working Expenses		136 87 8 <b>75</b> 26 65	172 27
Balance in hand			10 70
Maryborough, South.			
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society	\$ cts. 59 42 106 00 22 75 75 21	\$ cts.	\$ cts.
Cr. By Prizes for Horses, \$31.25; Cattle, \$17.75; Sheep, \$10.25; Pigs, \$6; Poultry, \$2.35	67 60	263 38	

	\$ ets.	\$ ets.	\$ ets.
By Prizes for Grains and Seeds, \$7.25; Roots and other hoed crops, \$5.10; Dairy products, \$5.60; Fruits, \$3.25; Agricultural Implements, \$10.30; Ladies' Work, \$17.	Ψ 2	,	*
50; Discretionary, \$25.40	74 95		
	142 55	_	
Unpaid	30 10	112 45	
Printing and Advertising		5 50	
· Working Expenses		37 14	155 09
Balance in hand			108 29
Sophiasburg.			
Dr. To balance in hand, as per last Annual Report	\$ ets. 25 36	\$ cts.	\$ cts.
" Members' Subscriptions	83 00		
" Admission Fees to Exhibition	44 00 58 17		
			210 53
Cr. By Prizes for Horses, \$34.50; Cattle, \$24.25; Sheep, \$9.25;			
Pigs, \$3.50; Poultry, \$1.70	72 25		
crops, \$4.90; Fruits, \$5.40; General Manufactures,			
\$5.60; Fine Arts, \$5.30; Ladies' Work, \$12.40; Discretionary, \$25.35	74 10		
" Printing and Advertising,		146 35 32 18	
Trincing and 124701 abids,			178 53
Balance in hand			32 00
DENIEDEW VODUL			
Dr. RENFREW, NORTH.	\$ etc.	\$ cts.	\$ cts.
To Members' Subscriptions	128 75	<b>#</b>	47
" Legislative Grant Cr.	700 00		828 75
By Prizes for Horses, \$50; Cattle, \$23; Sheep, \$20; Pigs, \$5; Poultry, \$5	103 CO		
" Prizes for Grains and Seeds, \$22; Roots and other crops,	100 00		
\$15; Dairy Products, \$15; Fruits, \$5; Plants and Flowers, \$1; Vegetables, \$10; Agricultural Imple-			
ments, \$20; General Manufactures, \$10; Fine Arts, \$5; Ladies' Work, \$30	133 00		
		236 00	
" Portions of Legislative Grant paid to Township Societies  Exhibition Buildings		$ \begin{array}{cccc} 210 & 00 \\ 60 & 00 \end{array} $	
" Paid on purchase of Exhibition Grounds		107 50 30 00	
" Printing and Advertising" Working Expenses		88 00	
			731 50
Balance in hand			97 25

The President and Directors have much pleasure in submitting their Annual Report to the members of the Society, and are happy to state that during the past year the crops (hay excepted) have been most abundant, the heaviest harvested in this county for many years. The same may be said of the adjacent counties on the Ottawa, and while we consider that the markets for farm produce are low, and likely to remain so for some time, yet it is a cause for thankfulness that there will be an abundance both for man and beast, so that there will be no cry of want, and the extra quantity which the farmer will have over previous years will leave him in better circumstances than he was previously with his light crop and the consequent high prices.

Your Directors would urge upon the farming community the necessity of keeping more, and also a better class of, stock. The pure-bred animals imported by the Society (though at a serious loss to the Society financially) have been a great benefit to the country. Many farmers who opposed the introduction of these animals, and who did not patronize them

while kept by the Society, see their mistake now.

With regard to the Annual Exhibition held on the Society's grounds in the Village of Beachburg last October, it cannot be said that it was as good as some previous Exhibitions, but when we consider the circumstances under which it was held—commencing in the midst of a fearful rain-storm which had centinued for about two days and lasting till noon of the Fair day—we cannot say it was a failure. The entries were equal to any previous year, but owing to the circumstances above stated, the stuff could not be brought forward.

Your Directors would suggest to their successors in office the propriety of holding their Exhibition two successive days. This would no doubt obviate many difficulties, and remove many complaints that exist and must continue while endeavouring to accomplish so much in

one day.

It is with great satisfaction your Directors hand over to their successors in office the possession of a commodious Agricultural Hall, with grounds fenced and all complete, with only about \$100 debt, which amount is not due till next April, and there is a balance in Treasurer's hand which will almost cover this debt.

Dr. Ross.	C of	s. \$	ata	Ö	040
To Balance in hat.d, as per last Annual Report  "Members' Subscriptions	91 0 52 0	4	Cts.	₫.	CIS.
' Legislative Grant from Electoral Division Society	140 0 46 3				
Cr. By Prizes for Horses, \$31.50; Cattle, \$28.50; Sheep, \$5.25;		-		329	39
Pigs, \$3.50  Prizes for Grains, and Seeds, \$17.60; Roots and other hoed crops, \$4; Dairy products, \$13.80; Vegetables, \$7.35;	68 78	5			
Agricultural Implements, \$14.45; General Manufactures, \$18; Ladies' Work, \$6.10	83 30	)			
Less as per by-laws	152 05 9 45				
" Purchase of Seeds " Agricultural or Horticultural Publications		142 43 20	12		
" Working Expenses		55	16	260	78
Balance in hand			-	68	61

NOTE.—Notwithstanding unfavourable weather, the Show was a success, and in Dairy products and most departments of live stock, there was a manifest improvement on form' years.

DEVEDEM SOUTH						
m RENFREW, SOUTH.	8	ets	. \$	ets.	s	ets.
To Balance in hand, as per last Annual Report		01	• W	Cube	**	0000
" Members' Subscriptions	150					
" Admission Fees to Exhibition	285					
" Legislative Grant	700					
"Borrowed						
"Miscellaneous	131					
Cr.					2,320	84
By Prizes for Horses, \$129.50; Cattle, \$47.75; Sheep, \$48.50;					,	
Pigs. \$5; Poultry, \$4.75	235	50				
" Prizes for Grains and Seeds, \$31; Roots and other hoed						
erops, \$19.75; Dairy products, \$21.75; Fruits, \$5;						
Plants and Flowers, \$20.75; Vegetables, \$4.50; Agri-						
tural Implements, \$52.25; General Manufactures, \$43						
50; Fine Arts, \$2; Ladies' Work, \$17.25	217	75				
			453	25		
" Portions of Legislative Grant paid to Township Societies			420	00		
" Exhibition Buildings			13			
" Paid on purchase of Exhibition Grounds			1,220	00		
" Printing and Advertising			38	00		
"Working Expenses, including services of Secretary and						
Treasurer			153			
				;	2,298	57
				-		
Balance in hand					22	27
Admaston.						
Dr.	\$	cts.	\$	cts.	\$	ets.
To balance in hand, as per last Annual Report	15	65				
" Members' Subscriptions	155					
" Legislative Grant from Electoral Division Society	140					
" For ploughing match by S. F Brown	19					
" Miscellaneous	13	68				
Cr.					343	77
By Prizes for Horses, \$16.20; Cattle, \$23.60; Sheep. \$11.10;		~ ~				
Pigs, \$4.65	55	99				
Prizes for Grains and Seeds, \$19.95; Roots and other hoed						
erops, \$3.77: Dairy products, \$10.85; Growing crops,						
\$7.65; Vegetables, \$8.15; Agricultural Implements, \$8.	111	0.0				
70; Ladies' Work, \$21.19; Ploughing match, \$15.00	111	86	1.07	4.1		
By Exhibition Ruildings and Crounds for rout lighting fitting			167	41		
By Exhibition Buildings and Grounds for rent, lighting, fitting			00	60		
up, &c			106			
"Printing and Advertising			106	00		
" Printing and Advertising "Working Expenses			45			
Tapensoo minimum minim			10	10	327	82
Balance in hand					15	95
Grattan and Wilberforce.						
Dr.	d)	. 4	6%	. 4	0	- t- m
		ets.	\$ (	its.	\$ (	ets.
To balance in hand, as per last Annual Report	140					
" Members' Subscriptions " Legislative Grant from Electoral Division Society	33 (					
200 Structive Citable from Precional Division Society	100 (	<i>y</i> 0	273	96		
107			210	00		

Cr.	\$ ets.	\$ ets.	\$ cts.
By Prizes for Horses, \$21.20; Cattle, \$14; Sheep, \$4; Pigs, \$4; Poultry, \$1.50	44 70		
" Prizes for Grains and Seeds, \$10.65; Roots and other hoed			
crops, \$2.60; Fruits, \$1; Vegetables, \$6; Agricultural Implements, \$10; General Manufactures, \$25; Ladies'			
Work, \$10.80	66 05		
, and the second		110 75	
Retained, as per rules		26 00	
			84 75
" Printing and Advertising		5 00	
· Working Expenses		44 83	
l .			49 83
			104 50
			134 58
Balance in hand			139 38

We have much pleasure in having to state that the prospects of this Branch Society are highly flattering, and that the farmers, mechanics and inhabitants in general of this vicinity, as well as people from a distance, are seemingly alive to the great benefits to be derived therefrom, as evidenced by the very large attendance at the Show Fair, on the 2nd of October last, from the Townships of Wilberforce, Bromley, Admaston, Algona, Sebastopol, Brudenell, and the Villages of Douglas and Renfrew. We hope that such attendance on the part of outsiders, as well as those belonging to the Society, will be an incentive to the members to use greater exertion in the future to make the Society a useful Institution and grand success.

The horses, cattle, sheep and other animals, poultry, vegetables, grain, butter, implements and home-made fabrics exhibited on the above mentioned date, reflected great credit on the owners as well as on the members of the Society. Especially in the Ladies' Department, there could be seen some splendid specimens of fancy needlework, crocketing, tatting, knit ting, plain sewing, and a large and beautiful collection of ladies' fancy work, such as Parmer's wreaths, boquets, fruit baskets, beaded ornaments, and a variety of articles too numerous to to insert in this Report, which would certainly compare very favourably with work of the same description exhibited in older and more favoured localities. This is certainly very gratifying to the members of the Society, as it is a sure guarantee of success to have the ladies take such a deep interest in the affairs of the Society. What can be more pleasing to a man of sense than to observe the looks of admiration bestowed on those articles manufactured by the clever industrious hands of a wife or a loving little daughter?

We would, therefore, respectfully, and at the same time earnestly, urge on those fathers and mothers who have not as yet joined this Society, to lose no time in doing so, and thereby give their daughters an opportunity of displaying their talents before the public. It is the best and cheapest school of industry and invention which the country possesses and we earnestly hope the ensuing Show Fair will be still more generally attended and patronized, and that we will be able in our next Report to announce a large accession to our list of

members.

#### McNab.

Dr.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions			
" Legislative Grant from Electoral Division Society	110 00		
" Municipal Grant			
Cr.			259 15
By balance due the Treasurer, as per last Annual Report		8 36	
" Prizes for Horses, \$27; Cattle, \$32.25; Sheep, \$18.25;			
Pigs, \$9; Poultry, \$2.75	89 25		
100			

By Prizes for Grains and Seeds, \$16.75; Roots and other hood crops, \$11.75; Dairy products, \$16; Fruits, \$2;	\$ cts.	\$ cts.	\$ cts.
Vegetables, \$7; Agricultural Implements, \$19; General Manufactures, \$24.25; Ladies' Work, \$7.05	114 80		
Less as per Rules	$204 \ 05 \ 25 \ 35$		
		$178 70 \\ 25 75$	
" Paid for Agricultural or Horticultural Publications" " Printing and Advertising		24 65 45 50	
"Working Expenses			282 96
Balance due Treasurer			23 81

Note.—The leading articles of the Exhibition, such as Grains and Live-Stock, were, both in number and quality, considerably above an average.

# Arnprior Horticultural Society.

# [In connection with Union Agricultural and Industrial Association.]

Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Donation of Ontario Government  "Stands and Refreshment Booths  "Proceeds of Note Discounted  "Miscellaneous	103 930	90 00 00 00 00	•	cts.	\$ 2,405	ets.
Cr. By balance due the Treasurer, as per last Annual Report "Prizes for Horses; \$198; Cattle, \$195; Sheep, \$38; Pigs, \$41; Poultry, \$46	<b>5</b> 18	00	159		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
" Prizes for previous years paid " Exhibition Buildings " Paid on purchase of Exhibition Grounds " Printing and Advertising " Working Expenses, including services of Secretary, Treasurer and Assistants			1,09- 23:	5 00 0 00 1 37 2 33 3 77	3,65	2 93
Balance due Treasurer					1,24	9 87

# RUSSELL.

Dr.	\$	cts.	8	cts.	#	cts
To Members' subscriptions	46	0.0				
To Members subscriptions	700	00				
" Legislative Grant	.00	00				

To Miscellaneous	\$	cts.	\$	cts.	\$ c	ets.
Cr.					752	00
By balance due the Treasurer, as per last Annual Report "Portions of Legislative Grant paid to Township Societies "Live Stock			$\frac{2}{420}$ $190$			
"Working Expenses, including services of Secretary and			100			
Treasurer			71	0.0		
					683	34
Balance in hand					68	66
Clarence.						
Dr. To balance in hand, as per last Annual Report "Members' Subscriptions	- 17		\$	cts.	\$ 6	
Cr By Prizes for Horses, \$55.78; Cattle, \$55.74; Sheep, \$25.60; Pigs, \$3.10; Poultry, 5.35	145	<b>57</b>			381	94
crops, \$17.45; Dairy Products, \$30.45; Growing Crops, \$68.62; Fruits, \$5.10; Vegetables, \$26.20; General Manufactures \$17.38; Ladies' Work, \$8.62	177	82	323	39		
" Working Expenses			34	62	358	01
Balance in hand					23	_
Cumberland.						
Dr.	s	cts.	S	cts.	S c	ts.
To Members' Subscriptions	104		47	0.00		
Cr. By Prizes for Horses, \$30; Cattle, \$25; Sheep, \$15; Pigs,					166 (	00
"Prizes for Grains and Seeds, \$40; Roots, and other hoed	82	00				
erops, \$16; Dairy products, \$20.50	76	50	150	50		
" Working Expenses			158 7	50		
					166 (	00
Gloucester.						
Dr. To balance in hand as per last Annual Report  "Members' Subscriptions  "Legislative Grant from Electoral Division Society  "Interest on Sale of Society's Ground  "Rent of New Show Ground	12 68 54	$\begin{array}{c} 22 \\ 00 \\ 00 \end{array}$	\$ (	ets.	\$ c	ts.
		00			255 (	61
" Prizes paid for Fall Show " Printing and Advertising. " Working Expenses				15 00 00		
			_		242	15
Balance in hand					13 4	46

$\it Osgoode.$				
Dr. To Members' Subscriptions	\$ ets. 83 00 50 94	\$ cts.	\$.	cts.
Cr. By balance due the Treasurer, as per last Annual Report " Keep of Live Stock		21 76 89 50	133	94
Keep of Mve Stock			111	26
Balance in hand,		_	22	68
Russell.				
Dr. To Members' Subscriptions " Legislative Grant from Electoral Division Society " Sale of Stock	\$ cts. 171 00 101 00 21 75	\$ cts.	\$	ets.
Cr. By balance due the Treasurer, as per last Annual Report "Prizes for Horses, \$46; Cattle, \$45.80; Sheep, \$19.20;		19 23	293	75
Pigs, \$3; Poultry, \$2.70  "Prizes for Grains and Seeds \$21.75; Dairy products, \$8.40; Fruits, \$10; Plants and Flowers, \$8; Vegetables, \$24.05; Agricultural Implements, \$14; General	116 70			
Manufactures, \$35.60; Miscellaneous, \$5.50	127 30	244 00		
' Printing and Advertising " Working Expenses		8 50 23 15	294	88
Balance due Treasurer			1	13

Note.—The Exhibition in some respects was above an average, the quality, taken as a whole, being superior.

# SIMC E, EAST.

Dr.	e ato	0	cts. S	ot.
To Members' Subscriptions	166 00	•₽	cts. 🤿	ets.
" Admission Fees to Exhibition	46 00			
" Legislative Grant	700 00			
" Union Agricultural Society Fund merged for Exhibition	75 53			
" Donations for Special Prizes	27 00			
Cr. Maria Paris			1,01	4 53
By Prizes for Horses, \$71; Cattle, \$110; Sheep, \$56; Pigs,			,	
\$38; Poultry, \$25	300 00			
" Prizes for Grains and Seeds, \$45; Roots and other				
hoed crops, \$30; Dairy Products, \$20; Fruits, \$15;				
Vegetables, \$20; Agricultural Implements, \$15;				
General Manufactures, \$10; Fine Arts, \$2.91:				
Ladies' Work, \$15	172 91			
		472		
Portions of Legislative Grant paid to Township Societies		275		
"Exhibition Buildings and Grounds			65	
" Printing and Advertising		35	00	
141				

By Working Expenses, including services of Secretary, and Treasurer		\$ ets 78 63	77
Balance in hand			73 34
Medonte.			45
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions "Legislative Grant from Electoral Division Society	\$ cts. 63 27 76 50 136 00	. \$ cts.	\$ cts.
Cr. By Prizes for Horses, \$21 50; Cattle, \$27; Sheep, 16.75;			275 77
Pigs, \$8.50  "Prizes for Grains and Seeds, \$13.50; Roots and other hoed crops, \$3.50; Dairy products, \$6.50; Vegetables, \$3; Agricultural Implements, \$7.75; General Manufactures, \$3; Fine Arts, \$10; Ladies' Work, \$7.75	73 75 55 00		
		128 75	
" Exhibition Buildings " Printing and advertising, " Working Expenses.		51 35 11 95 15 90	
			207 95
Balance in hand			67 82
Dr. To balance in hand, as per last Annual Report " Members' Subscriptions " Legislative Grant from Electoral Division Society " Miscellaneous Cr.	\$ cts. 37 40 98 50 138 62 45 75	\$ ets.	\$ ets.
By Prizes for Horses, \$26.50; Cattle, \$33.50; Sheep, \$1650; Pigs, \$8.25; Poultry, \$8	92 <b>75</b> 81 50	174 25	
" Miscellaneous" " Paid for Agricultural or Horticultural Publications " Printing and Advertising Working Expenses		35 00 4 50 14 25 22 45	250 45
Balance in hand			69 82
SIMCOE, WEST.	\$ cts.	\$ cts.	\$ cts.
To Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant.  "Special Prizes.  "Miscellaneous.  Ur.  By Prizes for Horses. \$217; Cattle, \$142; Sheep, \$129;	165 74 212 00 700 00 197 50 53 25		,328 49
Pigs, \$30; Poultry, \$30142	548 90		

By Prizes for Grains and Seeds, \$48.50; Roots and other hoed Crops, \$21.50; Dairy products, \$63; Fruits, \$35; Plants and Flowers, \$4.50; Vegetables, \$30; Agricultural Implements, \$68; Fine Arts, \$6; Ladies' Work, \$76	\$ 352	\$	ets.	\$	cts.
Unpaid  " Portions of Legislative Grant paid to Township Societies."  Exhibition Buildings	900 66	 420	50 0 00 2 90 3 00		
"Working Expenses, including services of Secretary, and Treasurer			33	,41	6 73
Balance due Treasurer				8	8 24

The Directors have much pleasure in again meeting the members of the Society, and in

giving an account of its transactions during the past year.

With regard to the Annual Show which was held on the 5th and 6th of October, your Directors have nothing of particular interest to report. The weather was most unfavourable, especially on the first day, when it rained in torrents, preventing many articles from being brought in for exhibition, as well as seriously affecting the attendance of visitors. On the second day the weather was better, but the rain in the forenoon prevented many from attending.

The show of cattle, with the exception of grades of sheep and of pigs, was much as usual both as regards the number and quality of the articles exhibited. Grades, however, were very inferior, the number of cows brought to the show not being sufficient to take the prizes offered. The quality of the sheep exhibited was very good, and the number would have surpassed that of any previous year, had the usual number of entries been made from the South Riding. Among the horses there were some very good colts and fillies, especially in the thorough-bred and carriage classes; but the display of team horses, of carriage horses in harness, and saddle horses, was, considering the handsome prizes offered, very inferior.

Some excellent grain was shown, but the number of entries was few. The show of field roots and garden produce was good, considering the season, but owing to the early frost the show of flowers was a failure; and your Directors would recommend that as there is a Horticultural Society existing in connection with this Society, the prizes offered for flowers be dropped from the list. The display of fruits was the best part of the Exhibition, and the Society is to be congratulated upon having done so much towards bringing into notice the capacity of this county for producing fruit, especially apples of the hardiest kinds, of such fine quality and in great abundance.

Domestic manufactures and ladies' work were not fairly represented, but most of the articles shown under the former head were in part factory made, and a better classification is

required in this department.

Your Directors are, they regret to say, obliged to have again to lament that the income of the society has not kept paee with the expenditure which your Directors sanctioned, relying on receiving a large measure of public support, than, as appeared by the result, they were justified in anticipating. They knew that in offering a very great addition to the amount awarded in former years for prizes, they were running a risk, and that they might find that their anticipation of public support would not be realized. The depression existing in all branches of trade and industry during the past year, and which they need not say, still exists, has been felt very severely by this society, and has proved that hitherto your Directors have been speculating too much on the chances of increased membership and larger returns of entrance money; and that for some time to come, a less ambitious policy must take the place of that pursued for the last three or four years. Your Directors, in coming to this conclusion, do so with extreme regret. It seems, and undoubtedly it is, taking a step backward and in the

wrong direction, and they would in all seriousness say, that they feel their efforts, and the efforts of their predecessors for the past three or four years, to make the North Riding—now the West Riding—Exhibition, second to no other County Show in the Province, have not met that encouragement at the hands of the farming community which they ought to have received. The Society last year numbered only 165 members, only 26 more than it did five years ago; a very paltry representation for the town of Barrie and the adjoining townships, not to speak of the rest of the Riding.

* *	*	ownships,
\$ cts. 41 91 695 25 166 16 140 00 90 00  384 50		\$ ets.
	795 00  71 80 80 75  227 60	,175 15
all Show emiums, a	was perland the qu	41 83 haps the ality, as
\$ ets. 91 25 16 70 63 80 50 00 3 00	\$ ets.	
60 65	0 48	224 75
	* * * * * * * * * * * * * * * * * * *	\$ cts. \$ cts 41 91 695 25 166 16 140 00 90 00 1, 384 50

62 00

 $122 65 \\
11 75$ 

18 35

 $\frac{153}{71}$   $\frac{23}{52}$ 

Work, \$17; Ploughing Match, \$14.....

" Printing and Advertising.....

" Working Expenses, including service of Secretary ......

Vespra.	_		
Dr. To balance in hand, as per last Annual Report	\$ cts.	\$ cts.	\$ cts.
"Members' Subscriptions	120 00		
" Legislative Grant from Electoral Division Society	112 40		
" Miscellaneous	5 00		
Cr. By Prizes for Horses, \$26; Cattle, \$35; Sheep, \$20; Pigs, \$8	89 00		352 85
"Prizes for Grains and Seeds, \$12; Dairy products, \$7; Growing Crops, \$15; Fruits, \$3; Plants and Flowers,			
\$1; Vegetables, \$10; Ladies' Work, \$11 75	59 75		
**	148 75		
Unpaid	42 00	100 75	
" Prizes for previous years paid		106 75 78 50	
" Exhibition Buildings		6 00	
" Prizes for Agricultural or Horticultural Publications		29 24	
" Working Expenses		12 00	09.) 40
			232 49
Balance in hand			120 36
Burrie Horticultural Society.			
Dr.	\$ ets.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	43 10		
" Members' Subscriptions " Admission Fees to Exhibition	$   \begin{array}{ccccccccccccccccccccccccccccccccccc$		
" Legislative Grant from Electoral Division Society	103 80		
" Miscellaneous	21 95		
Cr. By Prizes for Fruits, \$11.50; Plants and Flowers, \$104.50;			290 90
Vegetables, 36.50		152 50	
" Exhibition Buildings " Printing and Advertising		15 00	
"Working Expenses		$ \begin{array}{cccc} 24 & 10 \\ 21 & 95 \end{array} $	
3 1			213 55
Balance in hand			77 35
			11 99
8			
SIMCOE, SOUTH.	^		
Dr. To Balance in hand, as per last Annual Report	\$ cts.	\$ cts.	\$ cts.
"Members' Subscriptions	$     \begin{array}{ccc}       187 & 26 \\       513 & 25     \end{array} $		
" Admission Fees to Exhibition	331 00		
"Legislative Grant	700 00		
Cr. By Prizes for Horses, \$198; Cattle, \$105; Sheep, \$130; Pigs,		I	,731 51
\$75; Poultry, \$38	<b>54</b> 6 00		
" Prizes for Grains and Seeds, \$56; Roots and other hoed	020 00		
crops, \$60; Dairy products, \$75; Fruits, \$15; Vege-			
tables, \$15; Agricultural Implements, \$70; Fine Arts, \$40; Ladies' Work, \$84.66; Manufactures, \$65	480 06		
		,026 06	
" Prizes for previous years paid		32 00	
" Portions of Legislative Grant paid to Township Societies		369 80	
10 145			

By Exhibition Buildings " Printing and Advertising, \$71; Musical Bands, \$30 " Working Expenses	\$	\$ ets 70 00 101 00 61 00		
Balance in hand			7	1 65

In presenting you with our annual report (the eighteenth annual report of your Society), your Directors beg leave to congratulate you on its progressive and healthy state; at no time since its first formation have the endeavours of your Society met with greater success. During the past year your Society has held two Exhibitions. The Spring Exhibition was held in the Village of Bond Head, and the quality of stock and the numbers attending it, far surpassed any Agricultural Show ever held in this county.

The Fall Exhibition was held on the 8th and 9th days of October last, in your Society's Park, in the Village of Cookstown, and all who attended it, must have been pleased to see the marked improvement visible in all its departments, to any show ever held hitherto in this county, and we might add—not surpassed by any single county show in the Province of

Ontario.

The number of entries made was far in excess of any previous year. Your Directors might take up every class, and enlarge upon the improvements of each, to an extent that would swell this report to undue proportions, but will content themselves by congratulating you on the rapid strides your Society is making to place herself at the head of all Electoral District Agricultural Societies in the Province of Ontario—and sincerely hope that you will by your influence and liberality hasten the period when your fair Electoral District may reach that enviable position—a position, the richness of her soil, and the industry and intelligence of her sons and fair daughters, justly entitle her to.

$\it Essa.$			
Dr.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand, as per last Annual Report	16 87		
"Members' Subscriptions	115 00		
"Legislative Grant from Electoral Division Society	8 13		
" Municipal Grant	69 00		209 00
By Prizes for Horses, \$20; Cattle, \$21; Sheep, \$15; Pigs, \$10;	66 00		200 00
" Prizes for Grains & Seeds, \$13.50; Roots and other hoed	00 00		
crops, \$16.50; Dairy products, \$5; Fruit, \$4; Agri-			
cultural Implements, \$30; Ladies' Work, \$20	89 00		
		<b>15</b> 5 00	
" Exhibition Buildings		4 00	
" Printing and Advertising		$\begin{array}{cccc} & 6 & 50 \\ & 19 & 00 \end{array}$	
" Working Expenses		19 00	184 50
			104 00
Balance in hand,			24 50
Gwillimbury, West.			
Dr.	\$ cts.	\$ ets.	\$ cts.
To balance in hand, as per last Annual Report	70 68		"
" Members' Subscriptions	369 50		
"Admission Fees to Exhibition	212 24		
" Legislative Grant from Electoral Division Society	140 00		
" Proceeds of Excursion Miscellaneous	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
TIEDOCHALLOUGH	10 20		895 62
			000 02

Or.  By Prizes for Horses, \$152; Cattle, \$62; Sheep, \$58; Pigs, \$23; Poultry, \$13	\$ ets. 308 00 301 50	\$ ets.  609 50 50 100 00 35 60 81 16	\$ ets.  826 16  69 46
Innisfil.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Miscellaneous	\$ cts. 2 20 102 00 8 50 61 80 3 00	\$ ets.	\$ cts.
Cr. By Prizes for Horses, \$15; Cattle, \$13; Sheep, \$17; Pigs, \$6; Poultry, \$3  "Prizes for Grains and Seeds, \$15; Roots and other hoed crops, \$15; Dairy products, \$9.50; Ladies' Work, \$14	<b>54</b> 00 53 50	107 50	177 50
" Exhibition Buildings " Printing and Advertising " Working Expenses.		2 00 7 50 19 24	136 24
Balance in hand			41 26
Tossorontio.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  Cr.	\$ ets. 10 81 165 00 48 33 99 00	\$ ots-	\$ cts.
By Prizes for Horses, \$38.25; Cattle, \$21.25; Sheep, \$12.50; Pigs, \$8.75; Poultry, \$4  "Prizes for Grains and Seeds, \$21.50; Roots and other hoed crops, \$17.25; Dairy Products, \$11; Fruits, \$14; Vegetables, \$9; Agricultural Implements, \$36.25; Fine	84 75		
Arts, \$5; Ladies' Work, \$28.50	142 50	227 25 20 00 34 96	282 21
Balance in hand			40 93

# STORMONT.

	STORMONT.			
" " " Cr.	balance in hand, as per last Annual Report  Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant  Miscellaneous	\$ ets. 16 69 112 00 39 05 700 00 11 50 	\$ cts.	\$ ets. 879 24
66	Prizes for Grain and Seeds, \$37.50; Dairy Products, \$24.50; Fruits, \$4.50; Vegetables, \$19.25; Agricultural Implements, \$56; General Manufactures, \$37.25; Ladies' Work, \$21.75	200 75	464 00 235 00	
66	Exhibition Grounds Working Expenses, including services of Secretary and Treasurer		65 50 110 33	874 83
	Balance in hand			4 41
	Finch.			
	Members' Subscriptions.  Legislative Grant from Electoral Division Society	\$ cts. 78 00 95 00	\$. cts.	\$ cts.
Cr. By	balance due the Treasurer as per last Annual Report Prizes for Horses, \$21.67; Cattle, \$22.67; Sheep, \$9.68; Pigs, \$5.33 Prizes for Grains and Seeds, \$10.68; Roots and other hoed crops, \$7.83; Dairy Products, \$5.67; Agricultural Im-	59 35	21 54	173 00
66	plements, \$18.17; General Manufactures, \$12.83; Ladies' Work, \$4.47	59 65	119 00 4 00	
"	Working Expenses		23 43	105 05
	Balance in hand			$\frac{167 \ 97}{5 \ 03}$
	Osnabruck.			
66	balance in hand, as per last Annual Report  Members' Subscriptions  Legislative Grant from Electoral Division Society	f\$ cts. 10 82 151 00 140 00	\$ cts.	\$ cts.
	Prizes for Horses, \$37; Cattle, \$48.50; Sheep, \$17; Pigs, \$15.50; Poultry, \$6	124 00		301 82
	Work, \$19.50	113 00	237 00	
	148			

By Exhibition Buildings	\$	cts	6	cts, 00 50		ets.
Balance in hand					28	32
TORONTO.	45			,	/h	
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "I egislative Grant, \$550; Municipal Grant, \$3,000.  Sale of Sundries.  "Booth sites.  "Donation by Ontario Poultry Association  "Sale of feed for Stock at Exhibition.  "Rent for horse stalls  Cr.  By Prizes for Horses, \$1,065; Cattle, \$1,137; Sheep, \$733  Pigs, \$337; Poultry, \$291  "Prizes for Grains and Seeds, \$172; Roots and other hoed crops, \$109.50; Dairy products, \$162; Fruits, \$369; Plants and Flowers, \$207.75; Vegetables, \$107.50; Agricultural Implements, \$375; General Manufactures, \$784.50; Fine Arts, \$518; Ladies' Work, \$119.50; Natural History, \$34	2,094 1,872 .3,550 21 300 50 88 111 ; 3,563	00 85 00 60 00 00 25 00	Ch.	ets.	\$,219	ets. 44
" Cancelled by Diplomas taken.       327 00         Crops       50 00         Unpaid       163 50		50	= 001	ຄະ		
" Exhibition Buildings and Grounds, for rent, lighting, fitting		- (	5,981	20		
up, etc  "Paid for Agricultural or Horticultural Publications  "Printing and Advertising, \$650.05; Musical Bands, \$60  "Cost of Diplomas, framing, &c  "Judges' expenses, refreshments, fodder, &c  "Fire Works, \$58.77; Postage, freight, &c., \$86.32  "Working Expenses, including services of Secretary, Treasurer, and Assistants		1	409 80 710 170 504 145	95 05 50 98 09	076	35
					,010	
Balance in hand					143	09

In compliance with the statute relating thereto, your Directors submit the following

report of their proceedings for the past year:—

Instead of the usual spring competitive prize exhibition, your Directors held a Floral Show in the Music Hall, on the Queen's Birthday and the day following. The hall was tastefully arranged and decorated, the latter under the immediate supervision of Mr. John Paxton, a member of the board. The contributions of plants and flowers were principally from the Government House (Mr. T. J. Harris, gardener), the Hon. D. L. Macpherson (Mr.

Geo. Vair, gardener), the Normal and Model Schools (Mr. James Forsyth, gardener), and F. Richardson, Esq., (Mr. Alonzo Watkins, gardener). The display of plants, flowers, and bouquets, interspersed with specimens of statuary and modelling from Mr. V. Casci's studio, was pronounced to be superior to any previous Floral Show in the city, both as to the perfection of the plants and their excellent arrangement.

Band music was provided during the afternoon of the first day, under the leadership of Mr. F. Toulmin, and during the evening of each day the company was favoured with vocal and instrumental music by a number of lady and gentleman amateurs, under the conductorship of Mr. H. G. Collins. The show was a complete success, except that outside the membership of the Society, the number of visitors was much smaller than your Directors had

a right to expect.

In view of the Spring Show, and the heavy work anticipated for a general exhibition proposed to be held during the Fall, the usual Summer Competitive Exhibition was not held.

As the Provincial exhibition was to be held in the City of Ottawa—a place so far distant from Toronto as not to be available for any large number of exhibitors from this city and neighbourhood, your Directors determined to hold a Fall Exhibition in this city, at the Crystal Palace and Crounds, during the week next succeeding the Provincial Exhibition, of all the classes of stock and other specimens, usually shown at the Provincial Exhibition. Based upon the expectation of liberal grants from the City and County Councils, and from individual citizens, your Directors, as early as possible, issued a prize list of about \$10,000. The City Council made a grant of \$3,000, but the County Council made no grant whatever. The actual donations and subscriptions received, and payments made, will be found annexed to this report.

Your Directors were ably assisted in their respective departments, by committees of the Ontario Poultry Association, the Ontario Manufacturers' Association, and the Artists' Society

of Ontario; to all of whom the thanks of your Directors are hereby recorded.

The Exhibition was held on the 28th, 29th, and 30th of September and the 1st of October. The number of entries were; horses, 150; cattle, 245; sheep, 272; pigs, 146; poultry (pairs of), 262; grains and seeds, 100; roots, 148; fruits, 719; plants and flowers, 220; garden vegetables, 221; dairy products and food manufactures, 79; farm implements and tools, 194; general manufactures, 513; fine arts, 342; ladies' work, 203; natural history, 10; in all 3,824 entries. The amount offered in prizes was about \$10,000. The amount awarded was \$6,521.75, of which awards \$6,144.74 was payable in money, \$327 was represented by a beautifully designed and copyrighted diploma, taken instead of money by winners of first prizes, the principal diplomas being presented in neat frames; and \$50 was represented by five silver cups, placed at the disposal of your Board by the members of the Ontario Poultry Association, in addition to the Society's \$50 donation, for first prizes in the poultry department.

To particularize the animals and articles shown, would take take too much time and occupy too much space in this report, especially as they were so fully noticed at the time of the show by the city daily papers. Sufficient it is to say here, that in many classes the entries were not so numerous as they should have been, considering the prizes offered, the facilities provided for exhibiting, and the large number of manufacturers and producers in this city and neighbourhood, whose specimens, had they been shown, would have added so much to the interest and usefulness of the exposition. The quality, however, of the live stock, the products of the soil, the manufactured goods, and the fine art productions, as a whole, has not

been surpassed at any previous exhibition.

At the request of W. H. Fraser, Esq., the Secretary, sample bags of the prize grains and seeds have been furnished the Ontario Advisory Board, wherefrom to make selections to represent this section of Ontario at the United States Centennial Exhibition.

The Superintendent of the Floral and Agricultural Hall Departments, reports as

follows :---

"Notwithstanding the backward season, this department was pre-eminently successful; the surest test of its success were the high encomiums the general public expressed on its merits. The most attractive part of the display was the fruit and flowers.

Fruit was well and worthily represented in every section. The apples from Grimsby, and the immense collection of Messrs. Leslie & Son, deserves special mention. Pears were numerous and excellent. Hot-house grapes were all that could be desired, both in quantity

and quality; those shown by Mr. John Gray, of Brockton, gave evidence of superior cultivation, and well deserved the first prize awarded them. Two beautiful bunches of Museat Hamburg, shown by Mr. Scovell, were a credit to that gentleman, in every respect. Out-door

grapes were fairly represented, though not so ripe as could be desired.

Plants were represented by the splendid collections of Messrs. J. & J. Pape, Harris, Forsyth, and Vair, who vied with each other in a spirit of friendly rivalry for the palm of victory. The splendid effect produced by their collections, which filled the centre tables the whole length of the building, was simply magnificent—the fine foliage and flowering plants contrasting so well with the festoons of evergreen decorations overhead. Cut flowers and floral decorations were much better than might have been expected, considering the lateness of the season. Bouquets were numerous, and the lively interest, and even enthusiasm, manifested by a bevy of the fair sex, who clustered round them, gave abundant evidence of their superiority. The centrepiece of fruit and flowers, shown by Mr. Hirschfelder, was a model of taste, beauty, and design.

Vegetables made a good display, and the competition was keenly contested.

Grain was fairly represented, and the quality very superior. Some of the first prize grain, previously shown at Ottawa, was entered here, but in some instances only to be beat by grain grown in our own locality.

Dairy products were in strong force. Butter was of superior excellence. Scarboro'

may well be proud of her honours in this section. Cheese was decidedly very fine.

Field roots were numerous and good. Some extraordinary mangold wurtzels were shown by Mr. Burgess, and the potatoes were calculated to make the heart of the most fastidious Irishman rejoice.

Pickels and sauces were shown in great variety by Messrs. Moore & Richardson, and

Gray & Co., respectfully.

Cigars of superior quality were shown by William Dobson.

Pottery, in connection with horticulture, was well represented by Wm. Brown and John

Davis. The former showed a very extensive assortment.

Whether or not an exhibition similar to the one last held shall be held next Fall, will be a question for the Society and the new Board of Directors to decide. If such a course should be determined upon, preparations cannot be commenced too soon, either in respect to the prize list or the present in the present of the prize list or the present of the prize list or the present of the prize list or the prize l

prize list or the necessary financial arrangements.

Annexed hereto, in accordance with the 39th section of the statute, is a list of the names of the members of the Society, and the amounts paid by each; the amounts awarded in prizes to the several classes of live stock, and agriculture and other productions; and also the Treasurer's audited statement of receipts and expenditures for the year; the latter showing the total receipts to have been \$9,219.44; the expenditure, \$9,076.35; the balance in hand, \$143.09. Against this balance in hand, and about \$30 of unpaid subscriptions—together \$192.09, there are prizes uncalled for and unpaid amounting to \$183.50.

All of which is respectfully submitted.

PHILIP ARMSTRONG,

President.

W. EDWARDS,

Secretary-Treasurer.

Toronto, January 19th, 1876.

# VICTORIA, NORTH.

Dr.	\$ ets.	\$ ets. \$ et	s.
To balance in hand, as per last Annual Report	358 16		
" Members' Subscriptions	63 00		
"Admission Fees to Exhibition	40 00		
" Legislative Grant, \$700; Municipal Grant, \$200	900 00		
" Miscellaneous	5 35		
Cr.		1,366 5	1
By Prizes for Horses, \$55.50; Cattle, \$47.25; Sheep, \$23;		-,000	
Pigs, \$15.50; Poultry, \$3	144 25		
0,"			

	\$	cts.	\$	cts.	\$	cts.
By Prizes for Grains and Seeds, \$30.50; Roots and other					,,	
hoed crops, \$13.75; Dairy products, \$10.00; Fruits,					477	
\$4.25; Plants and Flowers, \$0.75; Vegetables, \$1.75;						
Agricultural Implements, \$6; General Manufactures,						
\$34.75; Fine Arts, \$2.50; Ladies' Work, \$10.00;						
Ploughing Match, \$30.00	110	00				
				25		
" Prizes for previous years paid				60		
" Portions of Legislative Grant paid to Township Societies				00		
" Paid on purchase of Exhibition Grounds				00		
" Printing and Advertising, \$22.60; Musical Bands, \$20			~ -	60		
" Working Expenses				50		
				<del></del> 1	1,329	95
Balance in hand					36	3 56

Your Directors in submitting their eighth annual report, beg leave to state that the crops of the past year, although not so abundant as those of the previous year, were nevertheless sufficient to repay the labours of the husbandman and crown the year with plenty. But although this is true in respect to the agricultural population of this country, we nevertheless find that in our large cities and manufacturing towns many families are reduced to actual want, and supported by public charity; yet this is not because of the earth not yielding her increase, but because of the stringency in the money market, and the great depression of trade which has fallen more heavily upon the manufacturing institutions of the country; still their blighting effects are not confined to these, but are felt more or less in every other department of industry throughout the length and breadth of the land.

According to the reports of roots and cereals received from the different portions of the Riding, the following is the estimated yield per acre during the past year; Fall wheat, 20 bushels; Spring wheat, 15 bushels; Oats, 30 bushels; Rye, 18 bushels; Barley, 25 bushels; Pease, 18 bushels; Hay about one ton; Potatoes, 130 bushels; and Turnips, 360 bushels.

Your Directors have much pleasure in drawing your attention to the large and respectable Exhibition Hall erected on the Society's lot during the past year at a cost of \$650, and

in which the last Fall Show of the Society was held.

The Fall Show, we regret to say, was less successful than on previous years, owing mainly, if not altogether, to the unusually wet season, and it so happened, unfortunately, that our show day was the wettest of the season; and taking this very disadvantageous circumstance into consideration, the show was fully as successful as could reasonably be expected.

And the Ploughing Match in connection with this and the Eldon Branch Society, which was held in Lorneville, we regret to say, was almost a total failure owing to circumstances over which your Directors had no control. Your Directors are, however, forced to the conclusion that sufficient interest is not taken in that very important and leading branch of agriculture to warrant the propriety of its encouragement in the same way in the future.

The gratitude of this Society is due to the members of the County Council for their continued liberality in their contributions to its funds. We have to acknowledge the further sum of \$200 during the past year; and as the Society is still over \$200 in arrears for the Exhibition Hall, your Directors hope and trust that a continuance of the same liberality will be extended towards us during the present year as has been so kindly done in the past.

# Bexley and Carden.

Dr.	\$ cts	\$ cts.	\$ ct.
To balance in hand, as per last Annual Report	39 03		
" Members' Subscriptions	81 00		•
" Legislative Grant from Electoral Division Society	71 10		
•			191 13

Cr.		\$ cts.	\$ cts.	\$ cts.
By	Prizes for Horses, \$12; Cattle, \$22; Sheep, \$10; Pigs,	56 00		
64	\$9.75; Poultry, \$2.25.  Prizes for Grains and Seeds, \$19; Roots and other hoed	30 00		
	crops, \$9.75; Dairy products, \$5.50; Fruits, \$4; Vegetables, 1.75; General Manufactures, \$8; Fine Arts, \$1	49 00		
		105 00		
	Unpaid	3 50	161 50	
66	Prizes for previous years paid		3 00	
66	Working Expenses		21 74	126 24
				C1 90
	Balance in hand			64 89
	Eldon.	0 -1.	Ø ata	e ata
Dr.	balance in hand, as per last Annual Report	\$ cts. 162 12	\$ cts.	\$ cts
66	Members' Subscriptions	92 00		
"	Legislative Grant from Electoral Division Society Municipal Grant	$\frac{93}{74} \frac{15}{70}$		
-Cr.				421 97
	prizes for Horses, \$45; Cattle, \$27; Sheep, \$14; Pigs, \$7; Poultry, \$4	97 00		
"	Prizes for Grains and Seeds, \$7; Roots and other hoed crops, \$4; Dairy products, \$9; Fruits, \$2; Plants			
	and Flowers, \$0.70; Vegetables, \$2; Agricultural			
	Implements, \$12.50; General Manufactures, \$10; Ladies' Work \$8.35; Ploughing Match, \$15	70 55		
			167 55	
66	Exhibition Buildings and Grounds		102 00 51 50	
66	" for Conveyancing		14 70	
44	Printing and Advertising		$\frac{14}{32} \frac{50}{80}$	
	1, 0,11128			383 05
	Balance in hand			38 92
-	Fenelon.	\$ cts.	\$ cts.	\$ cts.
Di To	c. b balance in hand, as per last Annual Report	42 06	÷ 005.	φ 0ι3:
66	Members' Subscriptions	$73 00 \\ 22 95$		
66	Admission Fees to Exhibition	59 40		
66	Miscellaneous	1 00		198 41
Cr By	Prizes for Horses, \$18.50; Cattle, \$15.50; Sheep, \$8.50;	10 50		200 ==
64	Pigs, \$4.00; Poultry, \$2 Prizes for Grains and Seeds, \$9.65; Roots and other hoed	48 50		
	crops, \$1.50; Dairy products, \$6,25; Fruits, \$4.45;			
•	Vegetables, \$8.25; General Manufactures, \$16.35; Ladies' Work, \$1.20	47 65		
		06 15		
	Unpaid	96 15 18 20		
	1		77 95	

By Prizes for previous years paid  "By Exhibition Buildings  "Printing and Advertising  "Working Expenses  Balance in hand	S ets.	\$ cts. 9 75 4 00 18 70 16 75	\$ ets. $\frac{127 \ 15}{71 \ 26}$
Somerville.			
Dr.	\$ cts.	\$ cts.	\$ ets.
To Members' Subscriptions	88 00 114 10		202 10
By Prizes for Horses, \$14.75; Cattle, \$9.25; Sheep, \$12.10; Pigs, \$4; Poultry, \$2	42 10		
General Manufactures, \$5; Ladies' Work, \$6.59; For Show at Kinmount, \$60.50	108 25	150 35	
" Printing and Advertising " Working Expenses		6 50 6 80	163 65
Balance in hand			38 45
VICTORIA, SOUTH.			
Dr. To Members' Subscriptions  " Admission Fees to Exhibition  " Legislative Grant, \$700; Municipal Grant, \$200  " Miscellaneous	\$ cts. 198 00 212 02 900 00 68 75		\$ cts.
Cr.			1,378 77
By balance due the Treasurer, as per last Annual Report By Prizes for Horses, \$63.50; Cattle, \$30; Sheep, \$52; Pigs, \$8.50; Poultry, \$3 " Prizes for Grains and Seeds, \$42.50; Roots and other hoed crops, \$12.75; Dairy products, \$23.75; Fruits, \$11; Vegetables, \$13.50; Agricultural Implements, \$8;	157 00	17 50	
General Manufactures, \$4.75; Fine Arts, \$5; Ladics' Work, \$38.25; Bands \$25	184 50		
By Prizes for previous years paid  "Portions of Legislative Grant paid to Township Societies  "Exhibition Buildings  "Exhibition at Peterboro'  "Printing and Advertising  "Working Expenses, including services of Secretary, and Treasurer		341 50 19 50 420 00 4 25 100 00 48 95 60 34	
			1,012 04
Balance in hand			366 73

A. 1877

## REPORT.

The Directors of the South Victoria Agricultural Society beg to report that as compared with the position of the Society a year ago, the prospects are very encouraging. The danger of unhappy litigation, which seemed possible, has been averted; the funds of the Society have assumed a more satisfactory basis, and confidence in the management, which had been considerably shaken, has been once more restored. At its June session, the County Council very liberally granted the sum of \$200 to assist the Society. The number of members who paid the annual subscription of one dollar was 165, and 24 others paid two dollars each to make entries at the fall show.

During the past year two shows were held in the town of Lindsay. The Spring Show was very successful, the animals exhibited being numerous, and of superior quality; the

interest shown was more than usual, and the sum of \$30 was taken at the door.

The Fall Show was not so well attended as on some former occasions, and in several of the classes there was a falling off in the number of articles exhibited. Two principal causes seem to have worked unfavourably on the occasion, one being the unpropitious weather, and the other the too great proximity of the Central Exhibition, which in some cases altogether prevented parties from exhibiting, or even attending our Show; or having spent much time in attending the one, were unwilling to lose another day or two in attending the other.

During the past year the first Central Exhibition for the counties of Peterborough, Victoria, Northumberland, and Durham, was held at the town of Peterborough, in the last week of September, and was a greater success than the most sanguine anticipated. Although at the time they were called upon to do so, the funds of the Society were very low, your Directors considered it their duty to contribute the sum of one hundred dollers, and to send two delegates to the Central Exhibition. The delegates selected were Messrs. Thorndike and Thompson. The President of the Midland Railway acted in a very liberal manner towards the delegates attending the preliminary meetings, as well as to the public attending the show.

The first Central Exhibition was a complete success, as regards the articles exhibited, the attendance of visitors, and the receipts—over a thousand dollars having been realized over

and above all expenditure.

Already arrangements are in progress for holding a Central Exhibition during the present year at Port Hope, and a request has been made that Delegates be appointed at this meeting to represent the Society at the Board of Directors. It is of the utmost consequence for the credit of this riding, for the interests of exhibitors, and for the welfare of the entire district, that a wise selection should be made.

According to the understanding which at present exists for alternate exhibitions, Lindsay will be entitled to its turn next year. Under these circumstances it behoves every inhabitant of the riding to exert himself, that our Show should not only equal that of other localities, but if possible exceed them in extent and quality. Our resources are at least equal to theirs; our land is not inferior; we have men of ability and enterprise as they have, and should the Exhibition fall below that of our predecessors, the fault will be our own.

During the past year communications have at different times been received from Mr. W. H. Fraser, Secretary of the Advisory Board, at Toronto, requesting members of this Society to contribute towards the Centennial Exhibition at Philadelphia. It is to be much regretted that, although much publicity has been given to these communications, no steps have been

taken to have the County of Victoria represented at the International Exhibition.

It is our painful duty, in conclusion, to record the removal by death of two of our former most active members, William Cottingham, Esq., who for several years occupied the position of President of this Society, and Gordon Drummond Brock, Esq., who held that office at the time of his decease. The ability and energy of both these gentlemen are too well known to all to need more than the statement, which will be acquiesced in by all, that the blank they have left will not soon be filled. May those who survive be equally anxious to work for the good of their country and the well being of society.

Emily.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	0 31		
" Members' Subscriptions	105 00		
" Admission Fees to Exhibition	35 00		
" Legislative Grant from Electoral Division Society	102 44		
Cr.			242 75
By Prizes for Horses, \$52; Cattle, \$20; Sheep, \$15; Pigs,			212 (1)
	97 00		
\$6; Poultry, \$4	91 00		
"Prizes for Grains and Seeds, \$15; Roots and other hoed			
crops, \$22; General Manufactures, \$25; Ladies'			
Work, \$17	79 00		
		176 00	
" Printing and Advertising		16 75	
"Working Expenses		29 - 71	
· .			222 46
Balance in hand			20 29

Note.—The Society held a Spring and a Fall Exhibition, which were attended by satisfactory results, though the number of members had considerably declined.

Mariposa.			
Dr.	\$ cts.	8 cts.	\$ cts
To Members' Subscriptions	74 00		
" Admission Fees to Exhibition	41 68		
" Legislative Grant from Electoral Division Society	61 46		
Cr.			177 14
By Prizes for Horses, \$18.75; Cattle, \$7.25; Sheep, \$22.50;			
Pigs, \$3.50; Poultry, \$2	54 00		
" Prizes for Grains and Seeds, \$3; Roots and other hoed			
crops, \$4.60; Fruits, \$1; General Manufactures,		1	
\$8.20; Ladies' Work, \$9.20; Discretionary, \$6.50	33 00		
•		87 00	
" Printing and Advertising		23 25	
" Working Expenses		17 58	
•			127 83
Balance in hand			49 31

Note.—The Fall Show was quite successful, and the new grounds were found quite suitable. Agriculture is progressing in the township, and increased attention is being paid to improved cultivation and the improvement of stock.

	Opps.					
Dr.		\$ cts.	\$ ct	s.	\$	cts.
To balance in hand, as per last Annua	l Report	24 44				
" Members' Subscriptions		142 00				
" Legislative Grant from Electoral	Division Society	140 00				
" Sale of Stock		122 00				
Cr.					428	44
By Live Stock			94 2	9		
" Keep of Bulls			40 6	0		
" Hire of Bulls			160 6	0		
" Working Expenses			20 3	5		
				_	315	84
Balance	in hand				112	60

The Directors of the Opps Agricultural Society beg to report to the members, that by care and economy they have succeeded in placing the Society on a sound financial basis. It is well known that by certain alterations in the Agricultural Act they have been debarred from holding a show at any place within a circuit of five miles of the town of Lindsay; as there is no other suitable place in the township, they were compelled to adopt one of three courses, either to spend their funds in the importation of superior stock, to unite with the County Society, or to allow the Opps Society to die out altogether. This alternative was forced upon them five years ago. After much careful deliberation the former course was decided upon, and accordingly two thorough bred bulls were purchased in the spring of 1871. Your Directors flatter themselves that their action has been productive of much good in the township by the manifest improvement effected in the quality of the stock owned in it. It has, however, been an expensive operation, and at the end of last season it was found necessary to sell all the bulls belonging to the Society, with the understanding, however, that their services were to be rented for the ensuing season. This plan has been carried out, and your Directors, relieved of the burden of the purchase and keep of animals for this year, and yet conferring on the members the same benefits as in previous years, are able to congratulate you on having a handsome balance in hand. They have, however, no hope of being able to pursue the same course for the incoming year, since the owners will not consent to retain the animals at the service of the Society. It remains, therefore, for you to consider what course it will be best to adopt. They fail to see the justice or utility of a law, which permits townships all around them to hold shows, whilst they are debarred therefrom simply because the county town is in their midst. It seems equivalent to saying all other townships may possess an Agricultural Society, but that township in which the county town is situated, shall not. They would therefore recommend that a memorial be sent to the Minister of Agriculture, petitioning for an alteration in the objectionable clause.

Your Directors have to express the deep sorrow they feel at the loss you have sustained in the death of your late President, Gordon Drummond Brock. He has been the life and soul of this Society ever since his first connection with it, some twelve or fourteen years ago. Always at his post and ever careful of your interests, they feel that his place will not be easily filled. At their last meeting they passed a resolution expressing their high sense of his worth, and sympathising with his widow and family.

Verulam.			
Dr. To balance in hand, as per last Annual Report	\$ cts. 59 85	\$ cts.	\$ cts.
" Members' Subscriptions	38 00		
" Legislative Grant from Electoral Division Society	37 08		
" Säle of Seeds " Plaster sold	90 96 9 72		
Cr.	9 12		235 61
By Special Prize for Thorough-bred Bull		5 00	200 01
" Paid on purchase of Seeds " for Plaster		88 27	
" Printing and Advertising		4 92 0 90	
" Working Expenses		2 26	
			101 35
Balance in hand			134 26
Lindsay Horticultural Society.			
Dr.	\$ cts.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report "Members' Subscriptions	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
" Admission Fees to Exhibition	12 65		
" Legislative Grant from Electoral Division Society	79 02		
			193 51

"Exhibition Buildings       6 53         "Printing and Advertising       14 55         "Working Expenses       16 55         —       98 63	Cr. By Prizes for Roots and other hoed crops. " " Fruits \$7.50; Plants and Flowers, \$30.50; Vegetables, \$14.50	\$ cts. 5 25 52 75 3 00	\$ ets.	\$ cts.
D 1 1 1 1	" Printing and Advertising		6 53 14 55 16 55	98 63  94 88

\* \* \* The Annual meeting of the Society was held at Weese's hotel, Lindsay, on the eighth day of January, when the report for the year 1874 was pre-

sented and approved of.

Owing to the funds of the Society being much reduced at the end of 1874, it was decided to hold only one Show in 1875, in place of two as in previous years, and which Show was held on the second of September. This Exhibition was in some respects inferior to many Fall Shows previously held, particularly in the Fruit and Flowers; the failure in the first being attributed to the cold backward spring, coupled with the dry season and the dire effects of the Codlin moth, the ravages of which are increasing every year: and the deficiency in the usual display of Plants and Flowers was in a grat measure the loss of a large number of these, occasioned by the destruction by fire of one of our market gardener's greenhouses, and the damage to those of another gardener by a severe hailstorm.

The display of roots and vegetables was fair, and the rustic shell, seed and cone work

excelled that of any preceding Show.

WATERLOO, NORTH.		
Dr.		\$ cts. \$ cts.
To balance in hand, as per last Annual Report.	387 33	
"Members' Subscriptions	225 00	
Admission Fees to Exhibition	182 81	
"Legislative Grant \$700, Municipal Grant \$220	920 00	
" Miscellaneous	15 00	1 790 34
Cr.  By Drives for Horses \$100. Cattle \$04. Sheep \$110. Dies		1,730 14
By Prizes for Horses, \$198; Cattle, \$94; Sheep, \$110; Pigs, \$38; Poultry, \$36	476 00	
" Prizes for Grains and Seeds, \$54; Roots and other hoed	410 00	
crops, \$37; Dairy products, \$26; Fruits, \$28; Plants		
& Flowers, \$5.50; Vegetables, \$17; Agricultural Im-		
plements, \$35; General Manufactures, \$46; Fine Arts,		
\$8; Ladies' Work, \$36.75	291 25	
, ,		767 25
" Portions of Legislative Grant paid to Township Societies		280 00
" Printing and Advertising		51 60
"Working Expenses, including services of Secretary, Trea-		
surer, and Assistants, and some items of last year		264 06
		1,362 91
D.1 ' 1 1		0.07
Balance in hand		367 23

Note.—Though the amount of stock and and grain on exhibition was not larger than some previous years, the quality generally was superior, indicating healthy progress.

A. 1877

Wellasley.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grants.  "Miscellaneous  Cr.  By Prizes for Horses, \$78; Cattle, \$60; Sheep, \$48.50;  Pigs, \$12; Poultry, \$4.  "Prizes for Grain & Seeds, \$25; Roots and other hoed crops,  \$9.50; Dairy products, \$19; Fruits, \$6; Vegetables,	\$ cts. 71 74 147 00 11 70 140 00 40 00 19 56 202 50	\$ cts.	\$ cts.
\$6.50; Agricultural Implements, \$15; General Manufactures, \$8; Fine Arts, \$1; Ladies' Work, \$20.25  "Printing and Advertising	110 25	312 75 6 00 63 55	382 30
Balance in hand			47 70
Databoo in hand			11 10
Woolwich.			
Dr To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Bonus  Cr.  By Prizes for Horses, \$59; Cattle, 71.50; Sheep \$40; Pigs, \$9	\$ ets. 28 46 178 00 17 00 140 00 20 00 100 00	\$ cts.	\$ cts.
"Prizes for Grains and Seeds, \$39.50; Roots and other hoed crops, \$23.25; Dairy products, \$18.50; Fruits, \$17.75; Vegetables, \$3.00; Agricultural Implements, \$18.50; General Manufactures, \$20.75; Ladies' Work, \$10.50  "Printing and Advertising	151 75	331 25 9 25	
"Working Expenses		66 13	406 63
Balance in hand			76 83
WATERLOO, SOUTH.			
Dr. To Members' Subscriptions	\$ cts. 211 00 284 00 950 00 106 00	\$ cts.	\$ cts.
Cr.  By balance due Treasurer as per last Annual Report  "Prizes for Horses, \$208; Cattle, \$142; Sheep, \$178; Pigs, \$30; Poultry, \$15.50	573 50	1 129 <b>75</b>	,551 00

By Prizes for Grains and Seeds, \$41.00; Roots and other hoed crops, \$21.75; Dairy products, \$72.50; Fruits, \$29.10; Plants and Flowers, \$4; Vegetables, \$17.25; Agricultural Implements, \$45; General Manufactures, \$19; Fine Arts, \$5; Ladies' Work, \$59.50	\$ ets	887 60 140 00 136 65 61 87 30 00 75 09  179 33 1,640 29
Balance due Treasurer		89 29
		00 20
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grant  "Special Prizes  Cr.  By Prizes for Horses, \$147; Cattle, \$82.50; Sheep, \$102; Pigs, \$20.50; Poultry, \$9  "Prizes for Grains and Seeds, \$33.25; Roots and other hoed crops, \$15; Dairy products, \$31.75; Fruits, \$29.25; Plants and Flowers, \$4.25; Vegetables, \$11; Agricultural Implements, \$79.50; General Manufactures, \$26.50; Fine Arts, \$2; Ladies' Work, \$31.25  "Exhibition Buildings  "Printing and Advertising  "Working Expenses	\$ ets 186 24 303 00 142 77 140 00 50 00 108 50  361 00	930 51  624 75 9 27 44 25 69 34 747 61
Balance in hand		182 90
WELLAND.  Dr.  To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant.  "Miscellaneous.  Cr.  By Prizes for Horses, \$162; Cattle, \$118; Sheep, \$114; Pigs, \$8; Poultry, \$9.59.  "Prizes for Grains and Seeds, \$28.62; Roots and other hoed crops, \$16.19; Dairy products, \$6; Fruits, \$30; Vegetables, \$9; Agricultural Implements, \$30; General Manufactures, \$31.69; Ladies' Work, \$40.	\$ ets. 343 53 145 00 178 25 700 00 32 00 411 59	\$ cts. \$ cts.
160		609 09

Sects   Sect	By Protions of the Legislative Grant paid to Township Societies				
Societies	Societies	By Portions of the Legislative Grant haid to Township	\$ cts.	\$ cts.	\$ cts.
Balance in hand	Balance in hand	Societies			
Balance in hand	Balance in hand				.,340 88
Bertie.   Bertie.   Bertie.   Bertie.   Bertie.   Bertie.   Bertie.   Bertie.   Bertie.   S   Cts.   S   Cts.	Berlie   B	Balance in hand			
Dr.   S   cts.   S   cts.   S   cts.   S   cts.   To balance in hand, as per last Annual Report.   108   00   00   00   00   00   00   0	Dr.   S   cts.   S   cts.   S   cts.   To balance in hand, as per last Annual Report   108   90   100   31   246   86	Note.—Notwithstanding unpropitious weather the Fall Esuccessful, particularly as regards the general quality of the exhibit	xhibition : oits—a ma	must be co rked impr	onsidered ovement.
Dr.   S   cts.   S   cts.   S   cts.   S   cts.   To balance in hand, as per last Annual Report.   108   00   00   00   00   00   00   0	Dr.   S   cts.   S   cts.   S   cts.   To balance in hand, as per last Annual Report   108   90   100   31   246   86	Bertie			
Cr.       246 86         By Prizes for Horses, \$37.50; Cattle, \$27.75; Sheep, \$21; Pigs, \$12; Poultry, \$5.80	Cr.   246 86   By Prizes for Horses, \$37.50; Cattle, \$27.75; Sheep, \$21;   Pigs, \$12; Poultry, \$5.80	Dr. To balance in hand, as per last Annual Report. "Members' Subscriptions	38 55 108 00	\$ cts.	\$ cts.
Crops, \$5; Dairy Products, \$1.85; Fruits, \$3.50; Vegetables, \$2,55; Agricultural Implements, \$17.10; Ladies' Work, \$9.25	crops, \$5; Dairy Products, \$1.85; Fruits, \$3.50; Vegetables, \$2.55; Agricultural Implements, \$17.10; Ladies' Work, \$9.25	Cr. By Prizes for Horses, \$37.50; Cattle, \$27.75; Sheep, \$21; Pigs, \$12; Poultry, \$5.80	104 01		246 86
## Printing and Advertising.  ## Working Expenses  Balance in hand.  ### Balance in hand.  #### Balance in hand.  ##### Balance in hand.  ##### Balance in hand.  ###################################	## Working Expenses ## 4 75 ## Working Expenses ## 180 85  Balance in hand ## 66 01  ### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  #### 60 01  ##### 60 01  ##### 60 01  ##################################	erops, \$5; Dairy Products, \$1.85; Fruits, \$3.50; Vegetables, \$2.55; Agricultural Implements, \$17.10;	47 39	151 40	
Dr.	Dr.   \$ cts. \$	" Printing and Advertising" " Working Expenses		4 75	180 85
Dr.       \$ cts.	Dr.       \$ cts.       \$ cts.       \$ cts.         To balance in hand, as per last Annual Report       14 63       82 00         " Members Subscriptions       82 00       78 00         " Legislative Grant from Electoral Divisional Society       78 00       700         Cr.       7 00       7 00         Cr.       53 00       181 63         By Prizes for Horses, \$30.25; Cattle, \$18.50; Sheep, \$4.25.       53 00         " Prizes for Grain and Seeds, \$10.12; Roots and other head crops, \$9.87; Dairy products, \$1.87; Fruits, \$4.87; Vegetables, \$3.40; General Manufactures, \$13.25; Fine Arts, \$3.80; Ladies' Work, \$10.37       57 55         " Printing and Advertising       57 55         " Working Expenses       110 55         Balance in hand       20 40         Balance in hand       46 18         Dr.       \$ cts.         To balance in hand, as per last Annual Report       61 77         " Members' Subscriptions       107 50         " Legislative Grant from Electoral Division Society       86 75	Balance in hand			66 01
To balance in hand, as per last Annual Report  "Members Subscriptions  "Legislative Grant from Electoral Divisional Society "Miscellaneous  "Miscellaneous  Cr.  By Prizes for Horses, \$30.25; Cattle, \$18.50; Sheep, \$4.25.  "Prizes for Grain and Seeds, \$10.12; Roots and other hoed crops, \$9.87; Dairy products, \$1.87; Fruits, \$4.87; Vegetables, \$3.40; General Manufactures, \$13.25; Fine Arts, \$3.80; Ladies' Work, \$10.37  Printing and Advertising  Working Expenses  Balance in hand  Stamford.  Dr.  Members' Subscriptions  Legislative Grant from Electoral Division Society.  Municipal Grant  14 63 82 00 78 00 7 00 181 63  53 00  181 63  53 00  181 63  54 50 20 40 135 45  4 50 20 40 135 45  4 50 20 40 135 45  46 18	To balance in hand, as per last Annual Report	Humberstone.			
Cr.       30.25; Cattle, \$18.50; Sheep, \$4.25.       53 00         "Prizes for Horses, \$30.25; Cattle, \$18.50; Sheep, \$4.25.       53 00         "Prizes for Grain and Seeds, \$10.12; Roots and other hoed crops. \$9.87; Dairy products, \$1.87; Fruits, \$4.87; Vegetables, \$3.40; General Manufactures, \$13.25; Fine Arts, \$3.80; Ladies' Work, \$10.37       57 55         "Printing and Advertising       57 55         "Working Expenses       20 40         Balance in hand       46 18         Stamford.       \$ cts.         Dr.       \$ cts.         "Members' Subscriptions       107 50         "Legislative Grant from Electoral Division Society       86 75         "Municipal Grant       15 00	Cr.       —       181 63         By Prizes for Horses, \$30.25; Cattle, \$18.50; Sheep, \$4.25.       53 00         " Prizes for Grain and Seeds, \$10.12; Roots and other hoed crops, \$9.87; Dairy products, \$1.87; Fruits, \$4.87; Vegetables, \$3.40; General Manufactures, \$13.25; Fine Arts, \$3.80; Ladies' Work, \$10.37       57 55         " Printing and Advertising       57 55         " Working Expenses       20 40         Balance in hand       46 18         Stamford.       \$ cts.         Dr.       \$ cts.         To balance in hand, as per last Annual Report       61 77         " Members' Subscriptions       107 50         " Legislative Grant from Electoral Division Society       86 75	To balance in hand, as per last Annual Report "Members Subscriptions "Legislative Grant from Electoral Divisional Society	14 63 82 00 78 00	\$ cts.	\$- cts.
Fine Arts, \$3.80; Ladies' Work, \$10.37 57 55  " Printing and Advertising 4 50  " Working Expenses 20 40  Balance in hand 20 40  Balance in hand 8 cts.	Fine Arts, \$3.80; Ladies' Work, \$10.37 57 55  " Printing and Advertising 450 " Working Expenses 20 40  Balance in hand 20 40 135 45   Balance in hand 50 cts. \$	Cr. By Prizes for Horses, \$30.25; Cattle, \$18.50; Sheep, \$4.25.  "Prizes for Grain and Seeds, \$10.12; Roots and other hoed crops, \$9.87; Dairy products, \$1.87; Fruits, \$4.87;			181 63
# Working Expenses	## Working Expenses	Fine Arts, \$3.80; Ladies' Work, \$10.37	57 <b>5</b> 5	110 55	
Stamford.   Stam	Stamford.  Dr. \$ ets. \$ ets. \$ cts.  To balance in hand, as per last Annual Report 61 77  "Members' Subscriptions 107 50  Legislative Grant from Electoral Division Society 86 75	" Printing and Advertising " Working Expenses			135 45
Dr.       \$ cts.       \$ cts.       \$ cts.         To balance in hand, as per last Annual Report       61 77         " Members' Subscriptions       107 50         " Legislative Grant from Electoral Division Society       86 75         " Municipal Grant       15 00         —       271 02	Dr. \$ cts. \$ cts. \$ cts. To balance in hand, as per last Annual Report 61 77  "Members' Subscriptions 107 50  Legislative Grant from Electoral Division Society 86 75	Balance in hand			46 18
11 161 271 02	" Nunicipal Grant 15 00	Dr. To balance in hand, as per last Annual Report "Members' Subscriptions Legislative Grant from Electoral Division Society	61 77 107 50 86 75	\$ ets.	\$ ets
101	11 161 271 02	11 161			271 02

Cr.	\$ cts.	\$ cts.	\$ cts.
By Prizes for Horses, \$65.70; Cattle, \$41.80; Sheep, \$24.60;	140 05		
Pigs, \$3; Poultry, \$5.75  "Prizes for Grains and Seeds, \$9.30; Roots and other hoed crops, \$4.40; Dairy products, \$3.20; Fruits, \$5.90;	140 85		
Vegetables, \$2.60; Agricultural Implements, \$3.40; General Manufactures, \$3.75; Ladies Work, \$11.05	45 60	186 45	
" Printing and Advertising, \$7; Musical Bands, \$6.50 " Working Expenses		13 50 18 60	218 55
			218 99
Balance in hand			52 47
Thorold.			
Dr.	3 cts.	\$ cts.	S cts.
To balance in hand as per last Annual Report  "Members' Subscriptions	30 05 101 00		
" Legislative Grant from Electoral Division Society	93 24		
" Municipal Grant	25 00		249 29
By Prizes for Horses, \$50.50; Cattle, \$30.70; Sheep, \$33.90;	199 19		
Pigs, \$4.75; Poultry, \$2.27	122 12		
crops, \$7.95; Dairy products, \$2.87; Fruits, \$10.65;			
Agricultural Implements, \$2; General Manufactures, \$9.81; Ladies' Work, \$3	48 79		
" Printing and Advertising		170 91 11 75	
"Working Expenses		13 62	
			196 28
Balance in hand			53 01
Willoughby.			
Dr.	\$ ets.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	$     \begin{array}{r}       34 & 92 \\       64 & 00     \end{array} $		
" Legislative Grant from Electoral Division Society	58 98		
" Miscellaneous	1 75		159 65
By Prizes for Horses, \$36.50; Cattle, \$16.75; Sheep, \$14.50;	72 21		
Pigs, \$2.75; Poultry, \$1.71 Prizes for Grains and Seeds, \$15.58; Roots and other hoed	12 21		•
crops, \$5.96; Dairy products, \$2.25; Fruits, \$3.26; Vegetables, \$0.74; General Manufactures, \$9; Ladies'		-	
Work, \$4.50	41 29		
" Printing and Advertising		113 50 3 <b>7</b> 5	
"Working Expenses, including services of Secretary, Trea-			
surer, and Assistants		21 05	138 30
Balance in hand			
Dalance in hand			21 35

	WELLINGTON, WEST			
Cr. By	Members' Subscriptions Admission Free to Exhibition Legislative Grant, \$700; Municipal Grant, \$275. Miscellaneous	\$ cts, 347 50 98 00 975 00 7 75 ——————————————————————————————————	\$ cts.	\$ cts.
66	Prizes for previous years paid Portions of Legislative Grant paid to Township Societies Exhibition Buildings and Grounds. Printing and Advertising Working Expenses, including services of Secretary, Treasurer and Assistants.  Balance in hand		501 50 2 50 420 00 100 74 35 00 202 31	.,262 05 166 20
				100 20
66	balance in hand, as per last Annual Report.  Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society	\$ cts. 7 88 147 00 8 45 140 00	\$ ets.	\$ cts.
	Prizes for Horses, \$39; Cattle, \$40; Sheep, \$25.50; Pigs, \$10.50; Poultry, \$4.50	119 50 127 00		303 33
46	Exhibition Buildings		246 50 15 47 11 50 28 93	302 40
	Balance in hand			00 93
	Minto.			
"	Members' Subscriptions Admission Fees to Exhibitiou Legislative Grant from Electoral Division Society Municipal Grant Sale of Seeds.	\$ cts. 139 00 30 00 140 00 71 00 16 20	\$ ets.	\$ ets.
Cr. By	balance due the Treasurer, as per last Annual Report Prizes for Horses, \$37.50; Cattle, \$36.25; Sheep, \$21.90; Pigs, \$8.75; Poultry, \$2.50	106 90	27 78	396 20

	\$ 0	ets.	\$ cts.	\$ cts.
By Prizes for Grains and Seeds, \$17.25; Roots and other hoed crops, \$10.30; Dairy products, \$13.50; Fruits, \$3.25; Vegetables, \$5.25; Agricultural Implements, \$20.25;			Ψ στο.	<b>*</b> 000.
General Manufactures, \$24.70	94	<del>-</del> -	201 40	
" Prizes for previous years paid" Printing and Advertising" Working Expenses			44 60 20 00 37 38	
~ ·				331 16
Balance in hand				65 04
Peel.				
Dr. To Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society.  "Extra Subscriptions.	\$ 6 133 ( 13 140 ( 23 )	75 00	\$ cts.	\$ cts.
Cr. By balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$54; Cattle, \$34; Sheep, \$34; Pigs, \$19; Poultry, \$10.50	151	50	5 29	310 29
crops, \$10.75; Dairy products, \$14.50; Fruits, \$4; Agricultural Implements, \$13; Ladies' Work, \$12.12	65	37	216 87	
" Exhibition Buildings " Printing and Advertising" " Working Expenses			10 00 9 00 28 09	,
Horang Baloassan				269 25
Balance in hand				41 00
WELLINGTON CENTRE.				
Dr To balance in hand, as per last Annual Report "Members' Subscriptions	\$ 6 275 110	46	\$ cts.	\$ cts.
" Admission Fees to Exhibition	45			
" Legislative Grant	700			
" Municipal Grant " From Nichol Society	$\begin{array}{c} 250 \\ -95 \end{array}$			
" From Pilkington Society	60			
" Miscellaneous	52	10		1 500 51
Cr. By Prizes for Horses, \$133; Cattle, \$114; Sheep, \$75; Pigs, \$14; Poultry, \$6.75	324			1,588 51
"Prizes for Grains and Seeds, \$69.50; Roots and other hoed crops. \$62.50; Dairy Products, \$36: Fruits, \$21; Plants and Flowers, \$24; Agricultural Implements, \$53.50; Fine Arts, \$7; Ladies' Work, \$92.50; Ploughing		•		
match, \$60; Fat Cattle Show, \$66	492	00	010 5-	
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies. " Exhibition Buildings			816 75 46 65 311 67 39 87	
164				

By Printing and Advertising  " Musical Bands  " Working Expenses, including services of Secretary and Treasurer	47 10 94	cts. \$ cts. 68 00 00 
Balance in hand		221 89

The Directors of the Centre Riding of Wellington Agricultural Society, in making their Eighth Annual Report, have much pleasure in stating that the financial affairs are in a very satisfactory condition.

The Township Societies of Nichol and Pilkington amalgamated with this Society during the past year, contributing towards the funds of this Society the sum of \$155.00, besides

the Legislative grant to each of them.

The Union Exhibition was held in the Village of Elora, on the 5th and 6th days of October last, at which the sum of \$815.50 was offered in premiums in the different classes, of which the sum of \$114.75 reverted back to the society for the want of competition.

The show was the largest that has as yet been held in this Riding, the number of entries being nearly 1,200; but owing to the very heavy rain on the second day, the stock did not show to such advantage as it would have otherwise done had the weather been more favourable.

The Annual Ploughing Match was held on the farm of William Robinson, esq., Upper Nichol, at which the sum of \$70.00 was offered in prizes; but owing to the very severe frost only 7 men and 3 boys put in an appearance, and \$10.00 of the money reverted to the society.

Å Fat Cattle Show was held in the Village of Fergus, on the 9th day of December, at

which the sum of \$81.00 was offered in prizes, \$15.00 of which was not competed for.

— ·			
Dr. To Members' Subscriptions  ' Admission Fees to Exhibition  " Legislative Grant from Electoral Division Society  " Special Prizes	\$ ets. 228 45 220 00 123 40 40 00	\$ ets.	\$ cts.
Cr. By Balance due the Treasurer, as per last Annual Report  "Prizes for Horses, \$70; Cattle, \$60; Sheep, \$20; Pigs, \$10; Poultry, \$6  "Prizes for Grains and Seeds, \$20; Roots and other hoed crops, \$21; Dairy products, \$16; Fruits, \$10; Agricultural Implements, \$18; General Manufactures,	166 00	46 18	611 85
\$19; Ladies' Work, \$60.90	164 90	330 90 33 70 17,25 25 25 69 35	522 63
Balance in hand			89 22
Dr To Members' Subscriptious  '' Admission Fees to Exhibition  165	\$ cts. 136 00 18 74	\$ ets.	\$ ets.

To Legislative Grant from Electoral Division Society	\$ cts. 67 20	\$ cts.	\$ cts
" Miscellaneous	10 50	4 87	232 44
"Prizes for Horses, \$30; Cattle, \$30; Sheep, \$24.50; Pigs, \$22	106 50		
crops, \$11.50; Dairy products, \$10; Growing crops, \$8; Fruits, \$3; Vegetables, \$4; Agricultural Implements, \$8; Ladies' Work, \$5.75.	70 25	176 75	
" Printing and Advertising " Working Expenses		7 50 37 92	227 04
Balance in hand			5 40
Luther.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  Admission Fees to Exhibition  Legislative Grant from Electoral Division Society.	\$ cts. 00 27 91 00 7 82 52 72	\$ cts.	\$_ cts.
" Municipal Grant	20 00		171 81
Cr. By Prizes for Horses, \$18; Cattle, \$14.50; Sheep,; \$10.50 Pigs, \$6.50; Poultry, \$3.25  "Prizes for Grains and Seeds, \$27.75; Roots and other hoed crops, \$14.75; Dairy products, \$17.25; Fruits, \$4;	<b>52 7</b> 5		
General Manefetures, \$4; Ladies' Work, \$28.00	98 75	151 50	
" Exhibition Buildings " Printing and Advertising " Working Expenses		8 55 5 75 26 53	192 33
Balance duc Treasurer			20 52
Datance due Treasurer			40 04
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions	\$ cts. 4 75 110 00	\$ ets.	\$ ets.
"Legislative Grant from Electoral Division Society Cr.	61 40		176 15
By Paid Central Riding Union Show "Working Expenses		156 40 10 30	166 70
Balance in hand			9 45
Pilkington.			
Dr. To Balance in hand, as per last Annual Report "Members' Subscriptions	\$ cts. 3 35 81 00	\$ cts.	\$ cts.
166			84 35

Cr. By Paid Central Union Society "Printing and Advertising "Working Expenses.	<b>6</b>	cts.	\$ cts. 60 00 1 00 16 00	0
Balance in hand				7 3.5
Elora Horticultural Society.				
Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from County Society	70 118 22	cts 01 00 <b>7</b> 5 35	. \$ ct	
Cr. By Prizes for Fruit  "Vegetables  "Flowers  "Sundry Expenses  "Printing and Advertising	40 89 38	50 50 90 49 00		279 11
		_		210 39
Balance in hand				68 72
WELLINGTON, SOUTH.				
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant, \$700; Municipal Grant, \$1,000  "Special Prizes  "Discount, &c  "Booths, Stalls, Hay, &c	213 843 4,116 1,700 541 4,444	00 68 00 95 10	. \$ et	,
Cr. By Prizes for Horses, \$957; Cattle, \$1,185; Sheep, \$489; Pigs, \$318; Poultry, \$270.00				12,764 76
	6,171			
Unpaid	305	75	5,865 7	5
" Prizes for previous years paid " Portions of Legislative Grant paid to Township Societies " Exhibition Buildings and Grounds " Prizes for fat Cattle Show			47 00 205 63 152 23 206 00	) 3 5

By Miscellaneous  "Printing and Advertising  "Working Expenses, including services of Secretary, Treasurer and Assistants	\$ ets. \$ ets \$ ets. 4,450 00 382 10 1,806 03 
Balance due Treasurer	350 05

The President and Directors of the Central Exhibition, in making this their fifth annual Report, are sorry they cannot do so with a more flourishing account of the past year's transactions.—that is, speaking in a financial sense, for they have again to state that there is a considerable deficiency between the receipts and expenditure. This unfortunate state of things is altogether owing to the unpropitious weather during the Exhibition. As is well known, for the last two years it has rained on the Thursday of the Exhibition week, that being the day on which most people visit the Exhibition, hence the principal cause of the deficiency; for in no other branch from which the Society draws its funds is there any falling

off in receipts.

It has now become a question whether our show is not held too early in September to allow our friends from the north of us an opportunity of visiting it, as their harvest is mostly a week or two later than in this section. This was especially the case in 1875, when the wet and cold weather so much retarded the harvest that a large quantity of grain was still in the fields, and some not even cut, at the time our show was held. This, no doubt, prevented many hundreds from paying us a visit. We have always tried to arrange the time for holding the Exhibition so as not to clash with our sister Societies of London, Hamilton, and Toronto, for the latter city got up a show on a large scale for the first time this year. but from some cause or other they held them on the same day, thereby injuring all to some extent; and it now becomes our duty to see whether we had not better look to our own future prosperity, by holding our Exhibition at a time most likely to accommodate that large portion of the country lying to the north of us, than to be so particular about interfering with our neighbours. We do not draw as largely from them as they do from us, for it is a well known fact that the stock from Wellington go largely to make up any show they may be taken to.

In reviewing the Exhibition as a whole, we can look back with a feeling of pride on the splendid display of agricultural productions, such as horses, cattle, poultry, grain, dairy products, &c., and also of implements and machinery that was exhibited, more especially, perhaps, in the great staple of this county, stock of all kinds. In fact, it is conceded by all those who visited the Provincial and other large exhibitions, that at none of them was there so grand a display of cattle, sheep and pigs, and had it not been for the twenty-eight car loads sent from Wellington, the Show at Ottawa would have been a much more meagre one

than it was.

The show of horses was an excellent one. The Stallions in the classes did credit to the importer and breeder, especially in the heavy draught class. The breed seems to be much on the increase, and large sums are expended yearly in importing animals from England and Scotland by the enterprising farmers of this Province. These importations have a marked influence on our young stock, and as the demand for heavy horses is on the increase, they will always command a ready sale at remunerative prices.

As usual, there was a large dislay of poultry, all the principal breeders having the pro-

duce of their yards entered for competition, which was keen and closely contested.

In agricultural implements there was a grand display, the space allotted to this branch of the exhibition being completely filled with all kinds of machinery. This is one of the most attractive features of the exhibition, especially for the farmers, who take great interest in viewing the different implements, to see if there is any new invention brought out during the last year, or any improvement in those he is in the habit of using. Should he see any, he is

quick to avail himself of the opportunity to purchase, and by that means reduce the cost of

working his farm.

A very great impetus has been given of late years to the breeding of sheep, and large sums of money are every year expended in importing from the flocks of the best and most distinguished breeders in England and Scotland; consequently, at every exhibition, this class of stock makes a very large and imposing feature of the show. The different breeds have each their admirers, some preferring Cotswolds, Leicesters, and others Southdowns, all claiming the superiority for that breed which he is most interested in. In fat cattle the show was remarkable, some of the animals were monsters of fat, and seldom, if ever in this country, has so large and fine a lot been brought together. They were principally bred and fed in the locality, and after having been shown here, they were taken to the Provincial at Ottawa, and carried off all honours; then, again, on their return, they were taken to London, Hamilton, and Toronto, at every place they were shown, came off with flying colours. Conspicuous among them were some Hereford cows and steers.

The samples of grain were more numerous, and the quality much better than we have seen for the past two years, this owing no doubt to the favourable season—and consequently

better crops.

Should our successors see fit to appoint the time for holding the exhibition a week or or two later, we feel convinced that a much larger display in this class would be the result, as it would enable the farmers in the upper sections of this and neighbouring counties, an opportunity to thresh out and exhibit their productions, which they cannot do now, as their harvest is fully two weeks later than in this section.

These remarks will apply even more forcibly with regard to roots, as a week or two at that season of the year makes a very material difference in the size and appearance of them.

The display of dairy produce was gratifying to all concerned, for seldom has such a quantity of butter and cheese been seen at any exhibition, and of such uniform good quality. The judges remarked that the difficulty was to know which really was the best, so much of it being equally good. The large number of 200 samples were exhibited. This is about three times as much as was shown at the Provincial.

The show of fruit was excellent, a large number of the entire being from the neighbour-hood of Brantford, Paris. Hamilton, and also from the fruit garden of Canada, St. Catharines. In this important branch also, our local fruit-growers would have a better chance of competing with their rivals in the older and earlier sections, by having the show somewhat later, for although the fruit might be as large and fine, yet, for the want of a little longer time, the colour is wanting, and this, as all fruit-growers know, makes a wonderful difference in the

quality and appearance of fruit.

We must not forget to pay a compliment to the ladies who contributed their share towards the success of the exhibition by a liberal display of their handy work. It may be all very well for some to think very little of the Fine Art and Ladies Department of the exhibition, but all do not see the same beauty in a fine horse or Durham that those more immediately interested in them do. Those who have been brought up in city or town, look for something more congenial to their tastes than fine stock, consequently, on entering the exhibition grounds, the first thought is to see all in the building; there they have the Fine Arts, Ladies' Department, and many other articles that go to make up an exhibition such as the Central has now become.

#### Eramosa.

Dr.		S	cts.	\$ cts.	\$	cts.
To	balance in hand, as per last Annual Report	104	00			
66	Members' Subscriptions	292	00			
46		118	16			
66	Legislative Grant from Electoral Division Society	140	00			
66	Miscellaneous	36	25			
					690	41
Cr.						
By	Prizes for Horses, \$80; Cattle, \$77; Sheep, \$51; Pigs,					
	\$24; Poultry, \$6.25	238	25			

By Prizes for Grains and Seeds, \$32.50; Roots and other hoed crops, \$12; Dairy products, \$17.25; Fruits, \$22.25; Plants and Flowers, \$12; Vegetables, \$13.75; Agricultural Implements, \$26.50; General Manufactures, \$15.75; Ladies' Work, \$29.50	\$ ets.	\$ ets.	\$ cts.
Unpaid	419 75 46 55	373 20	
" By Prizes for previous years paid " Paid on purchase of Exhibition Grounds and Buildings " Corporate Seal " Printing and Advertising		27 45 103 25 6 00 52 00	
"Working Expenses		49 30	611 20
Balance in hand			79 21
Puslinch.			
Dr. To balance in hand, as per last Annual Report  "Members' Subscriptions.  "Legislative Grant from Electoral Division Society  "Miscellaneous.	\$ cts. 15 97 161 50 83 00 1 00	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$36.50; Cattle, \$39.50; Sheep, \$37; Pigs, \$9.50; Poultry, \$5.50	128 00		261 47
General Manufactures, \$10; Ladies' Work, \$5	93 00		
" Printing and Advertising " Working Expenses		221 00 15 00 53 20	
			289 20
Balance due Treasurer			27 73

The Directors, in presenting their Report for the past year, regret to state that, owing to the difficulties and drawbacks the furmers had to contend with the past season, they are not in as prosperous a condition as formerly; the grasshopper plague and the excessive drought has told fearfully upon some parts of the Township, yet we have reason to be thankful other parts of it escaped the ravages of the pest. In taking, what is customary, a retrospective view of the growing crops throughout the Township the past season, we find Fall Wheat that escaped being winter killed, as regards quantity and quality, to be really excellent—fully up to the standard of former years. Spring Wheat, in the majority of cases, has been a failure, caused principally by a sort of grub which attacked the second joint. Peas are the only crops that seem to withstand the ravages of the devouring grasshopper, and consequently were a good crop. Oats and Barley that have escaped the above causes, has been a complete failure. Turnips have been very good in some parts of the Township, while in others they were destroyed as they were hoed or singled. Mangolds and Carrots are more cultivated than formerly, and have been a remarkably good crop—far superior to former years. The General Show was held on the 8th of October last. Although not up to former

years in point of entries, yet what was exhibited showed a marked improvement in point of excellence, and we might here suggest that in order to have a good Show, the Exhibition should in future be thrown open to all, come from where they may.

Guelph Horticultural Society.	
Dr. \$ cts. \$ cts.	\$ cts.
To balance in hand, as per last Annual Report	
" Members' Subscriptions	
"Admission Fees to Exhibition	
" Legislative Grant from Electoral Division Society 85 68	
" Special Prizes	
Cr	332 68
By Fruits 55 50	
" Plants and Flowers 115 00	
" Vegetables 72 00	
${}$ 242 50	
" Printing and Advertising	
" Musical Bands	
" Working Expenses 48 65	
	323 85
Balance in hand	8 83

# REPORT.

\* \* \* \* \* \* \* \*

The Spring Show was held on the 2nd of July, and a very good display was made, especially in flowers, some of which were much admired, and gave evidence of careful and successful culture. The show of pot plants was the best ever shown in Guelph; fuschias, geraniums, and window plants were in abundance, and the prizes were keenly contested for. One very pleasing feature was the fine display of foliage plants. This is the first time they have been exhibited here to any extent, and certainly they deserve the attention necessary for their cultivation, as they are a very great acquisition to the floral department of any show.

We must not forget to mention a very handsome collection of native ferns collected and shown by the pupils of the Agricultural College, also a general display of plants from the same establishment, which added much to the attractions of the Show, and we hope to see as good-if not a better display at our next Exhibition. The Directors are happy to see so much interest evidenced in the success of the Society by the members and pupils of that Institution

The Judges, in their Report, made special remarks on a table of choice plants, exhibited

not for competition, by Gilchrist Bros., some of them offered as special prizes.

The Fall Show was held on the 8th of September, and in every department there was a marked increase in the number of entries. The show of cut flowers was better than we have seen for the last few years, owing in some measure to a more propitious season, and also to a greater care manifested in the cultivation of them. We are glad to see so much interest taken in the cultivation of flowers by our country friends, and we can tell our gardeners and amateurs of the town that they must be up and doing, or the laurels will be taken from them. They had a fair warning this fall, for a large portion of prizes for cut flowers were carried off by our friends from the country, and we hope the success they have achieved will stimulate them and others to persevere in the cultivation of flowers, for certainly there is no occupation so pleasing in its results or more gratifying to the fiver feelings of our nature than a garden well stocked with choice flowers.

The show of fruit was large, but, owing to the previous dry season, was not so fine as in some former years. This applies more especially to apples and pears, for plums were very fine and a large number of the very best articles were on the tables. The grapes were not so good as we have seen at some of our Fall Shows, owing to the want of warmer weather to ripen them, although a few fine samples were exhibited.

The display of vegetables was excellent, and a large and varied assortment was exhibited. In this department some of our new members have shown themselves capable of competing

very successfully with those who have hitherto been looked upon as being almost unapproachable in this particular branch of horticulture, and we trust they will continue to take a lively interest in their gardens.

WENTWORTH NORTH.					
Dr.	\$	cts.	\$ cts.	8	cts.
To balance in hand, as per last Annual Report	663	65			
" Members' Subscriptions	189	50			
" Legislative Grant	700	00			
" Municipal Grant	200	00			
" From Treasurer of Central Fair	696	79			
" Miscellaneous	6	75			
Cr.			2	.456	69
By Paid Treasurer of Central Fair	1.436	00			
" Portions of Legislative Grant paid to Township Societies	317				
" Paid for Agricultural Publications		10			
" Printing and Advertising	5	10			
" Working Expenses	2	50			
· ·			1	,769	30
Balance in hand				687	39

NOTE.—This Society united with the South Riding and Hamilton Agricultural Societies in holding a Central Exhibition.

Bever ley.			
Dr.	\$ cts.	\$ cts.	\$ ets.
To balance in hand, as per last Annual Report	26 32 192 <b>50</b>		
" Donations	20 00		
" Legislative Grant from Electoral Division Society " Municipal Grant	$117 60 \\ 40 00$		
" Miscellaneous	68 85		
Cr By Driggs for Horses 200. Cottle 251 50. Cheer 221 50.			465 27
By Prizes for Horses, \$90; Cattle, \$51.50; Sheep, \$31.50; Pigs, \$11.50; Poultry, \$4.50	189 00		
" Prizes for Grains and Seeds, \$25.50; Dairy products, \$13;			
Fruits, \$18.25; Vegetables, \$24.50; Agricultural Implements, \$14.25; General Manufactures, \$22.25;			
Ladies' Work, \$27.10; Ploughing Match, \$39.00;	101 05		
Miscellaneous, \$7.50	191 35	380 35	
" Exhibition Buildings		8 27	
" Printing and Advertising " Working Expenses		26 50 45 39	
Haponsosiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii			460 51
Balance in hand			4 76
Datance in hand			1 10
Dr. Flamboro', East.	\$ cts.	\$ cts.	\$ cts.
To Balance in hand, as per last Annual Report	118 21	⊕ Cts.	o cis.
" Members' Subscriptions	243 00		
" Admission Fees to Exhibition  " Legislative Grant from Electoral Division Society	35 00 140 00		
" Miscellaneous	50 00		×00.0=
			586 21

Cr. By Prizes for Horses, \$63; Cattle, \$82; Sheep, \$50; Pigs, \$12  "Prizes for Grains and Seeds, \$35; Roots and other hoed crops, \$78; Dairy products, \$30; Fruits, \$24; Agri-	\$ c	00	tts.	\$ cts
cultural Implements, \$30; Ladies' Work, \$60.50  " Exhibition Buildings	257	— 46 ]	34 50 17 00 27 58 19 00	528 08
Balance in hand				58 1
Datance in nand				90 1
Flamboro', West.	Ф			<b>*</b>
Dr.  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Seciety  "Municipal Grant	\$ 6 122 ( 30 3 60 ( 20 0	35 00	cts.	\$ cts
Cr.  By balance due to Treasurer, as per last Annual Report  "Prizes for Horses, \$33; Cattle, \$19; Sheep, \$27; Pigs, \$3  "Prizes for Grains and Seeds, \$27.25; Roots and other hoed crops, \$10.75; Dairy products, \$5; Fruits, \$9.75; Vegetables, \$4; General Manufactures, \$3; Ladies'	82 (	00	7 84	232 95
Work, \$10.50	70 2		2 25	
" Exhibition Buildings " Special Prizes " Printing and Advertising " Working Expenses		1	2 25 1 00 9 50 1 50 7 26	
				229 35
Balance in hand				3 60
WENTWORTH, SOUTH.				
	\$ c 635 7 226 0 900 0 693 0	0	cts.	\$ cts.
Cr.  By amount paid to Great Central Fair  " Portions of Legislative Grant paid to Township Societies  " Printing and Advertising  " Working Expenses		37 1 5	0 00 0 00 6 48 2 46	2,454 84 .,818 94
Balance in hand				635 90

NOTE.—This Society united with the North Riding and City of Hamilton Societies for holding the Great Western Exhibition. See report under Hamilton.

Ancaster.			
Dr.	S ets.	\$ cts.	\$ cts.
To balance in hand, as per last Annual Report	16 26	"	"
" Members' Subscriptions	200 75		
"Admission Fees to Exhibition	8 80		
" Legislative Grant from Electoral Division Society	140 00		
" Municipal Grant	50 00		
" Miscellaneous	$20 \ 50$		100 01
Cr.			436 31
By Prizes for Horses, \$50; Cattle, \$55.50; Sheep, \$12; Pigs,	195 00		
\$9; Poultry, \$8.50	135 00		
crops, \$10; Dairy products, \$24.75; Fruits, \$27.50;			
Vegetables, \$18.50; General Manufactures, \$24.00;			
Ladies' Work, \$32	167 50		
, , , , , , , , , , , , , , , , , , , ,		302 50	
" Exhibition Buildings		6 25	
" Printing and Advertising		18 75	
"Working Expenses		38 18	
			365 68
To 1 1 1			<b>#</b> 0 00
Balance in hand			70 63
Barton and Glanford.			
Dr.	S cts.	S cts.	\$ cts.
To balance in hand as per last Annual Report	11 53		
" Members' subscriptions	119 50		
" Legislative grant from Electoral Division Society	90 00		
" Municipal Grant	55 00		
Cr.			276 03
By Prizes for Horses, \$55; Cattle, \$59.50; Sheep, \$38;	150 50		
Pigs, \$18	170 50		
crops, \$9.75; Dairy products, \$11; Fruits, \$12.25;			
Vegetables, \$3.75; Agricultural Implements, \$6.50;			
General Manufactures, \$16.25	87 00		
, "		257 50	
" Printing and Advertising		8 50	
"Working Expenses		15 00	
			281 00
D 1 1 m			4.05
Balance due Treasurer			4 97
Saltfleet and Binbrook			
Dr.	\$ ets.	\$ cts.	\$ ets.
To balance in hand, as per last Annual Report	38 47		
"Members' Subscriptions	180 50		
" Admission Fees to Exhibition	16 56		
"Legislative Grant from Electoral Division Society	140 00		
" Municipal Grant	65 00		110 50
Cr. By Prizes for Horses, \$78; Cattle, \$90; Sheep, \$50; Pigs, \$21;			440 53
Poultry, \$2.25	241 25		
" Prizes for Grains and Seeds, \$44.25; Roots and other hoed	241 20		
crops, \$14.75; Dairy products, \$20; Fruits, \$19; Vege-			
tables, \$6.25; Agricultural Implements, \$13; General			
Manufactures, \$24.50; Fine Arts, \$2.75; Ladies'			
Work, \$16.75	$162 \ 25$		
1774		403 50	
174			

By Prizes for previous years paid	\$ cts. \$ cts. \$ cts. 5 00 23 90 52 02 484 42
Balance due Treasurer	43 89
opplygenation deman	
YORK, NORTH.	
Dr. To Balance in hand, as per last Annual Report	\$ cts. \$ cts. \$ cts. \$ cts. \$ 170 05 323 00 902 66 850 00 625 00 98 45 2,969 12 515 00
tural Implements, \$172.50; General Manufactures,	
\$41.25; Fine Arts, \$34.25; Ladies' Work, \$79	532 75
By prizes for previous years paid	
"Portions of Legislative Grant paid to Township Societies	456 85
" Exhibition Buildings	128 00
" Paid on purchase of Exhibition Grounds	752 50
" Printing and Advertising, \$67.30; Musical Bands, \$18	85 30
"Working Expenses, including services of Secretary, Treasurer, and Assistants.	160 33
Survi, and Andrewster.	2,678 98
Balance in hand	290 14

In presenting the Annual Report of the precedings of the Society for the past year, your officers and Directors have pleasure in being able to congratulate you upon the continued

success and prosperity attending its operations.

In consequence of not forming a union with either of the branch societies in the riding during the past year, taken together with the fact that considerable stringency has existed in the money market, the total membership, hereto annexed, was not so great as before the unions of the previous two or three years; nevertheles, the receipt of \$323 from this source is anything but discouraging, while the success attending the Fall Show, held on the Society's grounds in Newmarket, last autumn, demonstrated that the membership is composed almost entirely of those who take a lively interest in the success and general prosperity of the Association.

During the year your Directors have purchased nearly one-third more land, adjoining the plot previously held by the Society, on the north side, and had the same fenced, thus adding immensely to the comfort of our exhibitors and visitors at our Fall Show.

The Fall Exhibition last autumn, as previously intimated, was a decided success. About 1,800 entries were made in the various classes, and in order to give a better idea of the character of the Show, it may be observed that the several classes were represented by the foilowing entries:—

Horses		Grains and Seeds Roots, Vegetables and Fruit	
Sheep			
Swine	33	Implements and Manufactures	189
Poultry		Domestic Manufactures	177

The balance of the entries, between 300 and 400, were in Fine Arts and miscellaneous articles, a portion of which will probably find a place on the regular list the coming year.

In 1874, this Society held an Union Exhibition with Whitchurch and East Gwillimbury, on which occasion there were 1,940 entries. The past year, without a union with any Society, there were about 1,800. It is, therefore, fair to conclude, your Board would respectfully submit, that, compared with the previous year, and especially in view of the stringency of the money market, that reasonable success attended the Exhibition, while the attendance of visitors exceeded all previous occasions.

Except the appearance of some fine imported horses in the show ring, your Board are not aware of any special feature of importance to which to direct attention, as compared to former years; but they might mention the appearance of the epizootic in horses in this neighbourhood, about the time of the Show, thereby considerably militating against this department. The dryness of the past summer seriously affected pasture lands, and this had the effect of lessening the number of entries in the class of eattle. The other departments were well sustained.

With regard to the Agricultural Implement department, the Exhibition clearly demonstrated a growing interest in this direction. The show was very fine indeed, reflecting much credit on our manufacturing interests.

Your Board experienced, what all former Boards found, a great difficulty in securing competent men to discharge the onerous and important duties of Judges. First-class men are generally appointed in the first instance, but when the day of exhibition arrives, only a part of them, from one cause or another, put in an appearance. The Board is then compelled to select men from such material as they find on the grounds willing to act. This is not all—even among those on the ground, the best men to serve are probably exhibitors themselves, and this narrows down the choice very materially. But the stock and articles are on the grounds, and must be judged, and the Board must select the best to hand. To avoid this difficulty is a problem hard to solve; but your Board are of opinion that it is one which must and should be grappled with, in order to secure greater satisfaction to competitors.

Reports of the Branch Township Societies of King, Whitehurch. East Gwillimbury, and Georgina have been received by your Secretary, but with the exception of King Branch, these reports are confined simply to the financial statement. Whitehurch reports that the Branch Association in that township held an Union Show with Markham Township last year. Georgina Township Branch has been revived, and from the list of gentlemen selected as officers for the coming year, there is reasonable prospect of success likely to attend its operations. This indicates improvement over the previous year.

In conclusion, your Directors would suggest to their successors the propriety of planting more shade trees on the exhibition grounds, and making some improvements by way of levelling the land recently purchased, so as to give the plot a more uniform appearance; and as the Village of Newmarket would be advantaged by having a handsome park for its citizens to visit, your Board are of opinion that if respectfully approached, the Council will aid in the work with that same liberality which has hitherto characterized that body towards this Association.

Gwillemsbury, East.

Dr. To balance in hand, as per last Annual Report "Members' Subscriptions		⊕ CIS.	⇔ ets.	
" Legislative Grant from Electoral Division Society	92 28			
" Municipal Grant	20 - 28			
" Special Prizes	39 00			
			326 70	

Cr. C. H. 272 Charle 222 Cheen \$12 Piers	\$ cts.	\$ cts.	\$ cts.
By Prizes for Horses, \$73; Cattle, \$32; Sheep, \$13; Pigs, \$11; Poultry, \$1	130 00		
"Prizes for Grains and Seeds, \$15.50; Roots and other hoed crops, \$6.75; Dairy products, \$17.75; Fruits, \$6.50; Vegetables, \$8.50; Agricultural Implements, \$27; General Manufactures, \$10; Fine Arts, \$10; Ladies Work, \$9.75	111 75	241 75 16 17	
" Working Expenses.		20 33	278 25
Balance in hand			48 45
King.			
Dr. To balance in hand, as per last Annual Report.  "Members' Subscriptions  "Admission Fees to Exhibition.  "Legislative Grant from Electoral Division Society.  "Municipal Grant.  "Donations.  "Miscellaneous	\$ ets. 71 88 153 00 19 30 140 00 29 83 79 50 18 00	\$ cts.	\$ ets.
Cr. By Prizes for Horses, \$96; Cattle, \$28; Sheep, \$47; Pigs, \$12; Poultry \$6.25	189 25		511 51
Work, \$32.25; Ploughing Match, \$31.10	170 60	359 85 3 00 24 50 38 05	425 40
Balance in hand			86 1
200200000000000000000000000000000000000			

Note.—The weather on the show day was extremely unpropitious, and consequently affected the exhibition very seriously. The number of entries was 583, several of which never came forward.

# Whitchurch.

Dr.	\$ ets.	\$ ets.	\$	cts.
To balance in hand, as per last Annual Report	295 66			
" Members' Subscriptions	217 00			
"Admission Fees to Exhibition	221 90			
" Legislative Grant from Electoral Division Society	140 00			
" Municipal Grant	$36 \ 46$			
" Markham Agricultural Society	<b>3</b> 31 00			
" Contributions	135 00			
" Surplus N. York Union	56 91			
Cr.		]	1,433	3 93
By Prizes for Horses, \$203; Cattle, \$67; Sheep, \$78; Pigs,				
\$42; Poultry, \$24.25	414 25			

		\$ 0	ets.	\$	cts.	\$	cts
Ву	Prizes for Grains and Seeds, \$62; Roots and other hoed crops, \$33.50; Dairy Products, \$39; Fruits, \$12.75; Vegetables, \$10.50; Agricultural Implements, \$45; General Manufactures, \$58.50; Fine Arts, \$47.50;						
	Ladies' Work, \$49.25; Ploughing Match, \$31.10	389	10				
		803					
	Unpaid	122	30	681	05		
"	Prizes for previous years paid Surplus of Markham Society Printing and Advertising, \$75.40; Musical Bands, \$25 Working Expenses			6 $117$ $100$ $147$	00 67 40 66	1,052	78
	Balance in hand,					381	15
`	YORK, EAST.	S	ata	\$	cts.	\$	ata
)r. 'o	Balance in hand, as per last Annual Report	672		Ð	CLS.	Ф	ULS.
	Members' Subscriptions Admission Fees to Exhibition.	492 856					
66	Legislative Grant, \$700; Municipal Grant, \$125	825 (					
66	Donations and Special Subscriptions  Donations and Subscriptions to Poultry Show	$\frac{496}{31}$					
	Rent of Stands, Pens, &c	155					
r.	Prizes for Horses, \$630; Cattle, \$300; Sheep, \$119;				2	,537	51
•	Pigs, \$87; Poultry, \$142	1,278	00				
66	Prizes for Grains and Seeds, \$120; Roots and other hoed crops, \$50; Dairy Products, \$173; Fruits, \$50; Vegetables, \$47; Agricultural Implements, \$166;						
	General Manufactures, \$180; Fine Arts, \$60; Ladies' Work, \$150; Music, \$50						
"	Portion of Legislative Grant paid to Township Society		<u></u> 2	,424 412	_		
6	Exhibition Building			50			
66	Printing and Advertising			153	03		
	surer and Assistants			231		0.50	90
					3	3,270	00

In the Spring this Society held a Show of Stallions and Bulls, also a Show of Poultry on the Fair Grounds, Markham Village. The show of Stallions and Bulls was successful, as is usual in this Riding; the Poultry Show was the great feature of the day, the finest specimens of poultry in the Province being on exhibition.

In October the Fall Show was held on the Society's grounds, Markham Village, the

number of entries increasing over any former year.

The show of Horses was good, every class from the Thoroughbred to the Heavy Draft was well represented. The show of Cattle was very good, especially the Durham Class, Sheep, Pigs, and Poultry excellent.

The show of Grains, Seeds, Roots, and Vegetables, the varieties of which were excellent.

Wheat exceedingly good.

The show of Farm Implements—greater in number, better in quality, and with all the modern improvements combined, made this the best display by far ever made in this Riding.

The show in the Agricultural Hall was all that could be desired, the ladies' class

deserves to be especially mentioned, as their handiwork was excellent.

Your Directors this year largely extended the Prize Lists for both Spring and Fall Fairs, as will be seen by the financial statement, the amount paid in prizes this year being

upwards of six hundred dollars over any former year.

This year your Directors interviewed the Directors of the Board of Arts and Agriculture respecting the Provincial Ploughing Match; delegates were appointed by this Society, and it was arranged to hold the ploughing match in Scarboro', on the farm belonging to Hugh Clark, Esq., this Society granting one hundred dollars.

The ploughing match came off on the 21st day of October, and was one of the most successful ever held by the Provincial Board; the Township of Scarboro' also contributed fifty dollars. After paying all prizes and expenses attending the match, twelve dollars was

returned to this Society, being proportionate share of profits.

Your Directors cannot close their report without referring to the gentlemen who so generously presented the Society with gifts and money for prizes during the year, nearly five hundred dollars being presented for that purpose.

Markham.						
Dr.	\$	cts.	S	cts.	S	cts.
To balance in hand, as per last Annual Report	632	34				
"Members' Subscriptions	166	00				
" Legislative Grant from Electoral Division Society	140	00				
" Municipal Graot	25	00				
" Agricultural Hall Company, 1874	22	00				
" Proceeds of Exhibition	107	93				
Cr.				,	1,093	27
By Printing	5	50			_	
" Postage, &c	4	00				
" Paid on account of Union Show	331	00				
					340	50
Balance in hand					752	77

NOTE.—The Society united with Whitchurch for a Fall Show, which, though the weather was unfavourable, was successful.

Scarborough.			
Dr.	\$ cts.	\$ ets.	\$ cts
" Members' Subscriptions	247 00	"	
" Admission Fees to Exhibition	77 50		
" Legislative Grant from Electoral Division Society	50 00		
" Municipal Grants	280 00		
Cr.			654 50
By balance due the Treasurer, as per last Annual Report		36 60	
"Prizes for Horses, \$80; Cattle, \$69; Sheep, \$24; Pigs,		:	
\$10; Poultry, \$4.50	187 50		
" Prizes for Grains and Seeds, \$26; Roots and other hoed			
crops, \$23; Dairy products, \$19; Fruits, \$13.50;			
Vegetables, \$8.50: Agricultural Implements, \$12;			
Ladies' Work, \$42; Ploughing Match, \$50	194 00		
		381 50	
" Exhibition Buildings		16 00	

By Printing and Advertising, \$26; Musical Bands, \$34 "Working Expenses		\$ cts. \$ cts. 60 00 60 35
VADE WEST		
To balance in hand, as per last Annual Report To Members' Subscriptions "Legislative Grant \$700; Municipal Grant, \$125. "Miscellaneous Cr. "Prizes for Horses, \$134; Cattle, \$42. "Prizes for Agricultural Implements	\$ cts. 435 54 168 00 825 00 18 00 176 00 66 00	\$ cts. \$ cts.
Prizes for previous years paid.  "Portions of Legislative Grant paid to Township Societies  Paid balance to Vaughan Society for Union Show.  For Agricultural or Horticultural Publications  Printing and Advertising.  "Working Expenses		242 00 10 00 412 50 383 83 4 00 19 00 71 45 
Balance in hand		303 76

NOTE.—The Society united with Vaughan for a Fall Exhibition at Woodbridge, which was very successful as a whole, particularly in horses, cattle, and implements.

# Etobicoke.

Dr.		8	cts.	\$	cts.	\$	cts.
To	Balance in hand, as per last Annual Report	24	20				
66	Members' Subscriptions	167	00				
6.6	Admission Fees to Exhibition	102	40				
06	Legislative Grant from Electoral Division Society	165	00				
66	Municipal Grant	80	00				
46	Rent of Grounds	32	00				
4.6	Specials	197	00				
Cr.						767	60
$\mathbf{B}_{\mathbf{V}}$	Prizes for Horses, \$141; Cattle, \$23; Sheep, \$60; Pigs,						
	\$26; Poultry, \$10	260	00				
66	Prizes for Grains and Seeds, \$46; Roots and other hoed						
	crops, \$27; Dairy products, \$44; Fruits, \$24; Plants						
	and Flowers, \$3; Vegetables, \$20; Agricultural Imple-						
	ments, \$50; General Manufactures, \$14; Ladies'						
	Work, \$42	270	00				
	, -			<b>5</b> 30	00		
By	Exhibition Buildings			40	77		
	Printing and Advertising, \$26.86; Musical Bands, \$20			46	86		
•	Working Expenses			109	50		
	0 1					727	13
				3			
	Balance in hand					40	47

Dr. To Balance in hand, as per last Annual Report  "Members' Subscriptions  "Admission Fees to Exhibition  "Legislative Grant from Electoral Division Society  "Municipal Grants  "Balance from West York on Union Exhibition  Cr.  By Prizes for Horses, \$192; Cattle, \$149; Sheep, \$66; Pigs, \$30; Poultry, \$16.50  "Prizes for Grains and Seeds, \$26; Roots and other hoed crops, \$16.50; Dairy products, \$36; Fruits, \$7; Vegetables, \$6.50; Agricultural Implements, \$71; General Manufactures, \$34.50; Fine Arts, \$22; Ladies' Work, \$69; Ploughing Match, \$122  "Prizes for previous years paid  "Exhibition Buildings and Grounds  "Printing and Advertising, \$33.13; Musical Bands, \$25.00  "Working Expenses, including services of Secretary, Treasurer	\$ cts. 331 36 239 00 652 55 140 00 75 00 283 83 453 50	\$ cts. \$ cts.  1,821 74  864 00 62 00 67 54 58 13
and Assistants  Balance in hand		$ \begin{array}{c} 155 \ 57 \\ \\ \hline                            $
York,		
Dr. To Members' Subscriptions "Legislative Grant from Electoral Division Society	\$ cts. 88 40 165 00	\$ cts. \$ cts
Cr. By Exhibition Buildings  "Miscellaneous  "Paid Toronto Society for Union Show  "Working Expenses, including services of Secretary, Treasurer and Assistants	30 00 50 00 125 00	253 40
Butte and Hobistanto	43 33	248 33
Balance in hand		5 07

Note.—The Society united with that of Toronto in holding a Fall Exhibition.

# APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

# APPENDIX (B.)

REPORT OF THE COUNCIL OF THE AGRICULTURAL AND ARTS ASSOCIATION OF ONTARIO FOR 1875-6.

# THE PROVINCIAL EXHIBITION OF 1876.

Office of the Agricultural and Arts Association of Ontario,

Toronto, January 20th, 1877.

To the Hon. S. C. Wood, Commissioner of Agriculture, &c., &c.

SIR,—I have the honour, on behalf of the Agricultural and Arts Association, to present the following brief Report of the results of the late Provincial Exhibition, held at Hamilton as required by Statute,—showing what progress has been made in the different classes of the Exhibition, as compared with the Exhibitions of other years.

Although being the year of the Centennial Exhibition at Philadelphia, and a year of extreme dullness financially, and also a very dry season, the Exhibition has been on the

whole quite as successful as formerly.

The entire number of entries in all the classes was 10,011, being an increase of 2,297 over the Exhibition of 1872, which was held in the same place, and 2,693 over the last Exhibition held at Ottawa in 1875. The amount offered in prizes was \$18,237.00 against \$16,996.50 at Ottawa in 1875; \$16,640.00 at Toronto in 1874; \$16,016.00 at London in 1873; and \$16,092.00 at Hamilton in 1872.

The amount actually awarded in prizes was \$15.631.50, against \$14,651 in 1875; \$14,-

070 in 1874; \$13,797 in 1873, and \$13,142 in 1872.

I beg to submit the following synopsis of the amount of competition in each Depart-

ment, as shown by the number of entries compared with previous years :-

Horses.—In all the classes of horses there were 928 entries, against 429 in 1875; 760 in 1874; 847 in 1873; and 680 in 1872. A number of very valuable animals were shown, which were imported since the last Exhibition, more especially of draught horses.

Cattle.—In all the classes of cattle there were 484 entries, against 587 in 1875; 595 in 1874; 847 in 1873; and 677 in 1872. A large number of the animals shown were of

recent importation, more particularly of the Short Horn class, and I may safely say that the cattle shown in all the different classes are generally improving in quality.

Sheep.—In all the classes of sheep there were 887 entries, as against 502 in 1875 580 in 1874; 868 in 1873; and 760 in 1872. A large number of which were recently imported, and of good quality.

Swine.—In all the classes of swine there were 230 entries, against 208 in 1875; 246 in 1874; 361 in 1873; and 280 in 1872; all fof the specimens on exhibition being very fine

Poultry.—In this class there were 985 entries, as against 582 in 1875; 823 in 1874; 607 in 1873; and 528 in 1872.

Implements.—In all the classes of machinery, implements and tools, there were 430 entries, against 349 in 1875; 486 in 1874; 466 in 1873; and 430 in 1872. A vast improvement in the character of the Exhibition was apparent, as compared to previous Exhibitions.

Agricultural Products.—In the classes of grains, seeds and roots the Exhibition was rather below the average compared to former years, caused, no doubt, by the very dry season. In the classes of dairy products, honey, bacon, domestic wines, &c., the entries were large and excellent in quality.

Horticultural Products.— In horticultural products, consisting of fruits, garden vegetables, plants, flowers, &c., the entries were 2,150, against 1,579 in 1875; 1,599 in 1874; 1,858 in 1873; and 1,797 in 1872. This being the centre of the fruit-producing district of our Province, the entries were large, and the display really magnificent.

Arts and Manufactures.—In the arts and manufactures department were exhibited cabinet ware, carriages, chemical manufactures, fine arts, groceries and provisions, ladies' work, machinery, manufactures in metals, musical instruments, sewing machines, natural history, paper, printing, saddlery, shoemakers' work, leather, woollen, flax, and cotton goods, furs, &c. There were 2,768 entries, as against 2,042 in 1875; 2,387 in 1874; 1,989 in 1873; 1,669 in 1872. The exhibitors in all these classes are deserving of all praise for the very creditable display made by them, some of the articles being of more than ordinary excellence.

#### THE FINANCIAL RESULTS.

In its financial results the Exhibition was highly satisfactory. The total amount received for members' subscriptions, rent of refreshment booths, rent of stables and stalls, sales of forage, admission fees, and materials sold after the exhibition was \$13,687.93, as against \$12,603.98 in 1875; \$22,613.88 in 1874; \$19,346.36 in 1873; and \$16,261.77 in 1872.

I cannot close this Report without mentioning the very great loss the Association has sustained since the last Exhibition by the death of its Secretary, the late Mr. Hugh C. Thomson, who was a most efficient and painstaking officer, and very highly esteemed for his very many good qualities by all the members of this Council.

I have the honour to be,
Sir,
Your most obedient servant,
IRA MORGAN,
President.

RESULTS of the Exhibition of 1876, showing the Amount offered in Prizes, the Amount Awarded, and the Number of Entries in each class; also, the Number of Entries in 1875, 1874, 1873, and 1872.

	STREET, SQUARE STREET					-		
CLASSES.		Amount offered, 1876.	Amount Amount offered, 1876.	Number of Entries, 1876, Hamilton.	Number of Entries, 1875. Ottawa.	Number of Entries, 1874. Toronto.	Number of Entries, 1873. London.	Number of Entries, 1872. Hamilton.
		3+0	5					
Tomosi Tromosi		346 00	338 00	04	22	32	25	24
horongn-bred morses		200 000	601 00	308	124	137 /	G F X	0.76
Koadster Horses		218 00	551 00	996	88	161	919	200
Carriage Horses		00 687	00 687	50%	110	277	194	171
Agneultural Draught Morses		00 757	00 305	110	į 5	153	115	123
Heavy Draught Horses		455 00	433 00	291	191	928	333	569
Durham Cattle		00 042	00 002	707	107	44	3.4	34
Hereford Cattle		00 6gg	00 629	T+6	9 E	7	08	7.5
Devon Cattle		550 00	389 00	7.9	To ,	7 1	00,	- 10
Armehina Cattle		613 00	288 00	S	150	Ter	18T	#CT
College Cottle		495 00	430 00	200	71	33	43	7.1
anna anna anna anna anna anna anna ann		00 383	00 835	000	09	27	96	3
L'Grade Cattle		00 007	204 00	146	9	30	73	33
orking Cattle		330 00	300 00	/e F	0 10	720	910	919
*Cotswold Sheep.		403 00	543 00	681	S. }	GQT,	212	2172
Laloester Sheen		343 00	343 00	298	161	148	349	777
		319.00	310 00	160	74	45	97	20
Incom Sucep		00 000	00 006	157	. 3.	104	68	106
Southdown Sheep		00 007	00 000	97	3	96	30	9.4
Shropshire and Hampshire Sheep		128 00	128 00	20	177	0.00	200	27
Merino Sheep		101 00	104 00	22	27	200	90	3 6
		00 96	00 09	30,00	64	**	55	00
rate bucch		166 00	901 00	<del>7</del>	69	78	145	135
serksille i gs		1100 000	146.00	OF.	30	100	64	55
Suffolk Figs		00 017	00 051	2 3	000	F6	30	38
Essex Pigs		1:40 00	00 OFT	77	000	107	08	35
Breed Pigs.		146 00	174 00	XX.	S	C†	600	0.0
Varkahira and other Large Breed Pies		146 00	180 00	44	555	30	60	CT
The Deland Come to		95.4 50	984 00	440	273	374	1000	002
7		00 107	000 1200	1	508	) 677	700 -	070
Asiatic Fowls, Inrieys, (1968e, &c.	«ć	707 00	00 107	1000	000	100	7.8	
Agricultural Implements, for exhibition only	mly			62.1	60	POT -	-	
Do Power Do		260 00	306 00	123	10.1	233	228	312
				) 86 08	101	2		1
1/				88	99	153	160	118
DO (Traine)				5 6	02.20	8F6	107	<del>1</del> 67
Field Grains, Hops, &c				7 5	12	2 2 2	8	7.5
Seeds, Peas, &c				To a	17	000	200	23%
Wield Roots Hoed Crops, &c.				314	470	236	403	nne
in the second se				314 )	e c	001	168	100
Dany Froduce				36	137	FOT	0#T	777
gar, Bacoll, &c				688	100	3	76	98

RESULTS of the Exhibition of 1876, &c.—Concluded.

CLASSES.	Amount offered, 1876.	Amount awarded, 1876.	Number of Entries, 1876. Hamilton.	Number of Entries, 1875. Ottawa.	Number of Entries, 1874. Toronto.	Number of Entries, 1873. London.	Number of Entries, 1872. Hamilton.
	& cts.	& cts.	ç	9	G.	G E	0 10
Fruit (Professional List)	263 00	157 00 223 00	3 gg	377	544	712	269 695
Do do	299 00	279 00	425	280	396	345	430
Garden Vegetables	184 00	177 00	445	579	399	517	458
Plants and Flowers.	293 50	253 00	560	245	188	231	158 178
Fine Arts (Oil Paintings, &c.)	294 00	397 90	317	210	138 868 868	66I	338
	269 00	222 00	98	55			
Paner. Printing. Pennanship. &c.	128 00	83 00	- OS:	41	49	45	40
Chemical Manufactures, &c.	119 00	20 00		52	41	40	50
Natural History	258 00	146 00	ਜ ਜ ੍ਹ	17	19	- 82.88	18
Ladies' Work (Braiding, &c.)	160 00	125 00	355	281	424	262	147
Do (Flowers, Hair, Moss, &c.)	155 00	157 00	401	747	200	8cT	- C.
Cabinet Ware &c			8	22	130	75	200
Carriages, Sleighs, &c.	286 00	252 00	120	163	88	180	22
Building Material, Pottery, &c.			59	45	54	27	7.5
Machinery Castings and Tools			245	179	264	145	601
Metal Work, including Stoves			398	247	98T	001	254
Sewing Machines			£ 22	67	1 %	8 3	. <del> </del>
Shoe and Bootmakers' Work Leather &c	00 676	145.00	និ	38	64	70	17
Wearing Amerel Flav and Cotton Goods			617	84	199	100	20 F
Woollen Goods			109	134	∑ 65 <u> </u>	671	Top
Groceries and Provisions			98	16	48	69	92
Band Competition				ಣ			
	18,237 00	15,631 50	10,011	7,318	8,162	8,920	7,714

# PRESIDENT'S ADDRESS.

(Ira Morgan, Esq.)

Gentlemen,—The season for holding the Provincial Exhibition having again come round, finds me in the position of President of the Agricultural Association, and expected to deliver in your hearing the annual address on some topics connected with the agriculture of our Province, on its present condition, and on its future prospects. He is a bold man who thinks that he can do this with perfect satisfaction, either to himself or to the people of the Province at large. The subject to be handled is so great, the manifestations of the Agricultural and Arts' Association so extensive, that few men are capable of comprehending them in all their parts, and then giving such a synopsis of our farming operations as shall at once prove interesting and instructive. I can only throw myself upon your accustomed generosity, which I have seen you extend to my predecessors in this honoured chair—to gentlemen intimately acquainted with agriculture, and able exponents of its requirements. I only trust that your courtesy will be extended to me, while I strive, according to my ability, to discourse to you briefly of our common culture, and to pass in review the results and issues of the past year's operations.

#### THE PAST SEASON.

The past season has been one of much care and anxiety. We have had exceptionable times, and singularly exceptionable weather. Harvest operations have been looked forward to with intense interest. The periodical depression of trade through which we are now passing has made it a matter of great importance that there should be an abundant harvest. This not more to inspire confidence, than that there should be a supply of food both for man and for beast. During the spring, in many portions of the country, not only in the eastern sections of the Province and in the Ottawa Valley, but also in the western districts, the wet weather greatly retarded the operations of the husbandman, and seed time was late. The intense heat of the past summer caused fears to become very prevalent that the crops would be short. Our fears, however, have been graciously disappointed by an all-wise and bountiful Providence. The hay crop has been gathered in a good state, and found in the western portion of the Province to be over an average. As a rule, throughout the Province there is an ample supply of this important product, a product essential almost to every farmer, but especially so to our breeders of cattle, many of whom I see around me.

Oats may be said to be a plentiful crop. Barley will scarcely come up to the average—

Oats may be said to be a plentiful crop. Barley will scarcely come up to the average—certainly much below the aggregate production of last year. The warm weather seemed to

colour the crop in a day or two, and it became prematurely ripe.

The staple production of our Province is sadly deficient. Wheat, both winter and spring sorts, is a failure. In some quarters fall wheat was scarcely worth the cutting, and the premature ripening of spring wheat has made a bad sample, it being shrivelled, and at that no great crop.

Potatoes are excellent in quality, though the size and quantity will not stand compari-

son with those of late years.

Turnips and mangel wurzel throughout the Province look splendidly, and promise a magnificent return. On the whole, the Canadian farmer may rejoice; a deficit in the wheat crop there may be, but such a deficiency is amply compensated for by the abundant yield of other cereals and root crops.

#### THE EXHIBITION AT OTTAWA.

I cannot omit mention of the Provincial Exhibition at Ottawa. A consistent advocate for holding it there from the first, I have been amply rewarded for my trouble and anxiety, by sceing it turn out a complete success. As an Association, I believe we will have no room for regret in taking the Exhibition to the Ottawa Valley. The good accomplished has been incalculable. It has shown our people what they can do, how they stand, what is to be done in the future to secure for themselves a forward place in the competitive exhibitions of the

Province. Ottawa, as a farming district, had been so long and so persistently decried that a certain amount of timidity had seized our people, and they were, therefore, backward in presenting what products they had; but on comparing their products with those from the more favoured West, they will more readily enlist every energy to compete for awards in the time to come. My vanity is also flattered when I think that it is generally admitted that the show grounds, for facilities of shipment and transhipment of stock, and adaptation of soil, cannot be surpassed in the Province, while the buildings are a credit not only to Ottawa but to the whole Dominion. It would be invidious to single out any individual connected with the erection of our commodious buildings, but I cannot refrain from mentioning the debt of gratitude we owe to the liberality and breadth of view of my fellow co-labourer—of one whom I am proud to call my friend—I mean the Hon. James Skead, a former President of this Association.

#### OUR POSITION AT THE CENTENNIAL.

As your President in this eventful year, I have had something to do and to say in regard to the Centennial Exhibition at Philadelphia. It is saying little to affirm that our position there among the civilized nations of the earth is a credit to ourselves, and no disgrace to the British nation, of which we now form an important part. The exhibition of cereals and stock proves a matter of astonishment to ourselves. It has turned out to be a wise forethought to have chosen our samples of cereals from last year's crop; they are really splendid, and whether we take the very front rank or not, they will place us in a proud position among the agricultural countries of the world. Much is being done for Canada in bringing her into competition with the grain-producing countries of the world. Not in agriculture only is this true, but our machinists, artists, horticulturists, and dairymen assume a most important and forward position, their respective produce forming the subject of remark and praise to all beholders.

#### HORSES AT THE CENTENNIAL.

It would be premature for me to prophesy what is to be the result of the awards by the Centennial Judges at Philadelphia. The Commissioners, however, having paid the compliment to the Board in appointing me as one of the judges in this class, I may say, without breach of professional etiquette, that our horses stand in the fore rank of those exhibited at the World's Fair. The American horses cannot compare with ours in stoutness of build and power, and almost every one is loud in praise of the splendid exhibit made by Ontario. The liberality of the Government cannot be too much lauded in bringing to the front this Province of ours as a stock-producing country.

#### DELEGATES TO THE CENTENNIAL EXHIBITION.

It has not been in vain that your Board has sent delegates to represent your interests at Philadelphia. I am persuaded that they have done a good work. Indeed, one of the chief benefits arising to Canada from this Exhibition has been, the expressed desire of the Board to be well represented among the exhibitors from every quarter of the world. I took the liberty, in your name, of inviting to the Provincial Exhibition at Hamilton the Centennial Commissioners representing the different nations of the world. For that purpose I circulated a card addressed to each of them, and the presence of a number of distinguished foreigners among us to-day testified, I think, to the judiciousness of the action. It is not for me to say how wise this may be, but I am satisfied that you will act towards the gentlemen who have favoured us with their presence with your usual courtesy and liberality, so often extended to strangers who may be interested in agriculture and its products, thus affording an opportunity of judging of our resources, which no other occasion could offer to our distinguished guests.

#### DISPLAY OF CHEESE AT PHILADELPHIA.

The display of cheese from Ontario at Philadelphia transcends the most sanguine expectations of Canadians. The awards cannot be known for some considerable time, but we entertain no doubt that Ontario will assume that position to which she is so justly entitled as a grazing and milk-producing country.

#### PROGRESS OF THE ASSOCIATION.

In addressing this Association I cannot refrain from paying a just tribute to the manner in which its affairs have in the past been conducted. The efforts made are only now beginning to bear fruit; after years of labour, anxiety and care, it seems as if our Association were assuming and vindicating its rightful place as the leader in agricultural pursuits, and the director of those material and essential interests which exalt a people. Our past efforts have only to be redoubled in the future, and prosecuted with increased diligenceefforts to further the introduction of good stock, the production of the most valuable kindsthe raising of the newest and best varieties of cereals—the encouraging of the most recent and approved methods of culture—the giving of that attention which is due to the teclnical education of the future farmers of the country-and the further developments of the wise arrangements which have already been made for the inculcation of the principles of the veterinary art upon every one who undertakes the raising of farm stock. No impetus in this direction can compare with the exhibition of our products as a farming community at a World's Fair. Our own Provincial Exhibitions are singularly beneficial, but coming into contact with other and older people, presents to us at once our advancement and deficiencies. I don't despair of the future beneficial advancement of our country in agricultural and other pursuits when I witness, as I have just recently done at Philadelphia, what progress we have made as a farming people during the past quarter of a century.

#### EVIDENCES OF PROGRESS.

The neighbouring city of Toronto witnessed a remarkable gathering of agricultural producers and stock raisers during the past fall. I refer "to the proceedings of the Convention of the American Association of Breeders of Short Horus." We know not whether to admire most the courtesy and kindness of our American friends in coming across the lines to discuss with us our common interests, or the boldness of our Canadian breeders in inviting the intelligent, practical and advanced breeders of the States to witness our progress and the state and condition of our present and future prospects. The objects contemplated by this Association have the right ring about them. The breeders of short-horn cat le associate themselves together "for the purpose of encouraging and protecting this important interest, and to increase the average excellence, and provide for the preservation and dissemination in its purity of this matchless breed for the improvement of American cattle." How well these purposes are carried out may be seen from a perusal of the admirable digest which has been published of their discussions—discussions which, we are bold to say, ought to find a place in every farmer's library throughout our country. Much valuable matter relating to stockraising is to be found in the Transactions for 1873-4-5. We notice this meeting of the Convention as it undoubtedly marks a new era in the farming prospects of the Dominion, and as it serves to identify ourselves with those in the United States, who have common aims and common interests. Gentlemen, the evidences of progress appear before you to-day in the magnificent display of stock and agricultural products around us, which will favourably compare, everything considered, with the exhibits of former years.

#### DAIRYMEN'S ASSOCIATION.

We may be said to live in the days of co-operation. Every important interest is less or more forwarded by the united efforts of our fellow men. This, as much in agricultural pursuits as in the secular affairs of every day life. Wonderful strides have been made within the last few years in this direction in cheese making. In fact co-operation has become an absolute necessity. Over the whole Province cheese factories have sprung up everywhere with a mushroom growth, and strange and wonderful have been the results. From the smallest beginnings, this industry has attained to wonderful dimensions. Mr. Ballantyne, of Stratford, stated in Ottawa last winter that the income from cheese alone amounted to the vast sum of six millions of dollars during the year 1875. Such a statement seems all but incredible when we can remember that our markets were mostly supplied from the neighbouring republic, and when farmers did little more than supply their own families, and perhaps the population of their nearest market town, with this commodity. Due praise must be

given to the pioneers in the production of cheese by the factory system; it required no little foresight, no little courage, to risk means, and time, and talent, on an industry which was so new to us, and one the beneficial results of which were yet in the undeveloped future. These cheese factories are working a wonderful revolution in farming. They will prove abundant sources of wealth to the country; being but in their infancy, their future progress cannot be estimated—the good to be derived from them is yet uncalculated.

#### THE OCEAN LIVE STOCK TRADE.

However strange it may appear, Canada is exporting live stock to Britain. The daughter is providing for the aged sire. Of late we have heard much of the introduction of breeds from the British Isles into Canada; now we hear of the payment of the debt, in the profitable return to Britain of British Canadian progeny. The development of this trade needs the building of steam vessels for the special purpose. When this is done, and nothing earried but stock, and every inch of sea space utilized for the conveyance of live stock from shore to shore, then, only then, will the Canadian farmer rep the rich reward of a market, which has been long in coming, but which, now dawning, will yet appear in all the splendour of a bright and happy day of prosperity and wealth.

#### GRANGERS.

One of the most modern developments of farming is, the sudden rise and spread of this potent organization. At first originating in the United States, it seems to have found a conganial soil in the hearts and intellects of our Canadian farmers. The truth is, the organization and its principles are rapidly spreading and taking deep root among us. Some are afraid of its effects, others see in it the salvation of the farming interests of Ontario. We wish God speed to every effort put forth to improve and foster the farming interests. If it need regulation, why let the wise and prudent among us lend a helping hand; if it need encouragement, let the members of our Association look to it that the Grangers receive every encouragement.

#### PLOUGHING MATCHES.

After falling in abeyance for a year or two, ploughing matches have taken a fresh start under the fostering care of our Association. By a wise division of the Province into districts' the whole country derives benefit from these useful and important gatherings. They have been singularly successful in their management, and fortunate in their aims. The good derivable from holding these district ploughing matches cannot be computed. It gives a stimulus to our young men to excel in what is a material part of good farming. A good ploughman is no mean adjunct to a good farm. That which is best administered is best, and good ploughing is intimately connected with good crops. We have sometimes thought that were a medal or award to be offered by our Association for the best mode of cultivating the soil, it would greatly tend to direct increased attention to this art of ploughing, and stimulate our young men to excel not in mere physical, but also in literary productions. We consider that a portion of the legislative grant from the Province cannot be better spent than furthering a taste for good workmanship.

#### IMPROVEMENTS IN AGRICULTURE.

In some districts good farms are allowed to run out. Constant cropping with one kind of cultivation has impoverished the land. We need not, at this time of day, refer you to the necessity of a rotation of crops. This, we believe is felt by every farmer to be a pressing necessity. Its usefulness has been demonstrated for years, and in every periodical laying claim to be the farmer's friend. It is so inconsistent with reason, and with true philosophy, that few now venture to dispute its usefulness. Still, however, a few of our number cling to the old methods, slovenly and suicidal. Were it possible for this Association, by committees of its membership, to take the oversight of this essential condition of good farming all over the Province, we know of no means that would prove more influential for good to the community. Of course it would require great effort, and be accompanied with much trouble, but

poor farming-fields covered with thistles and damaging weeds, damp soil. ill-tilled land, would give place to excellent husbandry, well-cleared fields, earlier crops, and commendable cultivation

#### AGRICULTURAL IMPLEMENTS.

It is a trite remark to make, that we live in a wonderful age. The world has seen the gold, silver, iron, and brass ages—we may be said to live in the mechanical age. So much is this the case, that with the fresh impetus agriculture has recently received, men are beginning to ask what would we have done had no sowing and reaping machines been now in existence. In fact, almost every farming operation is performed by machinery. We have no desire to champion any particular machines, but we cannot but refer to the loss sustained by every farmer who prosecutes his labour after the old-fashioned methods. A machine soon pays for itself in a pecuniary way, and as a lengthener of human life and a preserver of men's health it cannot be overrated. Sowing and reaping machines ought to find a place on every farm. Wheat sown with a drilling machine runs less chance of being winter-killed than when sown broadcast. Grain a day over ripe is an immense loss to the farmer. A reaper and binder enables him to accomplish his harvest in good, because in the nick of time. We have yet to learn what difficulty prevents three or four neighbours from clubbing to buy a reaper in cases where the means of one may be inadequate for the purpose.

Of all farming implements, however, we question if any one is more valuable than a soil or subsoil plough. We fear this has been too frequently overlooked to the great detriment of the farmer. The soil requires constant renewing, and no method is better than by making it renew itself. The yield per acre would be wonderfully increased if this instrument was in more frequent use. With a driller or grubber the farmer's stock of implements would be almost complete. The price of labour would be greatly diminished.

piete. The price of labour would be greatly diminished.

#### THE MANAGEMENT OF LIVE STOCK.

We leave this fertile subject to be ventilated by some future President, more acquainted with this department of agriculture than we profess to be. Should any of those now listening to me, however, be desirous of immediate light on this important subject, we cannot do better than direct his attention to the able, lucid, and telling discussions of the Convention of the American Association of Breeders of Short-horns.

#### MANURES AND PHOSPHATES.

Some one of our members has said, that attention to manuring is the first principle of agriculture. It is the basis of all good husbandry. In these times it has received a large amount of attention. It is impossible to overrate its beneficial influences. It stimulates every department of agriculture. A farmer is unworthy of the name who does not own a large pile of barnyard manure. After all, the stuff a farmer makes himself from the accumulations of his cattle, pigs, and sheep, cannot be surpassed. Manures, green, prepared, and liquid, are the sheet anchor of our Canadian farmers. Japan, a little larger than Great Britain, from the attention given to manures, raises cereals enough for a larger population than that of the British Isles. The amount of valuable manures wasted to-day in Canada, notwithstanding all that has been done to throw light on this subject, would go far to feed double the number of mouths embraced in our Dominion.

#### PASTURAGE.

Intimately connected with manures in the subject of the production of pasturage; top-dressing has not received that attention which it justly deserves. Cheese-making, however, will do much for this branch of successful farming. In the fall well-rotted manure ought to be liberally spread overall pasture, and which by the action of air, frost, and wind will have almost disappeared in spring. The benefits, however, will then only begin to appear, in colour, richness, and growth of grass, and in the increased yield of milk, butter, and fatness. Should this beginning be kept up with a liberal allowance from the liquid manure tank during the heat of summer twice a week, graziers would have less cause to complain of the short

and uncertain crop. In speaking of pasturage, it might not be amiss to say one word about the success attending stall-feeding. In either case the treatment recommended for the growth of pasture will prove satisfactory. House-feeding has many advantages, and were it to be generally practised, would prove a source of immense income to the farmer. We have heard that this mode is very successfully carried out at Bow Park. The mention of top-dressing for pasturage and its benefits leads us naturally to say one word about

#### AYRSHIRE CATTLE.

In this Province, where milk is becoming so profitable an article of farming production, we desire to say how adapted the Ayrshires are for the yield of milk. Their milk, too, is rich both in cheese and butter elements. We make mention of this breed because under the altered circumstances of our country in the various manufactures of the dairy and farm, several enterprising breeders are finding them most valuable animals.

From the cultivation of the land, we have a word to speak about another culture, viz.,

that of

#### FISH CULTURE.

Our Board has representatives from various industries. There is, perhaps, no representation more interesting than that of the representation of the artificial production of fish. Several establishments in Canada testify to the increasing favour with which this industry is beginning to be regarded. Mr. Samuel Wilmot's name will always be associated with the origination of this art in Canada. His indefatigable efforts are telling on the abundance of fish in our lakes and rivers. Soon every suitable stream in Ontario and Quebec will be stocked with the finny occupants of the water. The time is not far distant when the present unproductive streams of our country will become valuable as sources of wealth, and when men will begin to repent that they have been so long blind to the incalculable benefits to be derived from a philosophic pursuit of this interesting branch of industry.

#### ARTS AND AGRICULTURE.

These branches of our association may also be said to be progressing with rapid strides. Few but those who remember the first essay in art presented at our exhibitions, could believe in the advancement made in the last few years. Wealth and civilization make the votaries of art and science, and if we estimate aright the progress of art and literature in our Province, we can only conclude that our country is making rapid advances in all that is humanizing and civilizing among a people. The horticultural interests of the Province are in good hands, under the fostering care of the Fruit Growers' Association. Along with the other material interests of the country, fruit interests have made wonderful progress of late years. A better culture, a larger acreage planted, and a deeper interest in fruit matters, characterize almost every section suitable for the cultivation of fruit. A better class of fruit trees is being disseminated then formerly was the case. Horticulturists are planting fewer varieties and more approved sorts, and much is being done to secure good markets when the fruit has been grown.

Of all the arts, however, there is none that can compare to agriculture. Agriculture is the great fosterer, and is the only stable, permanent, and safe employer of capital. Commerce is liable to the vicissitudes of periodical fluctuations, such as those through which we are now passing; but well cultivated and improved lands always remain a source of wealth. The money invested in agricultural productions is beyond the reach of commercial misfortunes, and benefits alike the present and the future. When all other efforts of industry in this Province have yielded to time—our commerce—our wooden buildings—the apparatus of our fisheries—the horticultural adornments of our dwellings—the products of our mines, the land, reclaimed from the forest and from the red man, will remain the only unchangeable monument of our existence; and the capital thereon expended will have a duration coeval with that of the country. It will endure as permanent riches; and, to sum up all, it is the beginning and the end of national grandeur and wealth.

## APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

## APPENDIX (C).

REPORT OF THE ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO, AND ANALYSIS OF REPORTS OF MECHANICS' INSTITUTES.

ASSOCIATION OF MECHANICS' INSTITUTES OF ONTARIO.

TORONTO, October 2nd, 1876.

SIR,—I have the honour to enclose to you, in compliance with the requirements of the 24th section of the Act relating to Agriculture, a copy of the proceedings of the Annual Meeting of this Association—including the Report of the Executive Committee—for the past year, as held in the City of Hamilton, on the 19th of September ultimo.

I am, Sir,
Your obedient servant,
WM. EDWARDS,
Secretary-Treasurer.

The Hon. S. C. Wood, Commissioner of Agriculture and Arts, Ontario.

Association of Mechanics' Institutes of Ontario.

CITY OF HAMILTON, September 19th, 1876.

The Eighth Annual Meeting of the Association was held this evening at the City Hall, at 7:30 o'clock—the President, James Young, Esq., M.P., in the Chair.

A letter was read from Otto Klotz, Esq., of Preston, expressive of his regret that illness

would prevent his being present at the meeting.

Delegates from the following Mechanics' Institutes presented their credentials, which were approved:

AYR—Henry McLeod and W. D. Watson, Esqrs. Brantford—Rev. A. F. Kemp and W. Watt, Esq. Brighton—Peter Begg, Esq.

Dundas—John Garry and W. Bastable, Esqrs. ELORA—Robert Mitchell, Esq. GALT-James Young, M.P., and Hugh Cant, Esqrs. Hamilton-John R. Holden and John N. Tarbox, Esqrs. HARRISTON—R. S. Lambert, Esq. LONDON-Thos. Green, Esq., and Col. Walker. MILTON-John Dewar, Esq. MITCHELL-M. J. Broderick, Esq. NEWMARKET—E. Jackson, Esq. Paris—Geo. L. Scott, Esq. Peterborough—Rev. V. Clementi. PORT HOPE-Charles Stuart, Esq. PRESTON-Moses A. Abbey and John Clare, Esqrs. RICHMOND HILL-John Duncan, Esq. STRATFORD-W. R. Knox, Esq. TORONTO - Thos. Davison and John Taylor, Esqrs. WOODSTOCK-T. H. Parker and Peter Craib, Esqrs. WROXETER-Alexander Gibson, Esq.

The President, after congratulating the meeting on the large number of delegates present, the satisfactory progress made during the past year, and other features connected with the working of Mechanics' Institutes and this Association, called upon the Secretary to read the Report of the Executive Committee as follows:—

#### EIGHTH ANNUAL REPORT.

In accordance with your wishes as expressed at the last Annual Meeting, your Executive Committee meet you thus early in the Exhibition week, whilst the largest number of the Delegates are supposed to be able to be present, to submit to you a Report of their proceedings.

#### AFFILIATED INSTITUTES.

During the year now terminating, fifty-four Institutes affiliated with the Association by the payment of the five per cent. Statutory fee on their respective legislative grants. The number of Institutes affiliated has been increased from thirteen in the year 1868, to forty; three in 1871, and to fifty-four in the year 1875. The legislative aid for which the Institutes have qualified themselves and received, for the several years respectively,

Was in	1868	\$ 1,610 00					
46	1869	3,307 41					
66	1870	2,943 70					
6.6	1871	12,598 04					
6.6	1872	11,405 96					
46	1873	11,134 96					
66	1874	15,143 00					
66	1875	17,946 34					
1874, the number having	number of Institutes which affiliated from the year 1868 to oth inclusive, was	g to their 23					
Remaining  The number of Institutes which renewed their affiliation in the year 1875, was The number of Institutes which affiliated for the first time, was							
The To 13	otal number new affiliated, is	54					

The following is a list of the Institutes which received legislative aid and affiliated in 1875, and the two previous years:—

	Name.			187		187		187	
			te	\$200	00	\$300	0.0	\$200	
Aylmer	6.6	6.6						330	
Ayr	66	66			0.0	280	00	180	
Barrie	66	66		200		100	0.0	300	
Berlin	66	44		234	72	108	00	400	
Bowmanvi		66						400	
Bracebridg		.6						400	
Bradford	66	4.6	**********	400	0.4		0.0	104	
Brantford	66	66		400		400		400	0.0
Brampton	"	66	*****	200		400		400	
Brighton	66	4.6		148	00	200	00	400	
Brussels	6.6	66	***	400	0.0	4.00	0.0	376	00
Clinton	- 66	6.6		400		400		400	
Colliagwoo		6.6		200		200		250	
Dundas	6.6	66		400	00	400		400	00
Dunville	"	4.6				400			
Durham	66	4.6		200		324		108	
$\mathbf{E}$ lora	66	46		300	00	400		400	
Fergus		66				120	00	400	
Garden Is		66	********		0.0			400	
Grimsby	66	66	**** ** *****		00	134		130	
Galt	66	44		200	00	400		400	
Guelph	46	66			0.0		00	400	
Hamilton	66	66		400	00	400		400	
Harriston	66	66	******			240	00	400	
Hespeller	6.6	66	*****	200				156	00
Kincardin		4.6		169	20	156		106	00
Listowel	44	66				400			
London	66	6.6		300		400		400	00
Meaford	66	46		150	00	300			
Mitchell	66	66			- 0	400	00		00
Milton	66	66	******	400				200	00
Mount For		6.6		400		400	00		
Newmarke		66		80				260	
Niagara	66	66	*****	265		400		323	00
Norwood	66	"		100	00	100	00		
Paisley	"	66						400	
Paris	66	66		200	00	400		400	00
Parkhill	46	66				400	00	400	00
Port Elgin		66	**********	146	00				00
Port Hope		"						400	00
Port Perr		66						200	
Peterboro'		66		400		400			00
Preston		66		400		400			00
Richmond		"		325	74	155		100	
Sarnia	66	"				400		400	00
Schomberg		"		400	00	200	00		
Seaforth	"	"					0.0	400	
Strathroy	"	66	*******			400		313	34
Streetsville		66	**********			400			
Smith's Fa		66	***********	200		150		150	
Simcoe	"	66		400		400	00	400	
Stratford		66		302			0.0	400	
St. Cathar	ines	44		400	00	400	00	400	00
			194	4					

	Name	),		1873.		1874.	1875.
St. Mary's N	Iecha	nics' Insti-	tute	\$400 00		\$400 00	\$ <b>4</b> 00 0 <b>0</b>
	"	66				400 00	400 00
Toronto	66	66		400 00	•	400 00	400 00
Thorold	66	66	******	400 00		400 00	400 00
Uxbridge	66	66	**********	200 00		400 00	400 00
Waterdown	66	66	*******			80 00	
Whitby	"	46		400 00		400 00	
Woodstock	6	66		400 00		$400 \ 00$	400 00
Wroxeter	66	"					400 00

Total grants to Institutes in 1873, \$11,134.96; 1874, \$15,143.00; 1875, \$17,946.34

#### EVENING CLASSES.

The prizes offered by the Association, and the programme of studies and examinations, continued the same as in the previous year. The names of Institutes which organized and conducted classes in accordance with the programme, for the past year, were, Ayr, Barrie, Bradford, Guelph, Hespeler, Kincardine, London, Mitchell, Newmarket, Paris, Peterborough, Preston, Stratford, Toronto, and Woodstock, in all fifteen.

The comparative returns for the past and previous year are as follows:-

Institutes which established classes during the season of 1874-5	15
viously established	4
_	19
Institutes in which classes were established in 1874-5, but not in 1875-6	4
Net total	15

The highest average attendance of pupils at any one Institute, was 104; the lowest 13; the average attendance for the whole of the fifteen Institutes, was 444; or nearly thirty pupils for each Institute. The largest number of teaching meetings held by any one Institute, was 231; the smallest number, 25; the total number of all, 870, or an average of nearly 58 for each Institute. The subjects studied were:—

English Grammar and Composition	by	7 I	nstitutes.
Arithmetic, Geometry, &c		12	66
Penmanship and Book-keeping			66
Practical Mechanics		1	66
Drawing—Geometrical or Freehand			66
Phonography or Phonetic Shorthand			66
Telegraphy			66
Wax Flower Making			66
The average attendance of pupils in 1875-6 was			
" 1874–5	523		
	De	ecreas	e, 79.
The number of teaching meetings in 1875-6	870		,
" 1874–5	772		
	In	crease	98.

The following Table shows the results of the several Classes for the past Season, with the Names of those Pupils who carried off the Association's Prizes.

r.s.					ter		e.									
3rd Prize Winners.	George Caddy	Samuel J. Moore	Edmond Garrett	George Bruce	Morris W. Brewster	Richard Paterson	Herbert Collamore	John Harrison	P. Harding	W. Chambers	George Millar	Alvine Meyer	Hugh Beattie	C. J. Agar	Alexander Ross	
2nd Prize Winners.	E. Linton	John N. Hobley	Donald McNiven	John Inglis	John Limpert	Archibald Kecvil	Prancis H. Latimer	E. Cale	J. D. Townley	William Manson	Alfred R. Clark	John H. Erb	John H. Donaghy	James Young	Edward Bippon	
1st Prize Winners.	George Bell	George McCuaig	Edward Ferguson	John Bryce	Walter Renwick	Charles Rooklidge	Alfred Anundson	W. McLaren	Frank Cook	John Camie	Andrew McFarlane	George Keppele	John S. Scott	Henry Strachan	Malcolm Douglas	
Nos. of the Classes of Subjects taught.	II, III, VII.	II, III, VI.	І, П, Ш.	VI.	п, пт.	I, II, III.	11, 111, VI, VII.	I, II, III.	1, 111.	II, III.	II, III, IV, VI.	III,	1, 11, 111.	$\left\{ egin{aligned} & \text{I, II, III, VI, VII,} \\ & \text{and Short Hand, } \& \\ & \text{Wax Flowers.} \end{aligned}  ight\}$	1, 11, 111.	
Teaching Meetings.	27	50	45	37	33	25	100	54	50	22	7.5	35	50	231	30	870
Average Attend- ance.	16	20	20	13	30	14	75	7	18	20	31	19	14	104	<u>\$</u>	444
Class Opened.	Nov. 1875	Oct. 1875	33	Dec. 1875	Nov. 1875	Jan. 1876	Oct. 1875	Nov. 1876	Oct. 1875	**	"	Jan. 1876	Oct. 1875	3	Nov. 1875	
Institute.	Ayr	Barrie	Bradford	Guelph	Hespeler	Kincardine	London	Mitchell	Newmarket	10 Paris	11 Peterborough	Preston	Stratford	Toronto	Woodstock	Totals
No.	1 -	61	ಣ	4	70	96	2	oc	6	10	11	12	13	41	122	

At the last Annual Meeting it was Resolved "That the Executive Committee, with Messrs. Sweetnam, of Toronto, Crosby, of Richmond Hill, and Allan, of Paris, be a Committee to consider desirable Amendments to the new Agricultural and Arts Act, and to wait on the Commissioner of Agriculture and Arts in reference thereto."

The Committee so constituted met in Toronto on the 10th of November last, with all but one member present. The draft of the new Act was read and considered clause by clause, and several alterations and amendments were proposed, and, by appointment, were at once submitted to the Commissioner, who promised to give the recommendations his most favour-

able consideration.

The Joint Committee also recommended to the Executive Committee to instruct the Secretary to write to the Science and Art Department of the South Kensington Museum, London, for price Catalogues of Objects and Appliances suitable for Mechanics' Institute Evening Class instruction; and also recommended that the Executive Committee offer two prizes of \$40.00 and \$20.00 respectively, for the best and second best Essays on "Mechanics' Institutes, and the best means of improving them." Both these recommendations have been carried out by your Committee. In answer to the application to the Science and Art De-

partment, a number of catalogues have been received.

In answer to the offer of prizes, fifteen essays were received and placed in the hands of Professor Goldwin Smith, Matthew Sweetnam, Esq., and Frederick T. Jones, Esq., who had kindly consented to act as judges in awarding the prizes offered; and a majority of whom adjudged the first prize to Thomas Davison, Esq., President of the Toronto Mechanics' Institute, and the second prize to Richard Lewis, Esq., Teacher of Elocution, &c. &c., Toronto. The prize Essays are published in the September number of the "Canadian Monthly." Your Committee have communicated with the unsuccessful Essayists, who, with one exception, have all consented to a paper being prepared, which will be a complete synopsis of the whole of the Essays, so far as the suggestions therein may be deemed of value or interest to Mechanics' Institutes. The Committee decided to have the whole issued in pamphlet form, and copies of the same will be sent to Affiliated Institutes and to the Essayists. The expense, including the synopsis, will only be \$77.50 for two thousand copies of the pamphlet.

Your Committee indulge the hope that many useful hints and suggestions will be found in its pages, tending to render more successful the efforts of the Directors of Institutes, in their work of educating and improving the industrial classes amongst whom they labour.

The Treasurer's detailed statement shows total receipts for the past year, \$933.76; principal invested at interest, \$900.00; uninvested balance from the previous year, \$198.80; together, \$2,032.56; total expenditure for the year, \$767.40; invested at interest in the Bank of Toronto, \$1,000.00; balance in Bank deposit, on current account, \$265.16.

During the meetings of the Executive Committee, the question of how a portion of the surplus in hand could be utilized for the benefit of the Affiliated Institutes, was on several occasions discussed. It was decided to bring the subject before the annual meeting for consideration, leaving the delegates to decide whether the Executive Committee should be authorized to spend a portion of the surplus in that way or not.

Heretofore, and when the revenue of the Association was small, the Executive Committee audited the Treasurer's accounts. Your Committee have decided to ask the delegates to appoint an Auditor to audit the accounts for the ensuing year, and that such Auditor be

pnid five dollars for the service.

The necessity for a revision of the Arts and Manufactures Department of the Provincial Agricultural and Arts Association prize list, has at different times been considered by your Committee; and they are pleased to notice that through the action of your President, as a member of the Council of the Agricultural and Arts' Association, a great many desirable improvements have been made in this year's list.

All which is respectfully submitted.

James Young, President. William Edwards, Secretary-Treasurer.

Hamilton, September 19th, 1876.

## TREASURER'S DETAILED STATEMENT OF RECEIPTS AND EXPENDITURE

For the year ending September 19th, 1876.

1875.			RECEIPTS.			\$ cts.
Sentember	23.—Special Deposi	t at interes	st Bank of	Toronto		900 00
Сертемьет	" Cash balance in	hand	ou, Dank Or	LOTOHIO		198 80
66	" Toronto Mech.	Institute.	5 per cent.	on grant for	1875	20 00
October	4.—Simcoe	"	"	"	1874	20 00
66	30.—Brantford	66	66	66	1875	20 00
66	" Fergus	46	66	"	1874	6 00
November	5.—Thorold	66	66	"	1875	20 00
66	15.—Streetsvillle	"	6.6	66	1874	20 00
44	17.—St. Catharines	"	66	66	1875	20 00
44	25.—Grimsby	"	"	66	1875	6 50
"	" St. Thomas	"	"	6.6	1874	20 00
46	30.—Strathroy	"	66	6.6	1874	$20 \ 00$
December	2.—Aylmer	"	"	6.6	1875	16 50
"	17.—Wroxeter	66	66	"	1875	20 00
1876.						
January	4.—Bracebridge	6 6	. 66	"	1875	20 00
	18.—Richmond Hill		66	66	1875	5 00
February	2.—Stratford	"	6.6	66	1875	$20 \ 00$
	21.—Ayr	66	66	"	1875	9 00
March	1.—Collingwood	"	6.6	66	1875	12 50
66	13.—Peterboro'	"	"	66	1875	$20 \ 00$
"	30.—Brighton	"	66	66	1875 -	20 00
	31.—Woodstock	"	66	66	1875	20 00
April	6.—Hespeler	"	46	66	1875	7 80
66	10.—Preston	"	66	66	1875	20 00
	11.—Waterdown		"		1874	4 00
May	5.—Port Hope	"		"	1875	20 00
"	9.—Kincardine	"	66	"	1875	5 30
66	11.—Port Perry	"	66	"	1875	10 00
66	15.—Guelph	66	"	66	1875	20 00
66	17.—Milton 22.—Clinton	"	65	"	1875	10 00
"	29.—Garden Island	"	66	"	1875	20 00
<b></b>	" Bradford	(6	"	"	1875	20 00
66	" Barrie	6.	66	"	1875	5 20
June	6.—Newmarket	44	"	"	18 <b>7</b> 5 18 <b>7</b> 5	15 00 13 00
"	12.—Elora	"	66	"	1875	20 00
66	13.—Niagara	"	66	66	1875	16 16
66	19.—Whitby	66	"	"	1874	20 00
66	20.—St. Mary's	66	66	66	1875	20 00
66	27.—Uxbridge	66	64	66	1875	20 00
July	3.—Sarnia	66	66	66	1875	20 00
"	" Brussels	"	"	66	1875	18 80
66	" Seaforth	"	66	66	1875	20 00
"	" Dundas	44	¢¢	"	1875	20 00
46	8.—Brampton	44	66	66	1875	20 00
"	13.—Port Elgin	"	66	66	1875	8 00
66	31.—London	"	66	66	1875	20 00
August	3.—Bradford	"	66	66	1876	20 00
"	20.—Simcoe	66	66	66	1875	20 00
65	30.—Paris	"	"	"	1876	20 00
			108			

			==			=
1876.	R	ECEIPTS.			\$ 0	ots
	1.—Harriston Mech. I		nt. on grant for	r 18 <b>7</b> 5	20	
coptom sor	4.—Parkhill "		66	1875	20	
66	12.—Preston "	46	"	1876	20	00
66	14.—Galt "	66	6.6	1876	20	
.6	15.—Toronto "	"	44	1875	20	
	Accrued Intere	st on Deposit			45	00
					\$2,032	56
				7	#4,004	90
1075		Expenditur	100		\$ 0	ets.
1875.		EXPENDITOR	LEIS.		Ψ	5 612°
November	11.—McLeish & Co., pr	inting account			39	25
	, 1	O				
1876.						
February	10.—John Edwards, sta	tionery account.			7	50
	24.—Mail Printing Co.,	advertising prize	S		7	20
66	" Globe "					45
	" London Advertiser	"				00
66	" Ottawa Citizen	۲۲ ۲۲		• • • • • • • • • • • • • • • • • • • •	5	50
	Prizes to Me	chanics Institutes	s' Evening Co	lasses.		
					20	
					20	
Ayr		****************		**	20 (	
Hespeler		• • • • • • • • • • • • • • • • • • • •	4		20 (	
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	** *******************				20 (	00
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					20 (	
					20 (	
Bradford	(III) ID 1			****	20 (	
July 14.	-Thomas Davison, 1st	prize for essay			40 0	-
Amount 2	Richard Lewis, 2nd	Enalish Doolsasi	lan assaumt fo		$\frac{20}{15} = \frac{0}{8}$	
August 5.	—Hart & Rawlinson, the —Hart & Rawlinson, sta	tionery account	ier, account 10	г 1010 ани 1010	7 5	
Extenses of	f the Executive and the	Special Commit	tee attending	meetings for the		/(/
year		-	_		123 3	0.0
Hunter, Ro	se & Co., for essay pamp				77 5	
Postage and	l money order fees for the	e <b>ye</b> ar			9 5	
Secretary-T	reasurer's remuneration	for the year			100 0	00
Deposit at 1	Interest Bank of Toronto	)		\$900 00		
Sept. 18.—	Deposit at interest, addit	cional		100 00		
0.1.3	7 , 11				1000 0	
Cash in Bai	ak at call	************			265 - 1	16
					2,032 5	56
				-	2,002 6	90

WM. EDWARDS,

Secretary-Treasurer.

It was moved by Mr. Taylor, and seconded by the Rev. V. Clementi, that the report of

the Executive Committee just read be received and adopted. Carried.

It was moved by Mr. Davison, and seconded by Mr. Holden, "That the Executive Committee be requested to consider whether it is not desirable that the Government be asked to pay into the funds of this Association, the amount now paid by them to the various School Inspectors for the inspection of Mechanics' Institutes; and in return for which the Association will appoint one inspector, whose duty it would be to visit the affiliated institutes, to confer with the officers and members thereof, and the inhabitants generally, with the view of promoting the growth and usefulness of the institutes."

On the suggestion of Col. Walker, and others, the following was added to the resolution, "But that no definite action be taken by the Executive Committee in the matter, until it has

been approved of at a future meeting of the Association."

The resolution, so amended, was carried.

It was moved by the Rev. V. Clementi, and seconded by Mr. Jackson, "That such portion of the surplus now in hand, as may by the Executive Committee be deemed desirable, be devoted to the purchase of such objects and appliances as may be suitable for Mechanics' Institute Evening Class instruction, or for suitable technical works of reference for the Institutes' Libraries." Carried.

It was moved by Mr. Begg, and seconded by Mr. Knox, "That John Taylor, Esq., of Toronto, be appointed Auditor of the accounts of the Association, for the ensuing year."

It was moved by Col. Walker, and seconded by Mr. Jackson, "That the distribution of the twenty dollar prize grants to Mechanics' Institutes be left to the local Directors of such, to divide up in such number of prizes as they may find advisable." Carried.

The nomination of Office-bearers for the ensuing year then took place.

The President again stated that he was desirous of retiring from the position of the Presidency; but as the meeting expressed its unanimous wish that he should not do so, the nominations proceeded, and the following gentlemen were elected:

President—James Young, Esq., M. P., Galt, Vice-President—John R. Holden, Esq., Hamilton. Secretary-Treasurer-William Edwards, Esq., Toronto.

Executive Committee—Otto Klotz, Esq., Preston: Erastus Jackson, Esq., New market; Thomas Green, Esq., London; and Thomas Davison, Esq., Toronto.

Mr. Holden, President of the Hamilton Mechanics' Institute, invited the members of the Association to the free use of the Library and Reading Rooms, during their stay in Hamilton.

The meeting was then adjourned.

WM. EDWARDS,

Secretary.

## ANALYSIS

OF

## REPORTS OF MECHANICS' INSTITUTES,

1875-6.

#### AURORA MECHANICS' INSTITUTE.

RECEIPTS.			Expenditure.		
	\$ ct	s.		\$	cts.
Balance in hand	5 8	35	Books bought in accordance with		
Members' Subscriptions	123 -	0	conditions of Grant	162	30
Proceeds from Lectures	27 5	55	Evening classes	65	00
Donations	$32 \ 4$	16	Reading Room		
. Legislative Grant	$200 \ 0$	11	Printing, Stationery and Postage	12	00
Rent of Rooms	140 3	30	Fuel and Light	63	57
Balance due Treasurer	66 5	55	Building, Repairs and Furnishings.	120	00
		-	Insurance Premiums	16	50
	595 7	71		595	71

NOTE.—Members, 123; library, 524 vols.; 25 pupils in arithmetic and mathematics; 23 pupils in book-keeping and penmanship, and 20 in English grammar and composition; 8 periodicals and newspapers in reading-room; 2 lectures; 3 re-unions. Assets, \$2,635; Liabilities, \$166.

#### AYR MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.		
	\$ cts.		\$	cts.
Members' Subscriptions	57 00	Balance due Treasurer	37	12
Fees from Classes	22 00	Books bought in accordance with		
Proceeds from Lectures	57 74	conditions of Grant	171	00
Legislative Grant	180 00	Evening Class	90	00
Sale of Piano, part payment	50 00	Mechanics Institutes' Association	9	00
Miscellaneous	11 98	Books bought other than under the		
Balance due Treasurer	26 - 75	Statute	19	00
		Stationery and Postage	3	00
		Fuel and Light	2	00
		Insurance Premiums	10	00
		Donations	10	00
		Salaries	50	00
		Miscellaneous!	4	35
	405 47		405	47

Note.—Members, 79; library, 1,708 vols.; 23 pupils in arithmetic, mathematics, book-keeping and penmanship, English grammar and composition; 3 pupils in drawing; 2 lectures.

#### BARRIE MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
	\$ cts.		\$ 0	ets.
Members' Subscriptions	118 00	Balance due Treasurer	138	99
Fees from Classes	129 00	Books bought in accordance with		
Prizes	$20 \ 00$	Condition of Grant	52	44
Donations	29 00	Evening Classes	288	16
Legislative Grant	300 00	Reading Room	96	
Miscellaneous	$17 \ 35$	Mechanics' Institutes' Association	15	00
Balance due Treasurer	$62 \ 10$	Books bought other than under the		
		Statute	18	40
		Printing, Stationery and Postage	6	69
		Fuel and Light	3	50
		Prizes	20	00
		Salaries	36	00
	$675 \ 45$		675	45

Note.—Members 91; Library, 571 vols.; 33 pupils in arithmetic; 33 pupils in book-keeping and penmanship; 6 pupils in architectural and mechanical drawing; 20 periodicals and newspapers in reading-room. Assets, \$1286; Liabilities, \$93.

#### BRACEBRIDGE MECHANICS' INSTITUTE.

Receipts.		EXPENDITURE.		
Members' Subscriptions	$\begin{array}{ccc} 2 & 40 \\ 17 & 25 \\ 400 & 00 \end{array}$	Bocks bought in accrdance with Condition of Grant	558 25	
Miscellaneous		Books bought other than under the Statute	16 7 5	29 80 50 40 75
	795 52		795	<u>52</u>

NOTE.—Members, 130; library, 643 vols.; 10 pupils in music; 1 lecture on Irish history and character. Assets, \$714; Liabilities, \$54.

The report of the first year's operations of this Institute is very encouraging; a considerable number of standard works in science and literature has been purchased, forming the nucleus of a library.

#### BRADFORD MECHANICS' INSTITUTE.

Receipts.		EXPENDITURE.		
Balance in hand	$   \begin{array}{ccc}     76 & 00 \\     128 & 00   \end{array} $	Books brought to accordance with condition of Grant	140 119	25
Miscellaneous	2 00	Mechanics Institutes' Association		25
Balance due Treasurer	7 98	Newspapers and Periodicals, bought other than under the Statute Insurance Premium		00 25
	321 70	*	321	70

Note.—Members, 83; library, 637 vols.; 32 pupils in arithmetic, book-keeping, and penmanship; 32 pupils in English Grammer, composition, and mutual instruction. Assets, \$525; liabilities, \$138.

#### BRAMPTON MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.		
	\$ cts.		S	cts
Members' Subscriptions	187 50	Balance due Treasurer	22	19
Proceeds from Lectures		Books bought in accordance with		
Donations	50 00	condition of Grant	278	62
Legislative Grant	400 00	Mechanics Institutes' Association	20	00
Miscellaneous	20 20	Newspapers and Periodicals, bought		
		other than under the Statute	42	75
		Binding Books, Printing, Stationery		
		and Postage	25	50
		Rent, Fuel, Light and Water	168	65
		Insurance Premium	12	
		Cost of Lectures		50
		Miscellaneous	3	90
		Balance in hand	87	19
			-	
	683 30		683	30

Note.—Members, 159; library, 1,285 vols.; 20 periodicals and newspapers in reading-room; 2 lectures. Assets, \$1,347; liabilities, \$50.

#### BRANTFORD MECHANICS' INSTITUTE.

RECEIPTS.	,	EXPENDITURE.		
	\$ cts.		\$-1	cts.
Balance in hand	127 - 55	Books bought in accordance with		
Members' Subscriptions	268 60	Condition of Grant	582	10
Fees from Excursion	171 47	Mechanics Institutes' Association	20	00
Fines and extra Books	73 63	Books bought other than under the		
Legislative Grant	400 00	Statute	46	97
Miscellaneous	11 15	Newspapers and Periodicals, ditto	30	60
		Binding Books, Printing, Stationery		
		and Postage	31	76
		Fuel and Light		00
		Repairs and Furnishings	48	35
		Insurance premiums	15	00
		Rent	75	00
		Salaries	112	50
		Balance in hand	82	12
		-		
1	,052 40		1052	40

Note—Members, 93, Junior Members, 61; library, 2,376 volumes; 17 periodicals and newspapers in reading-room; 1 Excursion to Buffalo and Niagara Falls.

The Institute steadily progresses, and a number of the best works in Science and Literature has been added to the Library, which, with the reading-room continues attractive. More extensive accommodation is required.

#### BRIGHTON MECHANICS' INSTITUTE.

Dividition Middit	intoo intolli oli.	
RECEIPTS.	EXPENDITURE.	
\$ cts.		\$ cts.
Members' Subscriptions 50 50	Balance in hand	43 33
Rent of Room 8 50	Books bought in accordance with	
Proceeds from Lectures 29 39	Condition of Grant	233 48
Donations 5 00	Reading Room	69 30
Legislative Grant 400 00	Mechanics Institutes' Association	20 00
	Newspapers and Periodicals, bought	
	other than under the Statute	5 50
	Stationery and Postage	5 00
	Fuel and Light	2 00
	Insurance Premiums	4 55
	Rent	9 00
	Salaries	24 00
	Balance in hand	77 23
493 39		493 39

Note.—Members, 63; library, 887 volumes; 21 periodicals and newspapers in reading Room; 2 Readings. Assets, \$1,129.

## BRUSSELS MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.		
To 1 1 1	\$ cts.		\$	cts.
Balance in hand	3 53	Books bought in accordance with		
Members' Subscriptions	65 00	Condition of Grant	286	29
Subscribers	11 00	Mechanics Institutes' Association	18	80
Donations	45 00	Books bought other than under the		
Legislative Grant	376 00	Statute	125	02
Miscellaneous		Insurance Premium	9	0.0
		Miscellaneous	2	99
		Balance in hand	61	83
		,		
	503 93		503	93
Note.—Members, 65; library,	616 vols.	Balance assets, \$761.83.		

## CLINTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
Balance in hand	63 71	Books bought in accordance with Condition of Grant	259 233	08
Donations	17 25 400 00	Reading Room Mechanics Institutes' Association Books bought other than under the Statute Stationery and Postage Fuel and Light Repairs and Furnishings	20 15 10 4	00 00 08 70 40
	737 51	Insurance Premiums	8 <b>3</b> 5	00 11 21

Note.—Members, 47; subscribers, 193; library, 1,253 vols.; 20 pupils in arithmetic and mathematics; 10 pupils in book-keeping and penmanship; 6 pupils in English grammar and composition; and from 14 to 52 in ornamental drawing; 35 periodicals and newspapers in reading-room; 1 lecture and 1 concert. Assets, \$1,860.

#### COLLINGWOOD MECHANICS' INSTITUTE.

RECEIPTS.	Expenditure.
\$ c	ts. \$ cts.
Members' Subscriptions	Balance duc Treasurer 200 34
Catalogues 91	
Sale of Papers 22	
Donations	
Legislative Grant 250	
Miscellaneous	Books bought other than under the
Balance due Treasurer 200	
	Binding books, Printing, Stationery
	and Postage 43 95
	Fuel and Light 11 25
	Repairs and Furnishings 10 20
	Insurance Premiums 10 00
	Catalogues 68 30
	Salaries 50 00
	Rent
	Miscellaneous
866	55 866 55

Note.—Members, 127; library, 1,603 vols; 36 periodicals and newspapers in reading-room. Assets, \$2,145; Liabilities, \$188.91.

#### DUNDAS MECHANICS' INSTITUTE.

Dentalis information involved.						
RECEIPTS.	Expenditure.					
Receipts	Balance due Treasurer					
	Bank of Commerce. 300 00 Miscellaneous 7 85					
	Balance in hand					
1,187 01	1.187 01					

Note.—Members, 119; library, 2,775 vols.; 20 periodicals and newspapers in reading room; 1 concert. Assets, \$5,826; Liabilities, \$337.

#### DURHAM MECHANICS' INSTITUTE.

RECEIPTS.  Balance on hand	38 50 108 00	EXPENDITURE.  Books bought in accordance with condition of Grant  Mechanics' Institutes Association Insurance Premiums	120 16 14 45 27	20 00 00 <b>5</b> 5
	289 86		289	86

Note.—Members, 157; library, 501 vols. Assets, \$554.

## ELORA MECHANICS' INSTITUTE.

RECEIPTS.  Balance in hand	244 152 27 6 400	25 03 20 00	EXPENDITURE.  Books bought in accordance with condition of Grant  Books bought other than under the Statute  Binding Books, Printing, Stationery and Postage  Furnishings  Insurance Premiums  Cost of Entertainments  Salaries  Balance in hand	580 72 37 26 17 25 65	cts. 00 54 34 39 70 53 05 70
	850	25		850	25

Note.—Members, 139; Subscribers, 43; library, 2,845 vols.; 2 entertainments. Assets, \$2,946; liabilities, \$40.

## FERGUS MECHANICS' INSTITUTE

Expenditure.
Books bought in accordance with Condition of Grant 624 70
Books bought other than under the
Statute
Cost of Entertainment 15 00 Salaries 19 50
Miscellaneous 4 55 Balance in hand 127 99
845 44
s.40550 -4

Note.—Members, 134; library, 1,255 vols.; 1 literary and musical entertainment. Assets, \$1,887.00; Liabilities, \$25.00.

#### GALT MECHANICS' INSTITUTE

Receipts.		Expenditure.		
	\$ cts.		\$ 0	cts.
Balance in hand	431 23	Books bought in accordance with		
Members' Subscriptions	266 89	Condition of Grant		
Fees from Classes	138 00	Evening Classes	318	00
Legislative Grant	400 00	Reading Room	150	00
		Mechanics Institutes' Association	20	
		Books Bought other than under the		
		Statute	26	00
		Newspapers and Periodicals, ditto	45	10
		Binding Books, Printing, Stationery		
		and Postage	133	91
		Fuel and Light	31	38
	1	Insurance Premiums	8	00
		Salaries	10	00
		Balance in hand	364	22
_		-		
1	,236 12	1	1,236	12

Note.—Members, 162; library, 2,106 vols.; 20 pupils in book-keeping and penmanship, and 20 in architectural and mechanical drawing; 47 periodicals and newspapers in reading-room. Assets, \$3,864.

This Institute continues to make progress, and its library and reading-room are much resorted to, and in addition to a select [collection of works on light literature it has a large number of valuable standard works in science, history, &c.

#### GARDEN ISLAND MECHANICS' INSTITUTE.

RECEIPTS.	EXPENDITURE.
\$ cts.	\$ cts
Members' Subscriptions 260 00	Balance due Treasurer 286 16
Proceeds from Lectures and Exhibi-	Books bought in accordance with
tions 8 70	Condition of Grant
Donations 10 30	Reading Room
Legislative Grant 400 00	-Mechanics Institutes' Association 20 00
Balance due Treasurer 432 25	Printing, Stationery and Postage 10 30
	Buildings, Repairs and Furnishings 106 55
	Salaries
1,111 25	1,111 25

Note.—Members, 68; library, 488 vols.; 31 periodicals and newspapers in the readding room; 17 lectures and 7 readings and musical entertainments; Assets, \$878.00; Liabilities, \$432.00.

#### GRIMSBY MECHANICS' INSTITUTE.

RECEIPTS.  Balance in hand	78 25 97 23 20 00	EXPENDITURE.  Balance due Treasurer	36 (	90 42 00 50 75 00 70
	342 07		342	07

Note.—Members, 88; library, 1,116 vols.; 9 periodicals and newspapers in reading room; 4 readings and concerts. Assets, \$1,553.00

## GUELPH MECHANICS' INSTITUTE.

RECEIPTS,  Balance in hand	Books Bought in accordance with Condition of Grant Evening Classes Reading Room Mechanics Institutes' Association Rent	296 136 150 20 50 2 73 45 18	45 00 00 00 30 48 64 75 66 60
1,038	87	,038	87

Note: Members, 202; library, 2,200 volumes; 12 pupils in architectural and mechanical drawing; 32 periodicals and newspapers in reading room. Assets, \$2.231.

#### HAMILTON MECHANICS' INSTITUTE.

RECEIPTS.         \$ cts.         Balance in hand       646 08         Members' Subscriptions       1,430 50         Rent of Rooms       4,790 75         Legislative Grant       400 00         Bills Payable Discounted       800 00         Building Account       54 55         Sale of Newspapers       72 85         Miscellaneous       25 14	EXPENDITURE.    Sets.
8.219 87	8,219 87
8,219 87	8,219 87

Note.—Members, 887; library, 5,291 volumes; 13 pupils in arithmetic and mathematics; 15 pupils in book-keeping and penmanship; 7 pupils in architectural drawing; 2 in ornamental drawing; 95 periodicals and newspapers in reading room; 2 lectures. Assets, \$48,000. Liabilities, \$17,350.

This Institute is reported to be in a most satisfactory condition, and its library is continually being augmented by the best modern works in history, science, art, mechanics, travels, and biography, and is kept abreast with the current literature of the day in all departments. The Reading Room is kept well supplied with the leading newspapers and periodicals, and is much appreciated by the members. The evening classes, commenced at the beginning of the year, promise to be highly beneficial.

#### HARRISTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
	\$ ets.		\$ cts.
Balance in hand		Books bought in accordance with	
Members' Subscriptions	48 50	Conditions of Grant	505 11
Rent of Rooms		Reading Room	55 98
Proceeds from Lectures		Mechanics Institutes' Association	12 00
Donations	4 00	Buildings, Repairs and Furnishings	11 17
Legislative Grant		Cost of Lectures	28 00
Miscellaneous		Balance in hand	67 80
	680 06		680 06

Note—Members, 81; library, 613 volumes; 21 periodicals and newspapers in reading room; 1 lecture on drawing. Assets, \$624.

#### HESPELER MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
Balance in hand		Books bought in accordance with Conditions of Grant. Evening Classes Reading Room. Mechanics Institutes' Association Stationery and Postage. Fuel and Light. Insurance Premiums Salaries	79 165 58 7 2 1 10 9	93 80 31 29 00 58
		Miscellaneous	$\frac{12}{40}$	80
	388 15		388	15

Note.—Members, 42; subscribers, 70; library, 882 volumes; 36 pupils in arithmetic and mathematics; 33 pupils in book-keeping and penmanship; 15 pupils in English grammar and composition; 12 periodicals and newspapers in reading room. Assets, \$1,450.

#### KINCARDINE MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
Balance in hand       15         Members' Subscriptions       26         Legislative Grant       106	30	Books bought in accordance with Condition of Grant. Reading Room Mechanics' Institutes Association Stationery and Postage. Balance for Books	34 49 5 2	00 50 30 08 01
147	89		147	89

Note.—Members, 34; library, 573 volumes; 27 pupils in arithmetic and mathematics; 22 pupils in book-keeping and penmanship; 27 pupils in elocution; 27 in English grammar, &c.; 16 periodicals and newspapers in reading room. Assets, \$1,102.

#### LISTOWEL MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
	\$ cts.		S	cts.
Members' Subscriptions	200 25	Books bought in accordance with		
Proceeds from Entertainments	56 00	Condition of Grant		34
Donations	209 50	Reading Room	240	15
Legislative Grant	400 00	Mechanics Institutes' Association		00
Miscellaneous	7 94	Books bought other than under the		
Balance due Treasurer	51 05	Statute	57	05
		Periodicals, Printing, Stationery and		
		Postage	25	90
		Repairs and Furnishings	44	00
		Cost of Entertainments	35	00
		Salaries	76	50
		Miscellaneous	3	80
		•		
	924 74		924	74

NOTE.—Members, 68; library, 480 volumes; 40 periodicals and newspapers in reading room; 2 entertainments. Assets, \$500; Liabilities, \$51.

#### LONDON MECHANICS' INSTITUTE.

RECEIPTS.	Expenditure.
\$ cts.	\$ ets.
Balance in hand 72 33	Books bought in accordance with
Members' Subscriptions 218 00	Condition of Grant 265 32
Fees from Classes 70 00	Evening Classes 182 50
Rent of Hall 180 00	Reading-room 226 41
Donations 61 16	Mechanics Institutes' Association 20 00
Legislative Grant 400 00	Books bought other than under the
Proceeds of Note 250 00	Statute 30 00
Miscellaneous 55 17	Newspapers and Periodicals ditto 25 14
Balance due Treasurer 42 00	Binding Books, Printing, Stationery
	and Postage 51 40
	Fuel, Light and Water 138 99
	Insurance Premiums 49 00
	Interest 159 90
	Salaries 200 00
7.010.00	
1,348 66	1,348 66

Note.—Members, 449; library, 1,501 volumes; 6 lectures and readings; 59 periodicals and newspapers in reading-room. Clear Assets, \$6,242.00.

Evening classes:—

	1875	1876
Arithmetic and Mathematics	47 pupil	ls 32 pupils.
Book-keeping and Penmanship	47 " "	27 - 7
Drawing, Architectural and Mechanical	53 "	46 "
" Ornamental	73 "	58 "
Chemistry and Natural Philosophy	16 "	
Elocution	70 "	24 "
Mutual Instruction	56 ".	30 "

The Institute continues to make progress, and is doing a large amount of good. The accommodation at present is altogether inadequate to its wants, and it has been resolved to erect a new building as specify as possible. The library was increased during the year by 72 new works, and the reading-room continues attractive, and the directors are anxious to to make it and the library as useful and popular as possible. The Institute possesses a Museum containing 145 cases of Natural History.

#### MILTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
Balance in hand	\$ cts. 3 55 84 20 17 00	Books bought in accordance with Condition of Grant Reading-room	269	
Proceeds from Entertainment Donations	94 65 39 26	Mechanics Institutes' Association Books bought other than under the	10	00
Legislative Grant	4 70	Statute Insurance Premiums Cost of Entertainments.	16 36	50 50 65
		Salaries. Miscellaneous Balance in hand	18	00 75 51
	443 36		443	36

NOTE.—Members, 51; Subscribers, 43; library, 1,698 volumes; 6 periodicals and newspapers in reading-room; 1 concert. Assets, \$2,412.00

#### MITCHELL MECHANICS' INSTITUTE.

Receipts.	Expenditures.
\$ cts.	\$ cts.
Members' Subscriptions 100 00	Balance due Treasurer 13 40
Fees from Classes	Books bought in accordance with
Proceeds from Lectures and Con-	conditions of Grant
certs 28 48	Evening Classes 151 00
Donations 100 00	Reading Room 146 54
Legislative Grant 400 00	Mechanics Institutes' Association 20 00
Miscellaneous 2 15	Books bought other than under the
Balance due Treasurer 174 45	Statute 34 00
	Newspapers and Periodicals, ditto 20 00
	Printing, Stationery and Postage 8 90
	Insurance Premiums 4 50
	Salaries 115 18
	Miscellaneous 11 35
841 08	841 08

Note.—Members, 128; library, 600 vols; 18 pupils in arithmetic and mathematics; 18 pupils in book-keeping and penmanship; 18 pupils in English grammar and composition, and 18 in German; 27 periodicals and newspapers in reading room; 4 lectures and concerts. Assets, \$1,000; Liabilities, \$140.

#### NEWMARKET MECHANICS' INSTITUTE.

RECEIPTS.  Balance in hand  Members' Subscriptions	\$ 0	63	EXPENDITURES.  Books bought in accordance with conditions of Grant.		ets.
Fees from Classes.  Proceeds from Lectures and Excursion.  Legislative Grant.  Miscellaneous.  Balance due Treasurer.	126 245 260 5	00 59	Evening Classes Mechanics Institutes' Association. Printing, Stationery and Postage. Repairs and Furnishings. Insurance Premiums Cost of Lectures and Entertainments Salaries. Miscellaneous	13 11 20 14 243 20	00 25 00 25
	718	25		718	25

Note.—Members, 103; library, 927 vols.; 27 pupils in book-keeping and penmanship; 27 pupils in English grammar and composition. 2 lectures; 1 concert; 1 spellingmatch, and 1 excursion. Assets, \$1,000; Liabilities, \$20.

#### NIAGARA MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.	
Balance in hand	\$ cts. 8 62 89 27 39 60 323 20	Books bought in accordance with condition of Grant  Mechanics Institutes' Association Binding Books, Printing, Stationery and Postage  Fuel and Light Salaries.	16 29
	460 69		460 69

Note.—Members, 68; library, 2,398 vols.; 26 periodicals and newspapers in reading-room. Assets, \$3,022.

### PAISLEY MECHANICS' INSTITUTE.

RECEIPTS.		Expenditure.		
	\$ cts.		\$	cts.
Members' Subscriptions	104 40	Books bought in accordance with		
Proceeds from Lectures and Enter-		conditions of Grant	450	00
tainments	46 00	Reading Room	145	50
Donations	244 60	Mechanics' Institutes' Association	20	00
Legislative Grant	400 00	Books bought other than under the		
Miscellaneous		Statute	25	65
		Printing, Stationery, and Postage	10	00
		Fuel and Light	10	81
		Furnishings	4	00
		Insurance Premiums	13	00
		Cost of Lectures and Entertain-		
		ments	10	00
		Salaries	28	00
		Micellaneous	10	69
		Balance in hand	79	97
	807 62		807	62

Note.—Members, 112; library, 509 vols.; 22 periodicals and newspapers in readingroom; 4 lectures and readings. Assets, \$657.

#### PARKHILL MECHANICS' INSTITUTE.

RECEIPTS.			Expenditure.		
	\$	cts.		\$ (	cts.
Members' Subscriptions	86	00	Books bought in accordance with		
Fees from Entertainments	96	52	condition of Grant	472	70
Donations	31	20	Reading Room	164	00
Legislative Grant	400	00	Mechanics Institutes' Association	20	00
			Newspapers and Periodicals, bought		
			other than under the Statute	57	95
			Printing, Stationery and Postage	12	15
			Furnishings	10	20
			Insurance Premium	7	00
Balance due Treasurer	135	<b>2</b> 8	Miscellaneous	5	00
	749	00	•	749	00
		0.	10		

Note.—Members, 86; library, 681 vols.; 14 periodicals and newspapers in readingroom; 1 concert; 2 music and readings. Assets, \$1,150; Liabilities, \$255.

#### PARIS MECHANICS' INSTITUTE.

Receipts.	Expenditure.
Balance in hand       385 41         Members' Subscriptions       210 00         Periodicals sold       36 50         Proceeds from Lecture       24 19         Donations       100 00         Legislative Grant       400 00         Miscellaneous       20 50	Statute   12 44
1,176 60	1,176 60

Note.—Members, 140; library, 2,052 vols.; 37 pupils in arithmetic and mathematics; 37 pupils in book-keeping and penmanship; 37 pupils in English grammar and composition; 30 periodicals and newspapers in reading-room; 1 lecture on spiritualism. Assets, \$3,614.

#### PETERBORO' MECHANICS' INSTITUTE.

Receipts.	EXPENDITURE.
S ets.	\$ cts.
Balance in hand 29 87	Books bought in accordance with
Members' Subscriptions 248 95	condition of Grant 281 38
Fees from Classes	Evening Classes 196 00
Donations 500 00	Reading. Room 105 75
Legislative Grant 400 00	Mechanics Institutes' Association
They come il Count	
Town Council Grant 100 00	for 1874 and 1875
Miscellaneous 67 58	Books bought other than under the
	Statute 6 40
	Binding Books, Printing, Stationery
	and Postage 26 65
	Fuel, light and water 77 31
	Insurance Premium
	Rent 50 00
	Salaries 24 00
·	Loan on Mortgage 500 00
	3 0
	1.1120011-120011
	Balance in hand
1,412 40	1,412 40

Note.—Members, 232; library, 2,019 volumes; 16 pupils in arithmetic and mathematics; 15 pupils in book-keeping and penmanship; 13 pupils in architectural and mechanical drawing; 32 periodicals and newspapers in reading-room. Assets, \$3,525.

The Report gives an encouraging view of the state and prospects of the Institute. The library and reading-room continue attractive, and the evening classes have been fairly at-

tended.

#### PORT ELGIN MECHANICS' INSTITUTE.

RECEIPTS.			EXPENDITURE.		
Balance in hand	7 78 51 160	80 60 00	Books bought in accordance with condition of Grant	8 00 15 50 10 00 20 08	
	299	76		<del>2</del> 99 76	

Note.—Members, 91; library, 902 volumes; 1 lecture. Assets, \$922; Liabilities, \$15.

#### PORT HOPE MECHANICS' INSTITUTE.

	RECEIPTS.		EXPENDITURE.		
		\$ cts.		\$	cts.
Member	rs' Subscriptions	544 00	Books bought in accordance with		
Legislat	tive Grant	400 00	condition of Grant		
Miscella	aneous	13 75	Evening Classes	270	08
			Reading Room	316	85
			Books bought other than under the		
			Statute	90	10
			Miscellaneous	9	40
			Balance in hand	88	66
		957 75		957	75

Note.—Members, 129; library, 240 vols.; 11 pupils in arithmetic and grammer; 18 pupils in book-keeping and penmanship; 18 pupils in architectural and mechanical drawing, and 8 in photography; 16 periodicals and newspapers in reading-room. Assets, \$562; Liabilities, \$40.

#### PORT PERRY MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.		
Balance in hand Members' Subscriptions Proceeds from Concerts Donations Legislative Grant	$9590 \\ 12871$	Books bought in accordance with condition of Grant	309 10	00 40
		Insurance Premiums Cost of Concerts Miscellaneous Balance in hand	.8 55 2	75 00 60
	548 23		548	23

Note.—Members, 100; library, 875 vols.; 3 music and readings. Assets, \$1,636; Liabilities, \$216.

## PRESTON MECHANICS' INSTITUTE.

Receipts.	\$ ets.	Expenditure.	\$	cts.
Members' Subscriptions  Donations  Legislative Grant  Miscellaneous	131 00 221 79	Balance due Treasurer	*28 456 32 99 20	65
		Binding Books, Printing, Stationery, and Postage.  Fuel and Light. Repairs and Furnishings	8 24 10 13 50 14	45 06 90 31 00 73 90
	762 39		762	39

Note.—Members, 81; library, 1,840 vols.; 16 pupils in arithmetic and mathematics; 19 pupils in book-keeping and penmanship; 21 periodicals and newspapers in reading-room; Assets, \$2,972 00; Liabilities, \$224 00.

#### RICHMOND HILL MECHANICS' INSTITUTE.

RECEIPTS.	\$ cts.	Expenditure.	\$	cts.
Balance in hand	W	Books bought in accordance with	Ψ	0000
Members' Subscriptions		condition of Grant	145	00
Proceeds from Lectures and Enter-		Mechanics Institutes' Association	5	00
tainments	30 15	Rent	25	00
Donations	46 00	Cost of Lectures and Entertain-		
Legislative Grant		ments	19	25
Miscellaneous		Salaries	23	53
		Miscellaneous	5	00
		Balance in hand		98
	251 76		251	76

Note.—Members, 69; library, 1,062 vols.; 13 periodicals and newspapers in reading-room; 4 lectures and 1 entertainment. Assets, \$1,501.00; Liabilities, \$40 00.

#### SARNIA MECHANICS' INSTITUTE.

Receipts.		-	Expenditure.		
	\$ ets	s.		\$	cts.
Balance in hand	16 7	3	Books bought in accordance with		
Members' Subscriptions	69 5	0	conditions of Grant	268	00
	169 0	0	Evening Classes	169	00
Rent of Room	17 2	5		150	00
Donations	225 0	0	Mechanics Institutes' Association	20	00
Legislative Grant	400 0	0	Newspapers and Periodicals bought		
Balance due Treasurer			other than under the Statute	58	19
			Printing, Stationery and Postage	5	00
			Repairs and Furnishings	146	15
			Insurance Premiums		25
		ĺ	Old debts	133	33
		_			
	954 9	2		954	92

Note.—Members, 75; library, 350 vols.; 10 pupils in book-keeping and penmanship; 11 pupils in drawing; 19 periodicals and newspapers in reading-room; 1 lecture on English literature. Assets, \$1,422; liabilities, \$100.

#### SEAFORTH MECHANICS' INSTITUTE.

Receipts.  Members' Subscriptions	50 00 123 05 28 70 400 00 100 00 95 30 10 38 88 47	EXPENDITURE.  Balance due Treasurer	101 362 92 248 20 41 21 11 20 10 117 50 50	45 00 81 00 24 18 11 15 00
. 1	,144 48	1	,144	48

Note.—Members, 203; library, 847 vols.; 25 pupils in ornamental drawing; 30 periodicals and newspapers in reading-room; 7 lectures and musical entertainments. Assets, \$1,350; Liabilities, \$71.

#### SIMCOE MECHANICS' INSTITUTE.

RECEIPTS.         Members' Subscriptions       226 5         Proceeds from Lectures       38 9         Donations       44 7         Legislative Grant       400 0         Rent of Rooms       33 0         Cash from Investments       548 1         Miscellaneous       9 2         Balance due Treasurer       254 9	Balance due Treasurer.  Books bought in accordance with condition of Grant  Reading Room.  Mechanics Institutes' Association.  Books bought other than under the Statute.  Newspapers and Periodicals, ditto  Printing, Stationary and Postage  Fuel and Light.  Buildings, Repairs and Furnishings. Insurance Premium.	97 440 150 20 60 50 27 74 355 30	00 00 00 00 77 68 48
	Cost of Lectures	3	00
	Micellaneous	89	
1,555 5	1,5	555	50

Note—Members, 213; library, 549 vols.; 34 periodicals and newspapers in reading-room; 3 lectures and 4 readings. Assets, \$4,550.

This new Institute promises to become very successful. Its new building is both commodious and elegant, having a basement for fuel, a large reading-room with two ante-rooms on the ground floor, and a hall above. The reading-room is amply supplied with the leading newspapers and magazines, which with the works in library cannot fail in refining the intellect, and elevating the moral tone of the community. It is hoped that with the great interest felt by the people of the town in the welfare of the Institute, that the debt under which it labours at present will at no distant date be removed.

#### STRATHROY MECHANICS' INSTITUTE.

Receipts   Sects   S	EXPENDITURE.  Balance due Treasurer. 6 17 Books bought in accordance with condition of Grant 487 73 Reading Room 125 00 Mechanics Institutes' Association 15 45 Books bought other than under the Statute 79 86 Printing, Stationary and Postage 15 18 Fuel and Light 34 20 Buildings, Repairs and Furnishings 115 00 Insurance Premiums 4 00 Cost of Lectures and Entertainments 40 73 Salaries 115 00 Miscellaneous 37 70
1,076 22	1,076 22

Note.—Members, 307; library, 1,249 vols, ; 29 periodicals and newspapers in readingroom; 1 lecture, and 10 concerts and readings. Assets, \$1,876; liabilities, \$64 80.

#### STRATFORD MECHANICS' INSTITUTE.

RECEIPTS.   \$ cts.	EXPENDITURE.  Books bought in accordance with condition of Grant 377 06 Evening Classes 60 55 Reading Room 162 95 Mechanics Institutes' Association 20 00 Binding Books, Printing, Stationery and Postage 74 07 Insurance Premiums 12 50 Cost of Lectures and Entertainments 31 97 Paid Note 200 00 Miscellaneous 17 88 Balance in hand 203 13
1,160 11	1,160 11

Note.—Members, 130; library, 2,174 vols.; 39 pupils in arithmetic and mathematics; 33 periodicals and newspapers in reading-room; 5 lectures and 1 excursion. Assets, \$2,703; liabilities, \$100.

#### STREETSVILLE.

Receipts.	ets.	Expenditure.	(P. n.t.a.
Balance in hand 421 Members' Subscriptions 1	76	Books bought in accordance with condition of Grant Mechanics Institutes' Association Stationery and Postage Insurance Premium Balance in hand	20 00 3 00 15 00
422	76		422 76

Note.—Members, 51; library, 1,363 vols.; 5 periodicals and newspapers in reading-room; 1 lecture. Assets, \$2,538; liabilities, \$47.

The progress of the Institute has been of late much retarded from want of suitable accommodation, and it is expected that the new and commodious premises recently procured, will prove highly beneficial.

#### SMITH'S FALLS MECHANICS' INSTITUTE.

RECEIPTS.			EXPENDITURE.		
Balance in hand	68 15 12	60 00 00 00	Books bought in accordance with condition of Grant Mechanics Institutes' Association Books bought other than under the Statute Salaries Balance in hand	227 7 3 25	18 50 16 00 76
	267	60		267	60

Note.—Members, 68; library, 2,148 volumes; 2 readings. Assets, \$3,135.00

A. 1877

ST	CATHARINES	MECHANICS'	INSTITUTE.

Receipts.	EXPENDITURE.
Sects.   S	Balance due Treasurer
715 58	715 58

Note.—Members, 184; library, 2,223 volumes. Assets, \$2,800.

## ST. MARY'S MECHANICS' INSTITUTE.

SI. MART S MECHANIOS INSTITUTE.				
Receipts.		Expenditure.		
	\$ cts.		\$	cts.
Balance in hand	39 98	Books bought in accordance with		
Members' Subscriptions	293 00	conditions of Grant	438	97
Fees from Entertainment	30 25	Reading Room	150	51
Rent	56 00	Mechanics Institutes' Association	20	
Donations	150 00	Binding books, Printing, Stationery		
Legislative Grant	400 00	and Postage	27	00
Miscellaneous	6 80	Fuel and Light	5	00
		Repairs and furnishings	68	99
		Insurance Premiums	25	00
		Rent	130	00
		Salaries	58	34
		Miscellaneous	2	05
		Balance in hand	50	17
	976 03		976	03

Note.—Members, 294; library, 2,433 vols.; 14 periodicals and newspapers in readingroom; 1 dramatic entertainment. Assets, \$2,341.

#### THOROLD MECHANICS' INSTITUTE

THOROLD MECHANICS INSTITUTE.					
Receipts.		Expenditure.			
	S cts.		\$ ct	S.	
Balance in hand	455 53	Books bought in accordance with			
Members' Subscriptions	134 00	condition of Grant	582 2	:1	
Proceeds from Entertainments		Mechanics Institutes' Association	20 0	0	
Legislative Grant	400 00	Books bought other than under the			
Miscellaneous	41 74	Statute	60 0	0	
		Binding books, Printing, Stationery			
		and Postage	30 6	5	
		Light	8 0	00	
		Insurance Premiums	19 5	0	
		Cost of Entertainments	620 6	1	
		Salaries	16 0		
		Miscellaneous	16 0	0	
		Balance in hand		4	
		_		_	
1	,682 41	1	,682 4	1	

Note.—Members, 186; library, 2,140 vols.; 1 excursion; 1 festival and 4 entertainments. Assets, \$5,109.44. 230 new and expensive books have been added to the library, a new catalogue prepared, and the books extensively circulated.

## TORONTO MECHANICS' INSTITUTE.

RECEIPTS.   \$ cts.	EXPENDITURE.   \$ cts.
18,286 67	18,286 67

Note.—Members, 708; subscribers, 324; library, 8,080 vols.; 116 periodicals and newspapers in reading-room; 6 lectures, and 2 readings. Clear assets, \$24,974.

Evening Classes.				
	1	.875.		1876.
Arithmetic and Mathematics	64	pupils.		pupils.
Book-keeping	40	66	41	٤,
Drawing—Architectural and Mechanical	31	66	41	66
" Ornamental	23	"	16	66
Writing-English Grammer and Composition	70	66	51	46
French	12	66	1.0	66
Phonography	16		16	"
Telegraphy	19	66	14	66
Wax Flowers	6	66	4	
			191	64
Total	281	6.6	191	

#### LIBRARY.

Number of volumes issued during the year, 34,205. Average number to each subscriber, 31 volumes.

	Volumes n Library.	Issued during the year.
Biography	642	444
Fiction	2,688	27,164
History	659	489
Miscellaneous	564	500
Poetry and Drama	195	68
Periodical Literature	1,102	3,155
Science and Art	530	969
Voyages and Travels	590	1,291
Works of Reference and Special	901	98
Religious	209	27
	8,080	34,205
	0,000	04,200

#### THE SEVENTBENTH SESSION OF THE EVENING CLASSES.

The past session of this most important department has not been so successful in point of the number of pupils as the Committee would have wished, and the able staff of teachers could have conducted. The number of pupils enrolled was 191, and the decrease has arisen from three distinct causes: 1st, The impossibility of procuring suitable class-rooms; 2ndly, The competition arising from the free classes of the College of Technology; and 3rdly, The

depression of trade.

The attendance, conduct, and progress of the pupils have been all that could be desired, many of the pupils at their examination having received a much larger percentage of marks, than are usually gained by the pupils of the Public Schools, a fact highly commendable to themselves as well as creditable to the teachers. It is much to be regretted that the Institute classes, so highly useful for popular education, cannot be rendered more available to the working classes in consequence of the impossibility of obtaining the requisite accommodation.

## ·RE-PURCHASE OF THE BUILDING AND SUGGESTIONS.

In December last, the Secretary submitted some suggestions to the Board, tending to the improvement and sociability of the Institute. The suggestions were carefully considered, and shortly afterwards a letter was received from the Hon. Mr. Crooks, relative to the Institute re-purchasing the building. A special meeting of the members was convened, when your Directors were empowered to negotiate with the Government for the re-purchase of the building, and to carry out the suggestions of the Secretary as soon as possession of the Music Hall could be obtained.

The negotiations have not, however, been completed, but your Directors believe that they will result in a provisional agreement for the re-purchase of the building, to be submitted to the Legislature at its next session, when the Institution will be placed in a position to effectually carry out its objects, and to give effect to the best wishes and interests of its members.

The large number of persons who have voluntarily expressed their readines to become members, when the smoking, conversation, and games room is established, fully convince your Directors of the ultimate success of the Institute; they believe, with many of our citizens, that it will afford a great and powerful counter-attraction to the many places of public resort, which, unfortunately, do not tend to the moral or mental improvement of the large number of young men in the city, It is believed the proposed additions will promote the sociability and popularity of the Institute, and largely increase the membership. The funds would thereby be provided, whereby the Institute could extend its usefulness, augment the classes, improve and greatly enlarge the library, making it a boon and a credit to our citizens. The ladies' reading and waiting room would also, without any doubt, be largely patronized, there being no such accommodation in the city. The members are assured that no endeavour has been wanting, on the part of the Board, to bring the matter to a successful issue, but which they trust their successors may speedily be able to accomplish.

## UXBRIDGE MECHANICS' INSTITUTE.

RECEIPTS.  Balance in hand	3 167 29 164 51 400 2	00 25 00 00 45	EXPENDITURE.  Balance due Treasurer	27 411 61	25 00 52 00
				91	1.7
			Fuel and Light	11	
			Cost of Entertainments	35	
			Salaries	25	00
			Miscellaneous	11	40
	0.11	C 0		011	62
	944	02		844	0.2

Note.—Members, 165; library, 971 vols.; 19 pupils in book-keeping and penmanship; 17 pupils in architectural and mechanical drawing; 36 periodicals and newspapers in reading-room; 7 readings and music. Assets, \$1,232; liabilities, \$52.

## WATERDOWN MECHANICS' INSTITUTE.

Receipts.		Expenditure.	
Balance in hand Members' Subscriptions Legislative Grant Miscellaneous	$\begin{array}{ccc} 24 & 00 \\ 80 & 00 \end{array}$	Books bought in accordance with condition of Grant	
	124 00		${124\ 00}$

Note.—Members, 23; library, 1,225 vols.; 5 periodicals in reading-room. Assets, \$1,400.

## WALKERTON MECHANICS' INSTITUTE.

RECEIPTS.		EXPENDITURE.	
Members' Subscriptions	38 95	Books bought in accordance with condition of Grant. Stationery and Postage. Furnishings Cost of Lectures Salaries. Balance in hand.	$\begin{array}{c} 4 & 93 \\ 11 & 00 \\ 46 & 25 \\ 5 & 00 \end{array}$
	236 24		236 24

Note.—Members, 142; library, 138 vols.; 9 lectures. Assets, \$190.00; Liabilities, \$20.00.

## WELLAND MECHANICS' INSTITUTE.

RECEIPTS.  Members' Subscriptions  Proceeds from Lectures  Donations	10 90	EXPENDITURE.  Books bought in accordance with condition of Grant	7 70 2 55
	${124} 90$		124 90

Note.—Members, 110; library, 138 vols.; 2 lectures. Assets, \$128.00.

## WHITBY MECHANICS' INSTITUTE.

RECEIPTS.	Expenditure.
Balance in hand 942 57 Members' Subscriptions 225 00 Fees from Classes 15 00 Proceeds from Lectures 19 00 Legislative Grant 400 00 Miscellaneous 90 00	Books bought in accordance with condition of Grant
1,691 57	1,691 57

Note.—Members, 164; library, 1,036 vols.; 6 pupils in architectural and mechanical drawing; 10 periodicals and newspapers in reading-room; 1 lecture. Assets, \$2,126.00.

## WOODSTOCK MECHANICS' INSTITUTE.

Receipts.		Expenditure.				
	\$ cts.		\$	cts.		
Balance in hand	43 11	Books bought in accordance with				
Members' Subscriptions	340 37	condition of Grant	300	55		
Fees from Classes	76 00	Evening Classes	134	47		
Proceeds from Readings		Reading Room	150	00		
Legislative Grant	400 00	Mechanics' Institutes' Association	20			
		Newspapers and Periodicals bought				
		other than under the Statute	48	51		
		Fuel, Light and Water	23	63		
		Insurance Premiums		50		
		Cost of Lectures and Entertainments	33	00		
		Salaries	144	00		
		Balance in hand				
	901 98		901	98		

Note.—Members, 297; library, 2,380 vols.; 38 pupils in arithmetic, penmanship and English grammar; 20 pupils in elecution; 6 pupils in geometry and 8 in algebra; 38 periodicals and newspapers in reading-room; 1 exhibition and 1 reading.

## WROXETER MECHANICS' INSTITUTE.

Receipts.		Expenditure.		
Balance in hand	30 53	Books bought in accordance with conditions of Grant	253	
Legislative Grant	400 00	Mechanics Institutes' Association Books bought other than under the Statute		80
		Miscellaneous	21	25
	456 19		456	19

Note.—Members, 44; library, 567 vols. Assets, \$676.

## APPENDIX TO REPORT

OF THE

# Commissioner of Agriculture and Arts.

## APPENDIX (D).

ANNUAL REPORT OF THE FRUIT GROWERS' ASSOCIATION OF ONTARIO, FOR 1876.

To the Honourable the Commissioner of Agriculture.

SIR,- It gives me much pleasure to submit herewith the Report of the Fruit Growers'

Association of Ontario, for the year 1876.

The past season has been one of peculiar character, producing effects upon our fruits that are seldom noted. The mildness of the winter gave promise of a most abundant crop of fruit of all kinds, but when the autumn came, we found that, taken as a whole, we had not been favoured with our usual abundance of fruit. The plum crop was a failure in all those districts where it is usually most abundant. The crop of pears was also far below the usual average. Apples were more abundant—in some sections exceedingly abundant, but the quality of our apples, taken as a whole, was hardly up to the usual average. On the other hand, the grape crop was large and in more than usual perfection. Small fruits were in general, abundant and fine.

Notwithstanding all these unusual circumstances, we have had a sufficient supply of most fruits, especially the great staple fruit, the apple, to supply our own wants, and to export a considerable quantity. Some of our apples were sent to Nova Scotia, where they

have been much admired for their beautiful appearance and high quality.

We have also been able to make a very creditable display of our fruits at the Centennial Exhibition in Philadelphia. That collection of the fruit of Ontario was matter of great surprise to many thousands of visitors who had never supposed that our soil and climate could produce fruits of such beauty and high quality. The high encomiums passed upon the collection by the judges and by the press, will prove that we hold no mean position in the grand fruit display of the continent. A large number of copies of our Annual Report were distributed to those who were interested in fruit matters, from which the readers will learn that the people and Government of Ontario are not devoid of interest in the collection of fruits. But I must say in justice to those who contributed as they were able, to make up this exhibit of fruit, that it would have been far more satisfactory and complete, had the members known in January instead of July, that such an exhibit would have been undertaken.

On the whole, the work done by the Association during the past year will compare favourably with that of any former year, and the information in regard to fruits and fruit-

culture contained in the report I now have the honour to submit, will be found to be well worthy the attention of fruit culturists throughout the Province.

I have the honour to be, Sir,

Your obedient servant,

D. W. BEADLE,

Secretary of the Fruit Growers' Association of Ontario.

## PROCEEDINGS AT THE ANNUAL MEETING.

The Annual Meeting was held in the Court House, in the City of Hamilton, on Tues day evening, the 19th of September, 1876.

The President took the Chair, and called the meeting to order. The Secretary read the minutes of the last annual meeting. The Directors' Report was then read, which was as follows:—

## DIRECTORS' REPORT.

Your Directors, in submitting their usual annual Report, have the gratification of being able to say that your Society has continued its work of collecting and disseminating information in regard to the cultivation of fruit during the past year with a good degree of success. The Report for this year will contain a large amount of valuable information, and will, no doubt, be prized by all who are interested in these matters, as have those which have been issued heretofore. We expect to be able to give you a coloured lithograph of that already famous new grape, raised by one of our eminent hybridists, P. C. Dempsey, and known by you as the Burnet Grape, as an illustration for our forthcoming Report. As you are already aware, arrangements have been made to distribute this beautiful and excellent grape to all the then members as soon as Mr. Dempsey can furnish a sufficient quantity of the vines.

The meetings which have been held during the year have been well attended. The winter meeting was again held in Hamilton, the summer meeting in London, and the fall meeting is appointed to be held in Simcoe. Norfolk County is well adapted to fruit raising, and we look for a meeting of considerable interest, and to see a display of fine fruit.

After considerable negotiations, your Directors received from the Ontario Government the sum named by your Directors in their last annual Report as the amount that would be required for the purpose of making a display of our fruits at the Centennial Exhibition in Philadelphia. Unfortunately, the grant was not made until just before the July meeting, so that but very little time remained in which to make preparation, and fruit growers did not have that timely notice which was requisite to enable them to grow their fruit specially for this purpose. Your Directors, however, did what they could, according to their best judgment, to collect and exhibit the fruits of the Province. They made a short exhibit of summer fruits in July, including late cherries, currants, gooseberries, and a few raspberries. This prepared the way for the later exhibit in September, which comprised all the fruits then in season. Of these exhibits, it hardly becomes your Directors to say more than that in their opinion they were highly creditable to us, and to refer you to the published expressions of the judges and other distinguished pomologists, in which our fruits are mentioned in terms of high commendation.

We are called to deplore the removal by death of one of our most enthusiastic growers of fruit, who had also served this Association for some years as one of its Directors. Mr. A. B. Bennett was suddenly called away very early in the year, and at the winter meeting the

Association recorded its high sense of his many valuable services to the cause of pomology in a series of resolutions, which were faithfully transmitted to his bereaved family, and by them very gratefully acknowledged.

All of which is respectfully submitted.

On behalf of the Directors,
D. W. BEADLE,

Secretary.

The Report was accepted.

The Treasurer then submitted his Report, which was as follows :-

## TREASURER'S REPORT.

Paid out for expenses of Directors and Committees	\$534 2	24
Illustrations for Report	365 0	()
Telegrams and postage	82 5	
Advertising and printing	78 0	_
	115 0	
Prizes		
Express and freight	5.7	_
Commission for collecting members' dues	42 9	_
Trees and distribution	797 9	18
Clerk	$75 \ 0$	0
Sundries	4 6	12
Sundries Secretary and Treasurer's Salary Secretary and Treasurer's Salary Secretary Salary Secretary Secr	200 - 0	0
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		_
Total 8	32 301 6	11
TOPAT.,,	,001	, 1
Contra.		
Received, by balance from last year	\$24 4	15
	2 0	
by safe of freport		
by members rees	1,398 0	
" by Government Grant	1,000 0	)()
		_
Total	2,424 4	ō

Leaving a balance in the Treasury of \$123.44 to meet sundry unpaid accounts not yet sent in to the Treasurer.

The Treasurer stated that both of the Auditors appointed at the last Annual Meeting had declined to act, and that, consequently, he was unable to present the Auditor's Report. The Treasurer's Report was accepted, and referred to the Auditors to be appointed.

The President read his Annual Address, which was listened to with marked attention, and on motion of Rev. W. F. Clarke, seconded by William Saunders, the thanks of the meeting were given to the President for his very able and interesting Address, and he was requested to allow it to be published with the proceedings of the meeting.

## PRESIDENT'S ADDRESS.

The remarkable and gratifying progress that has been made within the last few years in the art and science of Pomology is in no small degree attributable to the establishment of our horticultural societies, and to the beneficial influences resulting from township, county, and Provincial shows. Every year enhances these salutary results—results which are chronicled by the press with wonderfully good effects to every fruit grower resident in every village, town, and city of our Dominion. A great work has been accomplished by the labours of the Fruit Growers' Association of Ontario, but much remains yet to be done. Few people can calculate the good that has accrued to fruit growers by the interchange of individual experiences at our summer and autumnal meetings—few have estimated the future benefits to arise from the collection and diffusion of these reports as found in the published transactions of our Society. A key is thereby furnished to the relative value of different varieties of fruit in every section of our extensive country, and what are suitable for any particular locality. Our

more recent discussions have brought into prominent notice what new sorts give promise of being worthy of dissemination, which are best for the amateur, and which are adapted to general cultivation. At Belleville we had an array of seedling apples that exceeded the most sanguine anticipations of any of our Directors—varieties well worthy of general cultivation, whether regarded for the excellent quality of the fruit, or for the long-keeping property of the particular apples. Belleville had a new experience for us as pomologists, and we are simply to propagate for patriotic ends every specimen of fruit presented to us likely to benefit our fruit growers. Obstacles there are to overcome in the dissemination of those fruits, and in making them more widely known, but the industry, intelligence, and enterprise of our fruit growers are equal to the task, and having put our shoulder to the plough we are not to look back.

No one can pretend to predict the future of this good work to our country—none can foretell the extent to which it will hereafter contribute to personal and domestic comfort, national prosperity, and material wealth. There can be no doubt that the multiplying of the comforts of pomology, both as respects taste and use, around the homes of our Province, will go far to strengthen attachment to our municipal institutions, and increase to an incalculable extent the joys of home, "promote industrial happiness, the love of kindred and country, and sweeten the social relations of life." Members of the Fruit Growers' Association of Ontario, yours is no mean labour. Your efforts may not be so productive of fruitful results as you might have wished in the past, but a mighty and, we trust, successful future, lies before you. You are to make your instrumentalities felt, and thereby awaken a

spirit of enterprise which shall be felt to the remotest districts of the land.

The past summer has not been a propitious season to the horticulturist. He has had various drawbacks in his work, and chief of these has been the heat, which has for the most part been intense. In early spring, nothing could exceed the promise of an abundant crop. The amount of blossom was something wonderful, but the promise has turned out to be but promise, and little else. Almost all varieties of fruit have suffered from the drought. Indeed, we may say all the small fruits appeared only for the briefest period—they were actually scorched, the very stems and leaves suffering. Here and there was a good crop of strawberries, but on the whole, there was scarcely a medium crop. Raspberries were a miserable failure, and the same may be said of plums and cherries. The latter, in many places, rotted on the tree, or, owing to the wet at the period of their ripening, rotted immediately on being pulled.

Apples and pears are generally a poor crop. In some localities apples are a medium crop. St. Thomas and neighbourhood possess some finely loaded orehards, the apples being plentiful and of a fair size. Generally, however, the crop may be said to be a failure. At Wellington Square, as usual, apples are good and abundant. Here and there throughout the length and breadth of our land are favoured localities, both for soil and climate, where the

fruit grower has received a bountiful return.

The Centennial year will long remain a marked era. Had the event happened in 1875, we as a Province, would have had beautiful samples of fruit for exhibition at Philadelphia. As it is, it must be admitted by the most enthusiastic among us, that our display at the Centennial was not lacking in quantity, but in point of quality and size. Neither of these characteristics came up to the show of fruit at Ottawa last year.

At Philadelphia, there was a general assent among the Canadian and American fruit-growers that Canada had done well, and it must be admitted, our rivals being judges that

we made a fair exhibition.

It is not too much to say that at the Centennial there were powerful competitors. First, among these, and we are inclined to think the foremost, was Nebraska. The apple display of this most important State of the Union, was something grand and remarkable. This, whether taken in its extent or excellence. The sample of fruit was the fairest we have ever witnessed, and the colour the highest. We were curious to know the reason of this, and made inquiries on the point. Some expressed themselves as if the recent culture was the cause—new soil, recently burned over, the fruit grown among the ashes and débris of grass and forest, and the destruction of insect pests. A more reliable theory, however, is perhaps found in the climate of this beautiful State. The air is so pure, the rainfall so slight in the summer months, that both conduce to the production of superb fruit. Mr. Moore, the genial and courteous delegate, was kind and attentive to every one, and earned by his urbanity and kindness, the respect of all who came into contact with him and his col-

lection of fruit. California made a magnificent display. We are not sure that the majority of the visitors would coincide with us in awarding the palm to Nebraska; the fruits of California were indeed superb and varied, but to our mind they stood in the second place. Size and colour were the predominent features of this display. Enormous pears, apples, grapes, peaches, and figs helped us to draw a most favourable conclusion in regard to the fruit-growing capabilities of the favoured section of the Pacific slopes. It would, however, only be the truth to add, in reference to the size of California fruits, that what they gain in size, they seem to lose in flavour. We have often tasted fruits of the same varieties much more exquisitely flavoured than those enormous specimens exhibited at the World's Fair. The taste displayed in the arranging of these fruits ought not to be passed over without one remark. Their huge bunches of grapes, gracefully suspended from a line running the length of their fruit table, added, as I thought, very much to the enhancing of the superb samples below. Iowa is no mean competitor with Nebraska for fruit honours. The only drawback that we could perceive was the "spotting" of the fruit from Iowa. It bore marks of a severe climate, if my theory be the correct one. Otherwise the two States were much upon a par. On such an occasion as the Centennial, it would have greatly tended to advance fruit interests in Canada had a Committee been appointed to taste and make such selections of fruits, and especially of apples, as might prove suitable to our climate and Province. In making a partial enumeration of the State exhibitions, it would be unpardonable to omit mention of that of Massachu The apple and pear display of this State was remarkable. The venerable and Honourable Marshall P. Wilder, as might have been expected, headed the list with 300 varieties of pears. It was a magnificent exhibit, and worthy in every respect of the President of the American Pomological Society. To me this exhibit had a wonderful attraction, and stirred up my pear fancy to its very depths. One regret, and that one of the deepest experienced at the Centennial, was occasioned by the unavoidable absence of the honourable gentleman through indisposition. We are very sure that pomologists on both sides of the line will join us in an earnest heartfelt prayer that he may speedily be convalescent, and long spared to continue to be the enlightened and cultured leader of pomologists. Benjamin B. Smith showed 46 varieties of splendid pears and a goodly variety of large sized apples. The display of seedlings from Clapp's Favourite was well worthy of notice, and arrested attention by their variety and beauty. Hovey, of Boston, fully maintained his old reputation for good, fair samples of pears—the list footed up 175 of fine, fair, full-sized varieties. Time and space fail me to speak of Earle, Robert Manning, J. W. Manning, Newhall, Clapp, whose names are as household words among ourselves. Suffice it to say that Massachusetts maintained ably and well her accustomed place in pomology, and exhibited her fruit growers as still in the front rank as leaders of pomological thought and effort. From Massachusetts, with its happy memories connected with fruit growing, we turn to the admirable display of seedling grapes made by J. H. Ricketts, of Newburgh, N.Y. This gentleman's reputation is so well known that the mere mention of his extensive collection of grapes is enough to direct attention to his hybrid productions. Connecticut and Michigan presented splendid exhibits; among the fruits of the former were cranberries; of the latter, beautiful peaches and plums. Individual collections, however, were as a rule cast into the shade by the magnificent and gorgeous display of Elwanger & Barry, of Rochester, New York. The beauty of their samples, the size and excellence of their fruits, caught the attention of all beholders. I ought not to omit the mention of the quality of their varieties exhibited. The choiceness of their collection is entirely reliable. Nothing but varieties of first-class fruits have a place in their exhibit, and perhaps it would only be fair to add, in their catalogue. Ellwager & Barry are princes in correct taste, and foremost in the cultivation of desirable varieties of fruit-trees.

#### PENNSYLVANIA HORTICULTURAL SOCIETY.

The forty-eighth annual exhibition of this society was held on the 12th, 13th, and 14th September, at the Horticultural Hall, Broad Street, winding up with a brilliant reception on the evening of the 15th, at which the F. G. A. of Ontario was duly remembered and suitably acknowledged.

The fruits on the tables were of the greatest excellence, and the plants and exotics of rare beauty. Here again the Hon. Marshall Wilder took the lead as an exhibitor, with 100 varieties of pears. The whole proceedings of the eventful evening of the 15th forcibly

reminded me of the play of Hamlet being represented without Hamlet himself. The absence of the Hon. Marshall Wilder was ill compensated for by the exhibition on the stage of the portrait of this veteran pomologist, however admirable the likeness. Thomas Melhan's plums were admirable. Amid the dearth of American plums at the exhibitions at which I have been present, it is pleasant to have to notice their cultivation by the most distinguished and philosophical of all fruit culturists in the United States. John Saul, horticulturist, Washington, D.C., exhibited fifty varieties of splendid pears. Bridgeman, Eshelman, Noble, Parker, Balderston, Hadweer, Chamberlain, Ricketts, Purdy, Brooksbank, Holkmake, Froth, Pentland, Brackenridge, Parry and others contributed to make the tables groan with the fair and splendid treasures of Pomona. Felton was almost the only exhibitor of vegetables, and I am satisfied that it would have taken six of his drumheads to make one of those exhibited at our Provincial to-day.

#### OUR PROVINCIAL EXHIBITION.

Hamilton holds her usual pre-eminence in horticulture. I ought, perhaps, to be less invidious, and say Hamilton and neighbourhood. The samples of apples and pears and grapes are all that could be desired. They are perhaps on the small size, but still they unmistakably show the excellence of our soil, climate, and location for the choicest production of fruit crops. I notice that our old and veteran exhibitors muster in full force, and maintain their former reputation. We question if any other district could show specimens so perfect,

large, and fair as those presented on our tables at this Provincial Exhibition.

Every effort has been made by your President, when lately in Philadelphia, to get the Commissioners from foreign countries to visit this exhibition. I may say that the Japanese Commissioner expects to be able to put in an appearance here on this occasion. We, as fruit growers, ought not to fail to draw his attention to our large, valuable, and select collection of fruits. You are aware that they have certain kinds of hardy grapes that flourish in the northern portions of China and Japan, and it might be worth while to attempt to exchange our Canadian varieties with theirs. The facilities of transit are now so great, that what would almost have been a Herculean labour a few years ago is now brought within the range of easy possibilities. I went round personally to all the Commissioners from foreign States, and gave them a cordial invitation to come north and judge for themselves of the extent and productiveness of our fruitful Province.

#### THE PROGRESS OF OUR ASSOCIATION.

I fear the progress of our Association for the last two years has not kept pace with the growing interest in fruit that marks our western country. Several reasons might be mentioned to account for this. In some sections there is dissatisfaction at the failure of the trees and plants that have been distributed. Others again can see in the diminution of the number of our members the severity of the times. Whatever may be the cause, it behooves every member to lend a helping hand to forward the best interests of the F. G. A. of Ontario, and not to flag in their efforts for the truest interests of our Prevince as a fruit-growing interest, till every farmer throughout its length and breadth makes a pecuniary return from a well-cultivated and abundant orchard. Certain changes in the Agricultural and Arts Act have been suggested, and commended to the consideration of the Government, by your directors, which, in due time, I have no doubt will receive their careful attention.

### APPLE CULTIVATION.

This, after all said and done, is the standby of Canadian fruit culture. No fruit product is more important in a sanitary and pecaniary aspect than this. None is so common, and can be so generally cultivated by all. The cultivation of small fruits is important, and making rapid strides among us as truit growers, but all other fruit culture must yield to that of the apple. Even pears, I am sorry to say, must give way to the value of the apple. It would be curious to know what is the annual production of apples throughout the country. Statistics on this head would be invaluable. There is no means, however, of knowing, and on such a subject guessing is in vain. The amount must be something enormous, and yet it is

far below what it should be. There are large districts highly susceptible of fruit raising that are barren of any fruit product. It sometimes startles one to see the lop-sided, decaying fruit trees that stand, like some deserted home, around the poor and ill conditioned homesteads of a class of our Canadian farmers. Such men are not aware of the abundant and efficient means of health they are squandering in allowing such a state of things to exist on their farms. No addition to the farmer's table is more wholesome than the apple. No product he raises so easily brings a return to the family income. An obstacle to apple raising is often presented to me, and consists of the following assertion:-" That attention to the orchard comes at the very time when the farm demands the most care and toil." Now the difficulty is imaginary. Pruning may be done in the fall, when the land is too wet for Trees can be cared for in early spring, in February and March, when other farm labour is mostly in abeyance. Two irons in the fire at the same time, of course, require attention. They can be both attended to. Again, it is asked, what are the varieties to be planted? The answer is ready; plant few, and let these be good varieties. It may be questioned by some that your President is able to give such directions as will lead to beneficial results on these heads. If the apple be planted for profit, then I would say, the fewer varieties planted the better. We can confidently recommend the Roxbury Russet, the Russet of Western New York, the Rhode Island Greening, and Northern Spy. We would like to add the Golden Russet to these, and our profitable winter list would be complete. A great advantage is to be gained in selling when few varieties are cultivated. Buyers like the sorts to be homogeneous. All Roxbury Russets—all Rhode Island Greenings—all Northern Spy. As a matter of course, the above list must be modified according to locality and aspect. Such a list, however, would afford a farmer fruit during a large portion of the year, as it is easy in almost every quarter to supplement his own supply from the earlier varieties cultivated by his neighbours. For pleasure, or for the gratification of the amateur, in addition to what we have already mentioned of winter varieties, we would recommend the cultivation of the Early Strawberry, Early Harvest, Pomme D'Or, Dyer, Early Joe, Red Astrachan, Fameuse, Ribston Pippin, Hawthornden, Maiden's Blush, Colvert, St. Lawrence, Blenheim Orange, Gravenstein, Porter, Alexander, Duchess D'Oldenburgh, Swaar, Autumn Bough, Newton Pippin, Pomme Grise, Swayzie Pomme Grise, Minister, Jonathan, Summer Rose, Red Quarrenden, Swect Pearmain, Seek-no-further, Red Canada, Canada Reinette, Wagner, Peck's Pleasant, Nick-a-Jack, Grimes' Golden, Ribston Pippin, Peach Apple, Cayuga Redstreak, Mother, Tallman, Sweetur's Bourassa, Norton's Melon, Cooper's Market, Braddick's Nonpareil, Marston's Red Winter, Klaproth, Smokehouse, Munson's Sweet, and Shiawassee. We have cultivated a number of these, and are acquainted less or more with every variety mentioned in the list. There are doubtless other apples of great promise, rich in flavour, and worthy of cultivation, but we desire to cut our coat according to our cloth, and only speak to the amateur of those that are of the first excellence. In speaking of apples and a sure guide to good varieties, we are constrained to make mention of a recent edition of a work on apples and other fruits—we mean the "American Fruit Culturist," by Thomas. We know of few books more guarded in their recommendations, or that have presented such judicious selections of first-class fruit. The selection of apples in Mr. Thomas' book is largely new to us, but from what we know of the author we can vouch for his being up to and ahead of the times. These, along with seedlings of less or more worth in the hands of various growers, are apples of great excellence. We do not advise the planting of all of these; far from it; but would suggest that a sufficient quantity of early varieties be planted to meet the early markets; that a judicious choice be made of fall varieties, and that the winter varieties recommended be planted to bring in satisfactory pecuniary returns. Gentlemen, no one can be more aware than I am of my inability suitably to fill, and profitably to you, as fruit-growers, perform the duties of the chair. I have striven never to go out of my depth in the presentation of any facts and recommendations in my annual addresses. You are aware, however, that with the best intentions we are all liable to err. I beg that you will overlook both the matter presented in this address and the manner of execution. I am grateful for your past courtesy and kindness, and would conclude, ministerial-like, in inculcating the most determined and earnest efforts to place our Association in the fore rank of the humanizing and elevating instrumentalities of our Province. For the accomplishment of this result, harmony and mutual forbearance must characterize our actions, and a docility to receive statements of facts and beneficial suggestions from the humblest of our members.

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Above all, an indefatigable industry must mark our plans and efforts for advancing the true interests of our Society; and in due time we shall reap, if we faint not.

"Survey the globe through every zone, From Lima to Japan; In lineaments of light 'tis shown That culture makes the man.

"All that man has, had, hopes, can have, Past, promised or possessed, Are fruits which Culture gives or gave, At Industry's behest."

On the motion of Mr. Saunders, seconded by Colonel McGill, the President was requested to appoint a committee to nominate officers for the ensuing year.

The President appointed Messrs. Holton, Caldwell, Lewis, William Roy, and Rev. W.

F. Clarke

The Committee retired, and subsequently brought in their report, which was read. It was resolved to take the vote on each name in the order in which they stood in the report. The vote was then taken, seriatim, with the following result:—

## OFFICERS FOR THE YEAR.

President. - Rev. Robert Burnet, London.

Vice-President.—Henry Macpherson, Esq., Owen Sound.

Secretary-Treasurer .- D. W. Beadle, St. Catharines.

Directors.—P. E. Bueke, Ottawa.

Colonel J. McGill, Oshawa. Geo. Leslie, Jr., Toronto. John Freed, Hamilton.

Rev. Charles Campbell, Niagara.

Rev. Charles Campbell, Mag R. Melvin, Guelph. Charles Arnold, Paris. Wm. Saunders, London. Rev. W. F. Clarke, Welland.

Auditors.—Robert Roy.

Angus Sutherland, Hamilton.

On the motion of Mr. Saunders, seconded by Col. McGill, it was resolved that the action of the Board of Directors for 1876, recommending that the Secretary-Treasurer of the Association give security, satisfactory to the Board, to the extent of \$2,000, be approved, and the security be required.

The meeting then adjourned.

#### AUDITORS' REPORT.

To the President and Directors of the Fruit Growers' Association of Ontario.

Gentlemen,—We have carefully examined the books of your Association, so far as they relate to the transactions of the past year, together with the receipts and vouchers for the disbursements of the same period, and we have great pleasure to report that we found them correct and satisfactory, reflecting great credit on your able Secretary-Treasurer D. W. Beadle, Esq.

We are your obedient servants,

(Signed) ROBERT ROY, ANGUS SUTHERLAND, Audito

Hamilton, 28th Nov., 1876.

## REPORTS OF DISCUSSIONS.

## WINTER MEETING.

The Winter Meeting was held in the City Hall, Hamilton, on Wednesday, the 16th February, 1876. It was well attended, and quite a number were present from distant points. President Burnet occupied the Chair, and the Secretary read the minutes of the Belleville meeting, which were approved. The President appointed A. M. Smith, Geo. Leslie, Vanduzen, Mills, and Saunders a Committee to examine the Seedling fruits on Exhibition. Mr. A. S. Willand, of Geneva, representing the Western New York Horticultural Society, being present, the President invited him to take a seat beside him.

On motion of A M. Smith, seconded by Linus Woolverton, it was resolved,

That whereas the fruit interest of Canada is rapidly becoming of great importance, and the exports of fruit have already grown to a considerable item, and whereas it has become very desirable, in the interests of fruit growers throughout the Dominion, and of this Association, that reliable information should be di-seminated in regard to the imports and exports of fruit, therefore resolved that the Directors be requested to memorialize the Dominion Government, asking that a bureau of manufactures and commerce be created, so that the imports and exports of fruit can be accurately shown.

The President received the following list of subjects to be discussed :--

1. How to give information to our fruit producers as to where and when they can best market their products.

2. The best agencies in fruit centres.

3. Does it pay the producer to hold his winter apples for a spring market?

4. How and where to make collections of fruit for the Centennial Exhibition at Philadelphia?

5. Is there any certainty in the operations of artificial hybridization?

6. Has the growing of hardy grapes proved profitable?

- 7. Are the coloured illustrations of our annual report of sufficient value to justify their continuance?
- 8. What practical suggestions can be given to promote the interests of our Association?

On motion, it was resolved to take up the eighth subject. The President announced that Mr. P. E. Bucke, of Ottawa, had prepared a paper on the subject, and, at the request of the meeting. Mr. Bucke read his paper as an introduction to the discussion.

Mr. Bucke's paper was as follows:—

Gentlemen,—I notice in Section No. 8 of the post-card calling this meeting "that practical suggestions are required which shall promote the interests of our Association." My connection with it has now extended over a period of five years, and it was only by an accident I became acquainted with the Society's existence; and it was in this wise: Having been brought up to agricultural pursuits on the fruit farm now owned by our distinguished director, William Saunders, E-q, in the Gore of London, and having now a small garden of my own in Ottawa, I was induced, from time to time, to contribute short articles of a practical nature to the Canada Farmer, the editor of which paper kindly supplied me with a copy, and it was in that publication I first discovered the existence of the Society known as the "Fruit Growers' Association of Ontario." I need hardly say I immediately joined it, and have belonged to it ever since. Now, what I want to inculcate by the foregoing remarks is, "How shall they hear without a preacher?" Unless our Society is talked about, written about, and made public, how can we expect people to know of our existence? I believe it should be the duty of some paid officer—the Secretary, for instance—to use every legitimate means of conveying the knowledge of our meeting to the public through the press. I believe also that short advertisements might be inserted in agricultural papers and others at various points in this Province, which would result in much success. These should state that the

annual subscription is due and payable on the 1st of March in each year; that prizes are offered for essays; that choice trees are sent out to its members, and that the Report, which is gratuitously distributed, contains valuable papers on fruits, their adaptation to the various localities of Ontario, and also the transactions of the Entomological Society. But I believe there is a better way even than this of benefiting the Society, and which, if carried out, would increase the revenue, and that way has been suggested to me by the fact that, when travelling on the Grand Trunk in early autumn, I met a man who was making inquiries about orchards. I did not learn his name, but, from what I could gather from conversation with him, I found out he was an apple dealer from Liverpool, and was picking up all the information he could with the view of obtaining fruit for shipment. Now, this man must have spent a good deal of valuable time running up and down the country in obtaining knowledge, which he could have learned in one hour if there had been some central office to apply to for the information he required. Therefore, why could not this information be obtained by the Fruit Growers' Association from reports furnished from various sections? These might be kept by the Secretary. Parties having orchards could state the probable number of barrels. kinds of fruit, and price, picked or unpicked. I believe these agents generally prefer to buy the apples on the tree, and see that all that is packed for them is of good average quality, that may be relied upon for the English market. They usually provide barrels. Through this agency, parties having fruit to sell, or those who are about to plant, would be able to ascertain those varieties most in demand for foreign consumption. The reports referred to could be sent to the Agency before the fruit is fit for gathering, and could be tabulated, so that they would be easy of examination and reference. The main difficulty experienced by fruit producers is that it is a very perishable commodity. It does not do to send it to a central market for reshipment, and the buyers referred to prefer to see it before it is made up in packages. If a bureau of this nature could be established, all the fruit-growers of any consequence would be glad to join in it, and the members of the Association would be very materially augmented. Buyers would also be glad to join, or pay a fee for the information obtained.

Another thing is wanted by fruit growers, and that is reliable agents for points at a distance, both for selling fruits and trees. Probably something might be done in the direction of obtaining tree sellers in the winter and fruit sellers in the summer—I know no place that would repay a man opening such an agency better than in Ottawa. If such a man had an acre or two of strawberries to run him through the early summer, after tree planting was over in the spring, and before cherries came in, he would, I should think, do well. I noticed in an agricultural publication, issued in the United States, that it is estimated that it costs \$10 per orchard to obtain information about its fruit and its probable production by travelling agents. Any money expended for this object, for the most part, is lost by the producer, and would, by the agency scheme suggested, be almost entirely avoided. Again, a central agency could keep a report of the prices, and where fruit could be had for either loca! or American markets.

Fruit growing, after all, is only half the battle; fruit selling is quite as interesting a subject to producers and if it cannot be disposed of in its ripe state, the methods of drying and canning should be resorted to—especially the former, for which there is always a steady demand. The dried apple called the "Normandy Pippin" brings remunerative prices at all the leading grocers in Britain. This is a medium-sized apple, dried with the core punched out, but the skin left on. I have never seen any of them in this country. The German prune, of which we import so freely, it is found, can be grown on the northern parts of Lake Michigan, to which trees have been imported from the continent of Europe, and no doubt they can be cultivated with equal success in our own Dominion. The quest on of artificially dried fruits has not yet received that attention at the hands of this Association which it is deemed its importance deserves. Drying machines have been constructed in the United States which will dry twenty-five bushels per day. In these, tomatoes, apples, peaches, squashes, plums, pumpkins and all varieties of fruits have the moisture extracted from them, and I believe the flavour is perfectly retained. One, such machine, built in a central locality, would answer for drying all the fruits that could not be sold in its native state. Canned fruit can be sold at a good profit at from 18c. to 20c. per quart; if parties returned the jars, say from 12c. to 15c. per quart for fruit, and 4c. to 5c. for half a pound of sugar. This would be as cheap as the average price of strawberries at Ottawa. Not much sweetening is required to

he added when the fruit is cooked. The great difficulty the fruit raiser had to contend with is the perishable nature of his product. This difficulty is only overcome by canning and drying, and these processes will enable producers to sell, and purchasers to buy, all the year round, instead of these operations having to be conducted at one particular season. It is questionable, of course, how far this Society can interfere in these matters, but it can, at all events—and I think it quite within its province—bring them before its members in a practical way. With these remarks, and thanking you for so patient a hearing, I take my seat.

Mr. Willard (Geneva, U. S.) suggested greater care in drying fruit. By co-operation, he thought peaches and like perishable fruit ought to be saved.

The Rev. Dr. Darling had heard of a canning establishment at Grimsby. He would like

to know the effect on the fruit market.

Mr. Woolverton reported that the people about Grimsby did not care to sell at the Grimsby Canning Establishment.

Mr. A. M. Smith said that several thousand cans were annually put up, but that our fruit

was too dear to be put up profitably.

Rev. Mr. Darling had seen large quantities of fruit go to waste in his neighbourhood.

Mr. A. M. Smith thought that peaches could be canned with profit.

Mr. Beadle said that our people know so little of drying fruit that they take no interest in establishing fruit drying processes; they know so little of the amount of dried fruits im-

ported that they do not know the profit of fruit drying.

Mr. Jarvis (Stratford) thought the motion ought to be referred to the Market Bureau of Agriculture. Had fruit growers been half as energetic as our cheese men, we would have had fruit markets established in England long ago. Stratford is fast becoming a fruit centre. In reference to prunes, he has had some for years. It is the most valuable tree that a man can have in his garden, as it keeps well. The prune has an advantage over every other variety of plum. French prunes are the most delicious of canned fruits. Fruit drying has made no progress, especially with regard to apples. Elsewhere they are doing wonders in improving the drying of fruit.

Mr. Willard knew that much was being done in Michigan, opposite Chicago. The quality

of their dried products was splendid, and it was being sold at a very large percentage.

Mr. Dempsey thought that fruit drying could easily be accomplished by means of a base-burner.

Mr. Jarvis (Stratford), said that he intended looking out for some dried peaches. Fruit growers should get the best dryers. He considered this subject one of deep importance.

Mr. Secretary Beadle thought that the Association should advise the Directors to communicate with prominent fruit-drying establishments in the United States, and ask those interested to come ferward and give all needful information at our next winter meeting.

Mr. Dempsey described a "Fruit-dryer."

The following resolution was then put and carried :-

Moved by P. H. Jarvis (Stratford), seconded by P. E. Bucke (Ottawa), That the Directors be requested to secure the presence at the next meeting of some person who can give information of the different modes of drying fruits, with samples and models.

The President stated that Mr. Arnold, of Paris, had sent over to England, to the Royal Horticultural Society, four varieties of seedling apples, to which he had received the following reply:—

ROYAL HORTICULTURAL SOCIETY, Chiswick Garden, W., December 2nd, 1875.

SIR,—I have the honour to return you the thanks of the Royal Horticultural Society for your exhibition of four varieties of seedling apples at the meeting of the Fruit and Vegetable Committee, on the 1st ultimo, at South Kensington.

I am, Sir, Your very obedient servant,

A. F. BARRON,

Sec. to Com.

#### EXHIBITION OF FRUIT AT THE CENTENNIAL.

Mr. Saunders, of London, moved, seconded by Col. McGill, of Oshawa, the following resolution:—

That, n the opinion of this meeting, the grant of \$1,000 proposed to be given by the Ontario Government to aid the Fruit-Growers' Association in making a suitable exhibition of our fruits in their season at the coming Centennial Exhibition at Philadelphia, is insufficient for the purpose designed; and in view of the increasing commercial importance of our fruit-growing interests, that a Committee be now appointed to proceed to Toronto to wait upon the Government and urge an increase of the grant to an amount sufficient to enable the Association to make such an exhibition as would be a credit to the Association and the Province of Ontario.

Mr. Frazer, Secretary of the Advisory Board, said that he hoped there would be a good show of Canadian fruit at the Centennial, and he hoped the Committee, if appointed, would be successful.

The resolution was carried.

Mr. Saunders moved, seconded by Col. McGill, That the President, Messrs. Leslie, Bucke, Arnold, Saunders and Beadle be a Committee to wait on the Government.

This was carried.

The Committee agreed to go down on Monday.

Mr. Saunders moved that the President leave the chair, and that the Vice-President take it.

This was done.

Mr. Dempsey, the Vice-President, called on Mr. Arnold to read the following

#### Address

To the Rev. R. Burnet, President of the Fruit-Growers' Association of Ontario:

Dear Sir,—The members of the Association in various sections of the Province having long felt a desire to express in some tangible manner their appreciation of your valuable services so long rendered in their interests, have availed themselves of this opportunity, and now beg, through me, to assure you of their admiration of your untiring zeal and labour on behalf of our Society, and to present you with this watch and chain as a token of their esteem, hoping that you may long be spared to read with undimmed eyes the inscription on the watch, and at the same time to remember the great delight this occasion has afforded the members thus spontaneously to show their attachment to you.

Signed on behalf of the members.

CHARLES ARNOLD.

Hamilton, Feb. 16, 1876.

Mr. Bucke said, a few of the members only had first been called upon, but so spontaneous was the response from the members of the Association that there was a surplus over,

which he had much pleasure in handing over to Mr. Burnet.

The Rev. Mr. Burnet, who appeared completely taken by surprise and much moved, said that he knew this was the work of friends. He was utterly unable to rise to the occasion and return thanks. He was unable to say anything. They must accept his sincerest thanks for this mark of their kindness. He knew of no one from whose hand he would receive such a presentation with greater pleasure than from his friend Mr. Arnold, and his friend Mr. Dempsey He esteemed them all his friends. He would thank them again, and he felt deeply their debtor.

Mr. Johnson, Chief of the Six Nations, said he did not know how many nations were gathered together; he himself represented six; he said he never gave towards anything with greater pleasure than to this presentation. The Association had done much good; they did not know how much; Mr. Arnold and the late lamented Mr. Bennett had introduced among his people the cultivation of fruit, and they were showing great improvement. He said he was overjoyed that the Six Nations had contributed towards the presentation, and he could

almost send up a "war whoo;."

The watch and chain, which we e extremely handsome, and were enclosed in an elegant morocco case, bore the following inscription:

PRESENTED

By the Members of the
Fruit Growers' Association
of Ontario
to
Their President,
REV. ROBERT BURNET,
As a Token of Esteem.
Hamilton, Feb. 16, 1876.

The meeting took a recess until Two o'clock, P.M. On re-assembling after dinner, Mr. Linus Woolverton, of Grimsby, read a paper on "Some of the Discouragements in Fruit-Growing."

#### SOME VEXATIONS OF THE FRUIT-GROWER.

There is, perhaps, no department of rural life, of which the world entertains more erroneous ideas than the one it seems to hold concerning fruit-growing. If I speak of the golden grain and sweet-smelling hay, of the lowing herds and the bleating flocks of the happy farmer in terms which would make you believe his life a lot of romance, still he is supposed

"To plough and to sow, To reap and to mow."

Not so, however, the grower of fruit. The fair goddess, Pomona, is represented as giving him his fruits without the sweat of his brow. His life among his trees is supposed to be one of comparative ease and idleness; his only toil to gather and to market his golden luxuries.

How very different this from actual experience, every one engaged in the work can bear us witness. With Edwards, he will say:—

"The price of our apples, of peaches and cherries, The price of fine currants, of pears, plums, and berries, Is measured by combats with foes in a tilt, With war to the knife and the knife to the hilt."

But we propose, in this paper, not the recital of poetry, but simply to set forth a few of the difficulties of fruit-growing which have come under our own experience during the past year or two, together with a warning or suggestion, where we are able, in regard to the surmounting of them.

Chief among the difficulties of our occupation is that of dealing with foes of the insect world. Root, stem, bark, leaf, and fruit are all to be defended with unceasing vigilance, which cannot be altogether remitted even during the severity of a Canadian winter. All those have been most faithfully described by our esteemed Canadian entomologists.

But one species, which was supposed not to be found in Canada, has during the past season been giving us much trouble. We refer to the Canker Worm, a full account of which may be found in the Report of our Association for the year 1870, from page 68. We there read, "This insect is not often met with in Canada. The only specimens we have seen were seut to us in 1867, by our friend Mr. Pettit, of Grimbsy, who stated that he had first noticed them late in November of the previous year."

Not often met with! How we would rejoice to be able to say that to day.

Last summer a large young orchard which we had planted near a clump of forest trees upon the shore of Lake Ontario, was nearly eaten up by this worm before we knew of its presence. In hot haste we turned up the Reports of our Association and those of Professor Riley, of Missouri, in search of every item concerning it. We set to work. We whipped the trees, and larvæ innumerable hung down by as many threads. These we killed by catching them upon flat boards, which were rubbed together. This was very tedious. We tried

Paris Green and Hellebore, somewhat more speedily, but still with no small toil. We filled casks with water, and placed them in our express waggon; then diluting the poison in water,

we applied it to the young trees through the rose of a watering-pot.

But among our older trees this was impracticable, and they were neglected. The Canker Worm was almost forgotten, until early in November, when we observed the female moths climbing the trees in very great numbers. Upon the branches and along the trunk of a single tree we counted over one hundred. We thought to ourselves:—" If, as the entomologists say, comparatively few leave their cocoons in the fall, and the great part of them not until early spring; and if each moth lay nearly a hundred eggs, what a prodigious army of Canker Worms would be upon our trees next summer! Surely not a single tree could survive the ravages of such a multitude.

We immediately set at work to apply the tarred bandages, as directed by the Reports of our Association. For this purpose we found stiff paper, folded double to a width of four or five inches, very suitable, being easily applied, and answering every purpose. These we fastened by means of a tack, drawing them tightly on the lower side, so that not a crevice should be left for the ascent of the small young larvæ Upon these bandages we applied a ring of fine tar, as much as would stay without running down, to the injury of the bark; which, upon warm days, required much attention. Care was also required to keep the tar sticky during the cool of night, for the moth is nocturnal in its habits; and for that purpose we found the admixture of a little raw oil very serviceable. Nor is the labour little in a large orchard to renew the tar every mild day, beginning in early fail, and continuing until the leaves show themselves in the spring.

After applying the bandages, we set at work, whipping off the trees those moths that had already climbed up them. This done, we could sit down with a quiet satisfaction, and watch their vain endeavours to get back. Scores were below the bandage, but none were able

to cross it.

So we were fully repaid for our labour, and indulged in the hope that two seasons of

such toil might rid us for a time at least, of this troublesome pest.

We have thus fully set forth our experience with the Canker worm, because it has as yet become little known among the fruit-growers of Canada, and perhaps the recital may be of some interest to our brothers in the business, or at least may warn them of the approach of one of the most formidable among our insect enemies.

From other injurious insects we have had a comparative immunity during the past season.

The Borer (Buprestis) has searcely shown himself. But we can point to marks that show what ravages he was making before our brothers in Entomology taught us how to

fight it.

A fine orchard of twelve years, just ready for bearing, has in it a few trees dying of premature old age, the effects of the Borer and the knife some years ago. We have decided that the labour of applying a protective wash to a whole orchard is repaid, if a single tree is saved. In one section of our orchard the Tent Caterpillar (Clisiocompa Americana) was exceedingly

abundant during the month of June.

"Catch'em and Kill'em" was the motto of Mr. S. E. Todd, and this we put vigorously into practice. True, a Yankee friend suggested a quicker method than the one we were using. He said, "Blow them away with powder from a gun." We experimented to please, but found that worms so scattered had a peculiar faculty of climbing back upon the trees again. So we continued the old slow method of killing them in a hand-to-hand fight, as the only sure and safe means of destroying them.

Mice had been a great vexation; but sad experience has taught us many lessons, and we now see heavy falls of snow with less trembling. We find that by clearing away all rubbish, and heaping fine earth about the tree, it is made safe; and this attention every tree gets, although it occupies a man through almost the whole month of November of each year.

Once a careless hand piled soddy earth against our trees in our absence. How happy the mice were! They used the sod for nest material, and the bark of the trees for food, and a cosy comfortable home they had. What more trying to the grower to see trees he has carefully tended for years, thus girdled!

Another great vexation is spotted fruit. Usually the fall pippins and the snow apples in our section spot very badly. In 1873 and 1874, one-half to two-thirds of these apples were unfit for shipping, solely on this account, though fine in every other respect. To show

how/unsatisfactory it is to ship spotted fruit, we may here state that in September, 1872, we shipped to Montreal thirty-six barrels of Fall Pippins, choice, but somewhat spotted. In culling them over, we had already thrown out about the half. The lot was sold in Montreal for \$46.50, or about \$1.25 per bbl., the greater part of which was eaten up by freight, cartage, and commission. At the same time our King and Cranberry Pippins sold for \$3 per barrel.

But should we enumerate all the vexations and difficulties with which a grower of fruit must contend, in order to achieve success, we would swell this paper beyond all patience.

Suffice it to say, that in no other occupation of life must more earnest vigilance, more constant industry, and more untiring patience be exercised, than by him who desires to become a successful Orchardist.

The President read a paper on "Criteria for Fruit-judging."

#### CRITERIA FOR FRUIT-JUDGING.

We know of few subjects about which the notions of fruit-growers are more crude and indistinct, than the elements which enter into a good judgment of the excellence of fruit. Indeed, we question if any criterion for judging has ever been attempted, or laid down by connoiseurs, by following which they might arrive at a certain and definite result. This has partly arisen from individual idiosyncrasies, and from the difficulty of laying down any one unit of measure to gauge things differing among themselves. Such a unit of measure may yet be found, and we must not despair in making some advance even in this very essential branch of horticultural knowledge. We must all have often had occasion to deplore the judgments at our fruit exhibitions, in which ignorance and conceit have both played important parts, and must have often wished that points of judgment were established in judging of fruit, just as there are certain infallible points in the judging of cattle, recognized and acted on by every one possessed of the competent knowledge.

Your Secretary and President have issued circulars asking from our members some practical suggestions on horticultural subjects suited to advance the interests of our Association. That I may not be behind in setting a good example, I have thought I might perhaps be able to present some views on fruit-judging that might not be unworthy of some discussion at our

winter meeting.

The first criterion which I shall notice is

#### 1. BEAUTY.

Every housewife exercises her taste in the beautiful when engaged in purchasing our horticultural products. We are led to our judgments greatly by the eye, or, by the manner in which outward objects please the sense of sight. All fruits have this element of beauty, but some in greater perfection than others. Russet apples are in great favour with some buyers, and deep red coloured ones with others. It is well known that King of Tompkins County apples stand high in the market from their taking colour. So with the Baldwin, an inferior of itself, but catching on account of it beautiful appearance. We question if Rhode Island Greenings would stand so well in the market as they do, if the excellence of their eating, cooking, and keeping qualities was not well known. A green apple can never compare for market

purposes to a flashing red one. A dull yellow is inferior to a green.

Colour, however, is not the only element in a beautiful apple. Shape has much to do with our preferences. We have often admired the perfect shape of a Pomme Grise, of a Ribston Pippin, or Golden Pippin, or Westfield Seek no Further. The more an apple diverges from these recognized types of beauty, just in the same degree do they assume abnormal shapes, and offend the eye. The nearer fruits partake of the oblate, round, conical, and oblong, the nearer do they come within our notions of beauty. An unshapely apple ought not to be put in comparison with one distinguished for its fine outlines. It not unfrequently happens that exhibitors make choice of specimens grown on young, thriving trees, their size being something enormous, but lacking in every line of beauty and grace. What we desire to see is that every dish of fruit should be judged from a fair standard of the variety, taking into account colour and shape. Overgrown and misshapen samples should invariably have the second place assigned to them. Red we prefer to green, green to yellow, and russet to any of the three.

#### 2. SIZE.

Marketers of fruit know the value the public put on size of fruit. Small and ill-grown ones can never stand comparison with full-grown and fair samples. Good sized fruit is entirely different from abnormal, over-grown, and rugged specimens. The symmetry of large fruit may be quite as perfect as the prettiest smaller specimens. Large, handsome fruit can only be obtained by severe thinning. It is a fact not to be gainsayed, that a tree properly and carefully thinned will bear as heavy a crop as when allowed to overbear a small, undersized, and dwarfish crop. Either for exhibition or for market, fruit should be thinned. It not unfrequently happens that exhibitors pick over an orchard for their show day. What we would like to see is a shapely, large-sized, even crop. On this account we prefer a dish of fruit to a limited number of specimens—three or four, as the case may be. In forming an estimate of the size, a plate evenly sized, with few or no irregularities, is to be preferred to a similar plate with two or three monstrous large fruits, and the balance of a much smaller size. Size, and evenness of size ought to be the criterion.

#### 3. FLAVOUR

Flavour ought perhaps to have been the first grand requisite. It comes, however, in the sequence of time next in order. Beauty and size having entered into the judgment, the question of flavour succeeds as a necessary consequence. Different fruits have different criteria of flavour. The apple of the highest flavour is perhaps the Esopus Spitzenburgh. At this moment we remember no higher flavour, There may be some more delicate, but certainly few with so high and nice a flavour. The Mother, Grimes' Golden, Drap D'Or, Autumn Strawberry, Early Joe, Benoni, and Summer Rose have all their peculiar excellences, but for flavour they are all outdone by the Spitzenburgh. In the multiplicity of exquisite flavoured fruits there is such diversity that of necessity there must be a great difference of opinion. High flavour must be accompanied with agreeableness. In fact it must not be too high. Delicacy must predominate to render any fruit agreeable. Take the Bartlett as an example. Many people sooner tire of a luscious Bartlett than they would of a less highly flavoured variety. The Seckle is, perhaps, for delicacy and flavour, superior to every other variety of pear. There are however other pears of different but of exquisite flavour, such as the Beurre Millet, the Glout Morceau, Laurence, and Mount Vernon.

Among plums, perhaps the Green Gage is yet No. 1. We know of no plum that transcends it.

Among cherries the Coe's Golden Drop is exquisite—we have often thought that it is

the perfection of cherry flavour.

The Black Hamburgh and Otonell among grapes, Arnold's Seedling Strawberry, Saunders's Nos. 69 and 70 Hybrid Raspberries, and Arnold's No. 7 Seedling Hybrid Raspberry, stand in our estimation a long way ahead of any other fruits of their variety.

In judging, therefore, our conclusion ought to be, how near the flavour comes to the best established varieties, and the largest number of people to whom the variety is likely to

give the greatest satisfaction.

#### 4. ADAPTATION FOR GENERAL CULTIVATION.

It may be that this is as important a consideration in our judgment as any that have been previously noticed. Indeed, it cannot be over-estimated. Adaptation is the watchword of our Association in the distribution of plants throughout the Province. Blight, black knot, tenderness, hardihood, all render this question pressing and important. No more urgent criterion can be found among fruit judgers than the adaptability of the plant to different localities. It avails little to the country, and less to fruit-growers, that an individual can raise certain fruits by care and extra protection. We have heard of an enthusiastic fruitgrower keeping the temperature of his garden a number of degrees above that of his neighbour by hanging bottles with hot water among his trees and plants. Such plans may serve to make the ignorant stare at the size and beauty of the productions raised under such circumstances, but they are of no practical use or advantage to the ordinary fruit-grower. In estimating the real value of fruit, the measure must be, can the million grow it ?- is it hardy ?-will it

stand the winter ?-will it bear the heat of summer ?-the latter of these questions being just

as important as the former.

Our fruit trees must be able to withstand both heat and cold. Another feature of this adaptation of which we speak is,—can the fruit bear transportation to a distant market? Some varieties of fruits are so soft and delicate that while adapted for the cultivation of the amateur, they are utterly worthless for the general market. In coming to any comparative conclusion about the value of different varieties of fruits, we must of necessity embrace in our estimate the general good to be derived from the production of the fruit. Winter apples, in such a judgment, ought to stand higher than fall, and fall than the summer varieties. A fruit that grows over the largest area is to be preferred to one that will only grow in sheltered and favoured localities. Fruits that keep well, that are good cookers and easily handled without being damaged, are to be judged superior to higher flavoured varieties, soft, and apt to rot. We fear that were this quality of adaptation ought to bulk more than it does in our judgments on fruit, some varieties that now stand high would be found in a lower place.

Every year this important criterion is becoming more and more pressing. The introduction of new hybrid varieties urges every one to form a true estimate of the general value of such hybrid fruits. Indeed, it must become supremely important in the consideration of hybridists themselves,—their hybrid fruits will only succeed when they are entirely adapted

to general cultivation throughout the Province.

## 5. ADAPTATION FOR AMATEUR CULTIVATION.

This is the last element in the criteria for estimating the excellence of good fruit. It comes last because it is least valuable. The importance of amateur cultivation, however, must not be underrated. Patriotic aims must always give place to individual good. The amateurs of our Association are not likely to lay little stress on this requisite in forming a judgment of good fruit. Fruit of rare excellence—trees known to be tender—can be raised and cultivated by the amateur, when it is utterly impossible for the general cultivator to give his attention to their production. How it will pay must always form a large portion of the estimate of any fruit by the latter, while how it will please will form an important item in the consideratof the former.

We have thus passed in review briefly a few thoughts on this important subject. If not unworthy of reception by this Association, it will always remain a pleasing recollection that, as far as I know, I have been the first to give them embodiment, and any little that I can add to the advancement of fruit interests, and the advantage of our Association, will prove an ample reward, as a co-labourer with you, gentlemen, in this good work.

ROBERT BURNET.

Mr. Charles Arnold, of Paris, opened the discussion on the Fifth subject, by reading a short paper which he had prepared.

## IS THERE ANY CERTAINTY IN THE RESULTS OF ARTIFICIAL HYBRIDIZATION?

Taking the term Hybridization to mean here the crossing of two varieties of the same species, I would answer, according to my experience, yes, positively, yes, in the case of apples, strawberries, wheat and Indian corn; and in the case of grapes and raspberries, I am equally positive that what have been called distinct species will hybridize one with the other.

But, in making these positive statements, let me be distinctly understood to say that the operation must be performed at the proper time and in a proper manner, or it cannot be said

to be performed at all.

I have heard of people who believed that nothing more was necessary in order to produce hybrids than merely to shake the branch of one tree that was in flower over the branch of another tree of the same species that was in flower at the same time. That there was then nothing more to do but to save the seed from the fruit grown upon this branch. That every seed thus saved would in time produce fruit combining all the good qualities of both

parents, forgetting that, in most cases, Nature is making efforts to produce wild children instead of cultivated ones. That, with most fruits, the nearer they are to the wild type, the greater the superabundance of pollen they produce. That the whole atmosphere is sometimes charged with this pollen, ready to attach itself to any cultivated cousin that it shall find unprotected in the neighbourhood, the desire of nature seeming to be to produce healthy seed, and not caring to surround these seed with rich and superfluous pulp.

I would therefore beg most respectfully to express the opinion, that no good results can be expected from such pretended hybridizing as that alluded to above; and in order to any degree of certainty in the results of hybridizing, very great care, with some knowledge of the structure of flowers, is necessary, as well as the condition of the flower to be operated upon.

The amount of influence the pollen has upon the pistil varies with different plants, and

the condition of the pollen and the pistil when operated upon.

The stock also upon which the graft is worked may exert an influence over both male

and female parents.

I have been led to half believe this by observing the uncertainty of the results of crossing apples upon grafted stocks, compared with crossing raspberries, grapes, strawberries, corn and wheat upon their own roots.

In the crossing of corn, the pollen has sometimes a completely prepotent and immediate

influence both upon the colour and shape of the grains.

Again, in the grape, if foreign pollen is applied to the pistil of the native grape, I believe the pistil can be so gorged, or surfeited, that plants grown from the seed thus produced, will show scarcely a trace of the mother plant that produced them; thus showing, in my opinion, that the pollen has had almost a prepotent influence.

The same may almost be said of the strawberry, to such an extent, that I have found the pollen of Dr. Nicase upon the pistil of Wilson so powerfully to effect the embryo seed, that scarcely a trace of the Wilson parentage was observable in the next generation. So much so, that I have been compelled to breed back in order to get the good qualities of Wilson.

Let us now take the raspberry. To such a degreee is the embryo seed of one species of the raspberry susceptible to the influence of the pollen of another species, that I have been able by artificial fructification to change them entirely, and to shift, so to speak, the peculiarities of one species to what has always been considered an entirely distinct species. As a proof of this, I refer you to Mr. Saunders' hybrids as well as my own.

In my case all my last lot of seedling raspberries, that our President has spoken so highly of, are great-grandchildren of the old White Cap, that roots from the tips of the new canes, crossed with pollen of a different species, that does not root from the tip, but propa-

gates itself by throwing up suckers.

But the fruit of this first cross was worthless. Therefore, I again crossed, and this time with the pollen of a good fall-bearing variety. The result in the next generation was, in some instances, great fall-bearers of different shades of colour, size and flavour, but not one of

them rooting from the tip of the cane.

This fall-bearing quality proving of little value in this country, I selected the hardiest and best of these varieties and again crossed them, this time with the largest and best European varieties. The result is several new kinds, of various shades of colour (an illustration of one is now on the table, and will be sent out by this Society in 1877), that will challenge this continent for size, hardiness, flavour and productiveness, and one variety ripens

two weeks later than any other variety in cultivation.

Allow me to say a few words about the Pea, and the advantages to be derived from artificially crossing it. No one, I am sure, in our Association, that has ever grown and enjoyed a dish of luscious Champion of England Peas, could the next year muster up courage enough, however much he might be disgusted with its long rambling growth and, in some seasons and soils, greatly deficient productiveness, to throw it away, or to refuse to plant it again. Then, Mr. President, I would ask, would not every member of this Association who is "sound at the core" (as of course every fruit grower is) feel under a life-long obligation to the fellow-member who shall give him all the good qualities of the Champion of England upon such a gloriously productive little dwarf stalk as McLean's Little Gem.

Such, Mr. President, has been done by one of our members, and can be done again by

hybridizing.

If further proof is wanted as to the certainty of the benefits to be derived from hybridizing, let me refer you to Roger's Hybrid Grapes, to Mr. Saunders' Hybrid Gooseberries, Raspberries and Currants, and last, but not least, to Mr. Dempsey's hybrid fruits of various kinds; and let it be remembered that, but for the labours of the hybridizer, not one of the fruits referred to would have had an existence.

Now, Mr. President and Gentlemen, if the above statements are true, and shall be made known to our members, surely no one will ask in the future, "Is there any certainty in the

results of artificial hybridization?"

The Secretary read a paper written and forwarded to the meeting by Mr. George Peacock, of Mount Salem, on

#### THE FRUIT GARDEN.

We would distinguish the fruit garden from the commercial orchard; the former has reference to fruit to be consumed at home; in the latter fruits are grown especially for merchandise. Some sorts will naturally extend into both the garden and the orchard; yet there are several sorts more adapted for use at home than for transportation, even to adjacent markets; also, many good market fruits would be required for the fruit garden, such as some

good keeping apples, and some pears and peaches, etc.

It is supposed that at the present time an excellent collection of desirable fruit can be obtained among the fruit growers of Ontario, perhaps such as has never been equalled in any country of similar climate, for we have new apples, new pears, new peaches, new plums, new grapes,, and we may say, all the fruits have been recently improved so much that it is possible, for any one who owns land, to have a fruit garden as far superior to those belonging to our ancestors, as the present mode of travelling by steam surpasses the old turnpike road

manner of transportation.

The nations of antiquity being destitute of systematic communication must have been scantily supplied with the necessary information or with the materials for either numerous or good fruit gardens. The methods of hybridizing and of multiplying valuable sorts were not generally understood; consequently the balance of the people must have passed through the world without the possession of a fruit garden, or even the taste of its luscious productions. We read that collections of fruit trees were obtained and distributed at long intervals by invading armies, and later by ecclesiastics and individuals "in the days of monastic splendor and luxury." But how were the masses supplied? Where were the millions of fruit gardens for

the people?

The improved modern facilities for obtaining information have never been equalled in any age of the world. Horticultural societies, newspapers, nursery men and private individuals are daily publishing valuable information, and transmitting it through the post office and telegraph to millions of anxious readers and practical cultivators of the fruit garden. The post office, with returning seasons, for as small a sum as letters have been carried, will deliver seeds, and plants, and trees at our doors, after travelling hundreds of miles, as fresh and ready for transplanting as just from the nursery. And yet with all these extraordinary facilities, can it be possible that tens of thousands of families in Ontario are now living on bread and pork and potatoes, when they might have in their cellars a hundred bushels of apples in variety of the very best selected sorts, and a hundred gems (jars) filled with the most delicious fruits? Thus their tables might be decorated with cherries, plums, peaches, pears, and with blackberries, raspberries, strawberries, and grapes through the winter months, all from their own garden, the only expense being a few hours of seasonable and pleasant enjoyment.

Why are so many without a fruit garden? Why is so little known about "delicious, luxurious food?" Information is needed, which is being collected by the Fruit-Growers' Association of Ontario, and will be of incalculable value to thousands of families who know but little of the domestic happiness and enjoyment to be obtained from the fruit garden. Many have not considered the advantages of our climate and soil in relation to the richer and more delicious fruits. Having come from climates where the winters are not so severe as in Ontario, they have supposed that the richer fruits would not prosper here any better than in more northern latitudes, and have been satisfied to grow the mere necessities of life, and a few of the common kinds of fruit. But it should be considered that the summer sun

and the refreshing dews of Ontario give to our fruits a richness and a delicacy not discernible in those of countries having winters milder than our own. Our beautiful apples, melting pears, juicy peaches, and golden plums; our shining strawberries, clustering grapes, and tempting cherries, give to our tables a richness and relish far beyond the most sanguine expectations of those not accustomed to such delicious fruits. In a conversation with a gentleman on the comparative climates of the north of England and Ontario, it was elicited that in the former country water-melons are grown and of only moderate quality, yet the luxury cannot be dispensed with by the opulent classes, who produce them, by artificial appliances, at the cost of five dollars each; while the climate of Ontario is such, that melons of superior quality and of delicious flavour can be raised as easily as potatoes, affording their refreshing

juices from the middle of August to late in October.

The money value of the fruit garden may be stated briefly; thus, one hundred bushels of apples stored for winter, fifty dollars; and one hundred "gems" filled with small fruits in great variety, fifty dollars. These would supply a family through the winter months, and would in a measure, on the table, turn winter into summer, for to have cherry pie at Christmas, and ripe plums, and strawberry short cake, would be having summer eating in winter. The table would be plentifully supplied during the winter months with fruit of every kind in its season, ripening from June to October; this summer's supply would be sufficient to pay for all the labour and expense of cultivation, and of gathering and storing the produce of the garden. Such a garden might be said to represent a capital sufficient to produce an annual income of \$100, to be applied to the comforts and enjoyments of a family during the winter. Even the present imperfect fruit garden is filled with highly desirable pleasures for its possessor. He beholds in the beautiful blo-soms the cheering prospect of golden fruits; his family, his friends, his neighbours, the passers-by on the highways, feel pleasurable emotions rise within them. All behold the delicately tinted flowery spray, the wafting odours, the rising melodies, and tiny humming birds whose varying plumes reflect the sun's most brilliant rays; and happy children dancing round the captivating scene. How can millennial happiness be brought about unless every man has a fruit garden of his own? Since the first occupation of man, has any substitute afforded so much real happiness and enjoyment, and at the same time administered to so many desirable habits as the fruit garden? In it is practised patience, perseverance, obedience, prudence, cheerfulness, content. The continual reflections of such principles in youth will constitute a special preparation for the duties of after life; for he who builds his character by a steady practice of virtue, is well fortified against vice and misery. The fruit garden is therefore one of the best schools for the young.

The fruit garden abounds with agreeable employment to those advanced in life, being well adapted to exercise the ingenuity and ability of all classes and conditions of men. The retired merchant, or the mechanic; the professor, or the unskilful, may each have a paradise of his own making, in which to pass away the last few years of his earthly existence in peace and happiness. Whatever may have been his successes or misfortunes in his earlier career,

he will have the pleasure of leaving a handsome legacy to the rising generation.

The climate, the political, and the social condition of Ontario, are highly favourable to the increasing multiplicity of fruit gardens; so much so, that it now lies within the sphere of individual enterprise to make this Province the brightest gem in the British crown.

Information on planting and cultivating plants and trees for the fruit garden can be obtained in Beadle's Fruit Book, which contains more useful and more recent instructions for

the climate than any other book on the subject.

Mr. Dempsey said that he had found in his experiments on hybridization that the female parent gave the constitution to the offspring. He was experimenting with apples and pears to see if he could effect a union by hybridization of these fruits.

Mr. J. McGill propounded to the meeting the following conundrum on this subject: Why is Mr. Dempsey not likely to succeed in producing good fruit from the union of apple with pear?

Answer.—In the Garden of Eden it was shown to be impossible. The apple turned the

first pear (pair) out of Eden.

The 7th question was taken up, and, on motion of Mr. Fearman, it was resolved, as expressive of the sense of the meeting,

That the Directors be requested to continue the illustrations in the Annual Report.

The Committee on Seedling Fruits brought in the following Report, which was accepted:—

## REPORT OF SEEDLING FRUIT COMMITTEE, FEBRUARY 16, 1876.

John H. Foster, of ———, shows three varieties seedling apples, No. 1, a fine showy apple, resembling very large specimens of the "Wagner;" sub-acid but inferior flavour. No. 2, a peculiar shaped, ribbed, oblong apple, striped and mottled with red, flesh firm, crisp and of a pleasant sub acid flavour, worthy of further trial. No. 3, a large showy apple resembling in appearance the Sweet Bough, sour, no distinctive qualities to recommend it.

Wm. Roy, of Owen Sound, shows a small and handsome striped apple of oblong shape;

but quality not such as to recommend it.

S. Morse, of Lowville, shows five varieties of apples; from appearance are rather out of season, or have been kept in too warm a cellar to judge of their merits. No. 2 is a handsome dark red apple of medium size; in colour, texture of flesh and flavour much resembling the Black Detroit.

Jas. Clarke, of Cannigton, shows two varieties of apples. No. 1 is a fine looking striped apple, medium size; but neither of the sorts of sufficient merit to recommend them. He also shows a small Crab resembling the small Red Siberian in appearance. Evidently a good keeper, and fine, nearly sweet, flavour. Its small size is against its being a candidate for public favour.

P. C. Dempsey, of Albury, shows a very handsome seedling apple of medium size, ribbed slightly at the apex, rich red colour, slightly striped. The flesh as white as the Fameuse, firm and of fine grain, of a peculiar agreeable and almost spicy flavour, sub-acid approaching to sweetness; an apple of a great deal of merit and well worthy of cultivation if the qualities of the tree are also to be commended. On this latter point we would be pleased if Mr. Dempsey would furnish the Association with the requisite information. We consider it worthy of a first prize.

Mr. Bucke, of Ottawa, shows a seedling from the Spitzenburg, showing some of the characteristics of the parent. It is of good flavour, but much smaller in size. If the tree is of a

hardy nature it will be valuable in the colder sections.

A. Moyer, of Jordan, shows two varieties, one resembling the Rambo and of small medium size; it is of good flavour, and we would recommend it for further trial as a winter dessert apple. The other is a handsome Russet, but too dry and sweet to be of much value.

Daniel Wismer, of Jordan, shows a large handsome red apple, which, from appearance, might be a good market fruit, but the specimens were in too wilted a condition to judge of its quality.

Mr. Wm. Brown, of Sydenham, shows one variety which neither in appearance or quality

can be commended.

D. Hammond, of Sheridan, shows a large handsome striped apple, flesh firm, and juicy, lacking flavour. Its attractive appearance would no doubt make ready sale of the fruit.

There were also on the table some fine grapes, namely Rogers No. 4 and 9 shown by Mr. Lister, Hamilton, and fine clusters of Rogers No. 4 by S Woodley. A cluster of Clinton, grown in Ottawa by Mr. P E. Bucke. Mr Dempsey, of Albury, exhibits very fine specimens of the Josephine de Malines pear in splendid condition. Other samples of cultivated varieties of apples are shown by Wm Roy, Owen Sound, and John McGill, Oshawa, which are in good condition, and are creditable specimens.

All of which is respectfully submitted,

A. M. SMITH, GEO. LESLIE, Jr. D. VANDUSER, WM. SAUNDERS.

Mr. Johnson, Chief of the Six Nations, explained to the meeting his method of growing grape vines, illustrating his remarks with some large bones. His method is to plant a a number of these large bones in the soil, forming a small mound, and on this mound and over the bones to plant a grape vine, which soon sent its roots into the bones, drawing from

them a great amount of nutriment. The leaves of the vines were larger and darker green than when planted in ordinary soil, and the fruit much finer.

Mr. Jarvis, Mr. Fraser, and Mr. Lundy called attention to the West Indies as a mar-

ket for fruit.

40 Victoria.

Mr. Saunders called the attention of the meeting to the loss the Association had sustained in the removal by death of one of our active members, who was also for some time one of the directors, and introduced the following resolution, which was warmly seconded by Mr.

Leslie and carried unanimously:-

Resolved, That we, the officers and members of the Fruit-Growers' Association of Ontario, have heard with deep regret of the sudden death of Mr. A. B. Bennett, of Brantford, who for many years was a member of the Board of Directors, and ever manifested a deep interest in all the affairs of our Society; and while we deeply deplore our own loss in the sudden removal from our midst of so active a member, we respectfully tender to his bereaved widow and family in their deep affliction our heartfelt sympathies.

That the Secretary be instructed to transmit to Mrs. Bennett a copy of the foregoing resolution; also to have the said resolution embodied in the proceedings of this meeting, to

be published in the next Annual Report.

After passing a vote of thanks to the Mayor and Corporation of the City of Hamilton for the use of their commodious Council Chamber, so generously given for the holding of this meeting, the proceedings were brought to a close.

### SUMMER MEETING.

The summer meeting was held in the City of London on the 6th of July, 1876, in the rooms of the Y.M.C.A. The President called the meeting to order, and minutes of last

meeting were read and approved.

After the reading of the minutes, the President and Secretary verbally reported the proceedings taken by the Directors in regard to Ontario being represented at the Centennial. The Ontario Government only promised \$1,000 to the Association with which to defray the expenses, and they stuck to that figure till this week. The previous day (Wednesday) the Secretary was promised \$2,000, the amount the Association asked for. This delay had caused a good deal of inconvenience to the Directors, Wisconsin having carried off the prize for long-keeping winter fruit, a prize which the President believed Canada might have obtained. It had also given them but small time to make preparations for their summer fruit exhibit, exhibitors having to get it ready at an early date. However, the Directors had resolved to do their best to show the fruits of Canada, and it was hoped they would be ably assisted by the members and fruit-growers generally.

#### STRAWBERRY CULTURE.

The meeting then proceeded to discuss the questions drawn up by the Directors, first taking up :-

"Strawberries-What new varieties are desirable and promising?"

Mr. Laing, St. Thomas, being called upon, said he had found the Wilson generally best, but last year he got a variety from the States, which looked very healthy and strong.

Mr. W. Saunders had found the "New Dominion" to be a pretty good variety. He

had also tried Arnold's kind, but it was not sufficiently far advanced to report on.

Mr. A. M. Smith, Drummondville, speaking of the "New Dominion" (some excellent specimens of which were shown), remarked that it was a little softer berry than the Wilson; yet, for a market berry, grown with the Wilson, he claimed it would be valuable, as prolonging the season. It was fully as hardy as the Wilson, and was nearly as prolific as the Wilson. It was uniformly a large berry.

Mr. Moyer, of Jordan, said he could not tell about the fruit of the "New Dominion." He had handled it, but had not much grown this year, as he had only planted out in the autumn. He thought the "New Dominion" and the "Colonel Cheney" were the best new varieties. He also liked the Kentucky, although not as good as the two first mentioned.

Mr. Russell, of London, had grown the "Colonel Cheney" this year. With small

protection, they had come through the winter better than any other variety.

Mr. Caldwell, Galt, found it was no use to plant until they had the proper soil. Hence he had failed in growing some of the new varieties. None of his neighbours had cultivated the "New Dominion." He believed that, to be a successful grower, they should make their business a fruit grower; in that respect they had failed in Galt.

Mr. Shoff, of McGillivray, had seen Mr. Wilson grow the "New Dominion" at Park-

hill, and that well. He had no experience of late years himself.

Col. McGill, of Oshawa, said that in his neighbourhood they found the Wilson to be the

most desirable and promising variety.

Mr. Arnold, of Paris, rather gave the "New Dominion" the preference to the Wilson. It was more hardy, and was possessed of more really strawberry qualities. The Wilson, of course, would stand more knocking about than any other; and, of course, it paid best. It was a miserable strawberry; but people who consumed strawberries generally looked for those that were most like strawberries. The "Hooker" and the "Bishop Scanning" he considered to be the best at one time; but these were now out of cultivation. There was a new strawberry, sent to him by Mr. Chas. Brown, of Yarmouth, N.S., called the "Mary Flesher," that, next to the "Hooker," he preferred. The berry was a good one; but he was afraid that, no matter how delicious it was, it was too small for market. For No. 1 of his own growth (which was exhibited), he claimed it was the best and most highly flavoured grown; but it winter-kills, and would be most expensive to grow. No. 23 (excellent specimens of which were also passed round), he remarked, was a hardy kind on his soil; but it might not be so on others. He intended to send No. 1 to England, where he knew it would grow very well, the climate being well adapted for it. No. 23 seems to be very prolific. The cross of No. l is a cross between the Wilson and Dr. Nicaisse; but all the seedlings were from No. 1, and not further crossed. No. 23 was a seedling of No. 1. His land was a mixture of clay and loam. He had not used any artificial fertilisers; but covered the plants with manure in winter. Straw was the best covering.

Mr. Parker of Woodstock, said he had used leaves to cover in the winter.

Mr. Stevens, London, had cultivated Wilson's hitherto, and found them the most

profitable.

Mr. Honsberger, of Jordan, said he cultivated Wilson, and sent it to Toronto. Col. Cheney was fully as hardy. He had realised a third more in St. Catharines market for the Col. Cheney than the Wilson. He was putting in the "New Dominion;" but didn't believe in growing fruit the first year, as the plants were not very strong. Cheney had paid him best this year, although the Kentucky was paying very well, too. It would ship as far as the Wilson; but was not so productive as some varieties.

Mr. Stevens, London, said his experience in strawberries was very poor. He did not

think the soil suited. There was always a hard knot in the centre.

Mr. Cooper, London, thought the Colonel Cheney good; Boyden's 30 was superior for market purposes. The French was too dry to his taste. The Charles Downing he considered a very good fruit. Grown in connection with the Wilson Albany it would be found to give satisfaction. The Nicanor was the hardiest of any he had. It stood the winter without any covering, and was several days earlier than the Wilson. It was much sweeter and nicer flavoured than the Wilson. He thought all fruit growers should grow it as an experiment.

Mr. Kettlewell, Westminster, had tried several new varieties, but had found none better than Wilson's. There was a great deal of difference in the soil; his soil was clay; where there was a mixture of sand and clay, they could grow all kinds of berries. The Wilson was

the best in the London market.

Mr. G. Morlatt, Oakville, said they grow strawberries there of an excellent qualitymany varieties-and good.

Mr. Laing, St. Thomas, thought Wilson best. He had found the new variety-" The

Bishop "—a failure in productiveness.

Mr. R. F. Sibbald, Bluevale, said they had not grown many strawberries in his district. They had a good soil; but people did not go in for cultivation.

In reply to Mr. Jarvis, Oxford,

Mr. Arnold, of Paris, said that in raising seedlings from his No. 3, which he had

produced this year, he transplanted 110 plants from the same plant one year from seeding. He generally planted out in the beginning of September.

The Secretary thought that, if the plant was strong and well rooted, it did not matter whether it was the first or fortieth runner. He preferred to do his planting out in May

whether it was the first or fortieth runner. He preferred to do his planting out in May. Mr. Arnold, being again called on, said his No. 8 was the earliest strawberry he had ever seen. It was quite as early as Metcalfe's variety, and double the size, and ripened a week earlier than the Wilson.

#### MANURES FOR THE STRAWBERRY.

The meeting next took up the question—" What manures are best suited to the culture of the strawberry?" the majority of the members being in favour of barnyard manure.

Mr. Arnold had once used soda as manure, but had now discarded it.

Col. McGill had never used any fertilizers except salt, sowing about a barrel to the acre, but had failed. He had also used leached and unleached ashes. It changed the foliage a little, and caused the rlants to be more vigorous.

Mr. Bucke, of Ottawa, thought bone dust the best promoter of strawberry growth.

People in his neighbourhood also used phosphates.

Mr. Jarvis, Oxford, never used anything but barnyard manure.

Mr. Caldwell thought there should be combination of both bone dust, barnyard manure, ashes and salt. That would answer for any soil.

Mr. Denton had found wood ashes and guano mixed, the finest fertiliser for strawberries that he had tried. This composition he had used for seven or eight years.

Mr. Laing, St. Thomas, thought the manure system spoken of by Mr. Denton would be

too strong.

Mr. Russell, London, said all the manure they used was the slops from the kitchenthrown over the garden.

Mr. Smith, Grimsby, and Mr. Honsberger, Jordan, used only barnyard manure.

Mr. Bucke, Ottawa, said that the Buckingham phosphates, after the mines were opened up properly, would be much preferable to those of Brockville. He considered water for strawberries far more needful than manure. When once they had the country thoroughly irrigated, then they would have much better crops of strawberries.

#### FRUIT EXHIBITION AT THE CENTENNIAL.

Practical suggestions on this subject were next called for.

The Secretary suggested that any one having plums and good summer fruits should send word to Mr. Saunders immediately, so that he might make arrangements. He had been informed by those that should know, that the plum crop at Meaford and Belleville was a failure. He had not heard from Owen Sound, the plum garden of Canada; but it would be necessary to act at once.

A gentleman here remarked that the crop of plums in Guelph and Galt was also a

failure. At Bluevale, it was stated, the crop was good.

Mr. Saunders said not only plums, but raspberries, currants, and all sorts of fruits would be required. Baskets, for the packing of the fruit, would be sent to exhibitors on application; these, then, would be sent direct to Philadelphia. The exhibition was to last from the 18th to the 25th; and a committee, consisting of Messrs. Beadle and Arnold, had been appointed to receive the exhibits.

Mr. Denton suggested that each member should do his very best to make the exhibit a

success. If not, he was afraid, it would not be so.

The suggestion was adopted by the meeting, as also several other minor suggestions by other members.

#### COMMITTEE ON FRUIT.

The President appointed the following committee to report on the exhibition of fruits on the tables:—Messrs. Saunders (chairman), Denton, Cooper, Kettlewell and Stevens.

#### MISCELLANEOUS QUESTIONS.

In reply to Mr. Stevens,

The President said he had cultivated Elliott's early pear. It kept much longer and better than several other samples. The size was a stage larger than the D'Ete (Doyenne). It grew coarse and rough at the stem. It was a hardy tree, and was a very desirable early variety. It does not rot at the core. The Souvenir de Congress, he had also cultivated. It was a good variety, and much larger than the Bartlett.

Mr. Saunders had seen the nicest flavoured Rostiezer pears lie in the dealer's window much longer than pears of inferior quality. It was not a good selling pear, as its colour was

against it. Some of his dwarf trees had been blighted this year.

Mr. Kettlewell advocated the doing away with the dwarfs. He went for a standard at once.

The President upheld the dwarf system as the best under ordinary circumstances.

Mr. Russell remarked that, if they cut away the bottom roots and cultivated the top ones, the trees and vines would be more productive. He believed that the top roots were fruit-producing, and that by taking away the wood-bearing roots they would have more fruit.

Mr. Caldwell spoke in similar strain.

Mr. Kettlewell had never seen the tap root of a grape at all. He held a Standard tree was the best for Western Ontario; and his experience was that the man who now cultivates dwarfs will regret the step inside of ten years.

Mr. Saunders said this was quite a new idea to him. And it seemed to arise from this:

—The more they pruned their tree roots the more fibres they gave it, allowing it to get ad-

litional sap. Still, the same roots produced both fruit and wood-giving qualities.

Mr. Cooper asked whether, in planting grapes in a cold vinery, he should place the border outside or inside.

Mr. Pucke, Ottawa, would place it outside. He had found that by far the best.

In further discussion,

Mr. Bucke—I wish to tell you a little experience of a Director of this Society. A gentleman grafted potatoes with tomatoes, and he found the potatoes grew above ground and the tomatoes under. (Much laughter.)

In reply to Mr. Bucke, who asked whether any one had experience of native wild plums

as a hedge tree,

Mr. Saunders said he had found them grow very well in a row. There was this objection, however—it was just a hot-bed for plum curculio.

Mr. Smith—Would that not be an argument for its use. If it took the curculio from

the good varieties.

Mr. Saunders—They will attack both.

The President recommended the "Beurre Giffard" as a good pear for cultivation.

### THE BIRD-SHOOTING QUESTION.

A letter was read from Mr. Geo. Buckland, Secretary of the Bureau of Agriculture and Arts of Ontario, in which he said he was instructed by the Commissioner of Agriculture to request the Fruit-Growers' Association to consider the question whether the present system of granting licenses to procure birds for scientific purposes is attended by injurious results to fruit-growers and gardeners generally. It added:—" About twenty persons residing in different parts of the Province have annually been granted this privilege, and it has been represented that, in consequence of this great destruction of insectiverous birds by these and other parties, very injurious results to fruits and also to garden and farm crops have followed."

After remarks from Mr. Wm. Saunders, London, and Me-srs. Smith, Grimsby, and Stevens, Westminster,—Mr. Saunders holding that, in the absence of a decided opinion as to what birds are, or are not, destructive to fruits, it would be difficult to condemn the granting of

licenses, the following resolution was carried :-

Resolved, "That having heard the communication from the Minister of Agriculture relating to granting licenses to persons to shoot birds for 'scientific purposes,' this meeting is of opinion that the traffic in birds for the purposes of personal adornment should be discountenanced by all classes of the community, and would suggest that the licenses to shoot birds

should not be transferable, but be limited strictly to the person whose name is incorporated in the body of the license, as we are of opinion that the privileges now granted are abused by many of the holders of such licenses, and that such destruction as is now carried on is detrimental to the interest of fruit-growers."

#### CULTIVATION OF CHERRIES.

The Association took up the query-

Cherries.—Best varieties for this neighbourhood? Is the culture of this fruit profitable?

Mr. Denton introduced the discussion by saying he grew Mayduke and Elton, Yellow Spanish, Black Tartarian and Black Eagle. Recommended not to grow trees too rapidly, and would select high land with north and north-west aspect. Early Richmond most profitable. Comes before the common cherry.

Mr. A. M. Smith, Grimsby-Empress Eugenie is very promising. Early Richmond is

the earliest. Butner's Yellow is a good late.

Mr. Arnold, of Paris, finds it necessary to grow only on Mahaleb stock. Believed he would sell cherries at a good profit if he lived near a large city.

Mr. Ellison had never found cherry trees to be very profitable.

Mr. Saunders—Have made more money out of Early Richmonds than any other cherries It is ten days earlier than others. Got from eight to ten cents a quart for Early Richmonds; only from three to five cents for common sorts. Had found Mahaleb stock the best. Belle de Choisy were a failure, so far as he was concerned. Bowman's May, Governor Wood, and other early varieties are non-paying, because you cannot keep the birds off. Next to Early Richmond, he preferred the English Morello. It was so bitter that the birds did not touch it so much as the early varieties. Empress Eugenie could be ripened, and was a pretty fair fruit-producer. The late Duke is a very nice cherry, and a fair bearer. The Belle Magnifique was also a good variety, and one of the latest. Mr. Saunders then explained the modus operandi pursued by Mr. Meehan, of Philadelphia, in planting trees. He dug a hole in the sod, and put in the tree; and it was found this practice suited extremely well.

Mr. Shoff, McGillivray, found the common cherries the best for use.

Col. McGill said the most moncy was in the Early Richmond. Had one tree that, two years ago, he had taken 114 quarts off, besides supplying his own and another family. He had got ten cents per quart for these before the common Kent were in the market. There was very little profit in cherries; if there was any, it was in Early Richmond and Elton's. He found at least three times the amount of money in an equal acreage of strawberries.

Dr. Brown, London, had one tree—the old country "Black Heart"--on which grew

so many cherries that he got plenty and the birds too. (Laughter.)

Mr. Kettlewell, Westminster, thought cherry trees, as a rule, should get a good trial as to age. Where they got too much growth, they could not get fruit. For productiveness, the early cherry beats anything he had ever seen. In regard to profit, he also thought it the best. As a cherry to eat, the Napoleon Bigareau was the best

Mr. A. B. McColl, London, spoke of the discussion as a great boon to fruit growers, in

elucidating so much valuable information.

Dr. Brown thought it would be a very good thing for this Association to disseminate instructions to the public, as to the best means to pick fruit. A great deal of fruit was destroyed by the way it was picked. He thought that all plums and cherries should be gathered by being cut by seissors.

The President.—I have picked fruit in that way; it is a good one.

Mr. Leslie, Toronto, drew the attention of the Association to what he believed to be a fact—that a great deal of the non-success of cherry culture in Canada arose from overculture. If they wanted to grow cherries, they must put them in poor soil. On an average, he thought the culture of the fruit in this country was not profitable. He believed, however, the Empress Eugenie—a new variety—might yet be made profitable.

Mr. Arnold. Paris, said that when a tree looked sickly he would cultivate it. If it was

growing too rapidly, he would not.

Dr. Brown remarked that his "Black Heart" tree had never got any cultivation; it

was all sodded; and yet it had grown enormously in the last five years, being now twenty feet high, and, as he had stated, bore large crops of fruit.

#### THE APPLE BLIGHT.

"What is its extent, and how far has it injured the apple crop? Have any remedies been suggested or tried?" These were the next questions discussed, the first speaker being Mr. Caldwell, of Galt, who said it was a most mysterious affair. He could not give any idea as to its origin or cure. It seemed to be caused by currents of heated atmosphere, when the air was charged with electricity. He could not explain how it sometimes took one tree, or one twig, and missed another. The hardiest varieties—the crabs, the golden russet, &c.—are the most subject to it. With a very few exceptions, it has not gone in amongst the young nursery trees. It entirely destroys the branch where the blight is; but if you cut it off, the rest of the branch is perfectly healthy.

Mr. A. M. Smith, Grimsby, said it extended over a vast area.

Mr. Leslie, Toronto, believed the theory of Mr. Caldwell— as to hot and cold currents, to be the real cause of the blight. He thought this country and the United States was being so denuded of forests that it allowed these currents to take effect. He thought they should

give their trees more shelter.

Dr. Brown had his garden well sheltered. This year his whole trees were blighted. It was due to atmospheric causes, he thought. There was still a large amount of ice in Lake Superior, which was absorbed into the atmosphere, causing these currents of hot and cold air. On some of his trees the fruit had died as well as the tree. He didn't think there was any remedy for it, because they could not control the atmosphere. One of his trees he had cut off the blighted parts, with the result that the tree was now sound. He was sorry he had not done so to the other trees. Reversing the general arrangement of fruit trees he had planted them quite close together, with the result that he had always an excellent crop of all kinds.

M. Stead remarked that his experience was, that currents of air could not produce the

blight, because often one tree was missed immediately by the side of one blighted.

Mr. Wm. Saunders said that some six years ago the blight appeared in the Western States, and had been gradually extending. Mr. Dougall, of Windsor, first spoke to him about it a few days ago, when his apple trees were seriously affected. He visited Mr. Dougall's nurseries last year, and found the blight had seriously increased, even entering his young nurseries. Prof. Beale, of Lansing, and other gentlemen were with him; and the general opinion was that, as in the case of the pear blight, the present blight arose from some fungus growth. He had tried the plan of cutting out the blighted parts, but had not much faith in it. In Mr. Dougall's nurseries, he thought, the larger portion of the trees had been blighted by a succession of the blighting of the smaller twigs. The blight might seriously injure the apple crop of the country.

Mr. Shoff reported the outbreak of the blight in McGillivray.

The Secretary said the blight generally struck the cluster of fruit. Non-fruited trees

seemed to escape.

Mr. Arnold, of Paris, said he would just as soon lay the blight to the "man in the moon" as to electricity or currents of air. He did not believe in either. It appeared to be a mystery, as Mr. Caldwell had correctly stated at the outset of his speech.

The Secretary said that on the trees where there were no blossoms in his garden there

was no blight.

Mr Sibbald, of Bluevale.—There is no blight in our neighbourhood.

Col. McGill.—In my neighbourhood, the trees affected are those which have not blossomed at all.

Mr. Russell.—My theory is that the blight is caused by an exhaustion of the tree, through overbearing; the trees at certain conditions of the atmosphere not being able to give sufficient nutriment, and the blight ensuing.

The President.—If it proceeds from exhaustion, how is it that the tree is not affected

as a whole?

Mr. Russell.—The partial want of nutriment is not sufficient to cause such a total blight.

Mr. Arnold.—I would suggest that we dream over the matter for a year or two.

The discussion then dropped

The Committee appointed to examine and report on the fruit exhibited brought in their Report, which was accepted. The Report is as follows:—

## REPORT OF FRUIT COMMITTEE APPOINTED TO REPORT ON THE FRUITS ON EXHIBITION AT THE SUMMER MEETING.

#### CHERRIES.

Mr. Arnold, of Paris, exhibits some fine samples of cherries on branches literally covered with fruit. Napoleon Bigareau very fine; also good specimens of Black Bigareau, Downer's Late Red, and Elton.

Mr. E. A. Taylor, of London, shows a plate of Black Eagle in very good condition.

#### STRAWBERRIES.

Mr. A. M. Smith, of Drummondville, shows fine samples of the New Dominion Strawberry, in good condition.

A seedling raised by Mr. Biggar, of Drummondville,—we regard this as a promising

variety, and worthy of more extended culture.

Mr. Arnold showed very good samples of his No. 1 seedling, which maintains its high character for flavour and beauty. He also exhibits a new seedling, No. 23, a seedling of his No. 1, which is also of excellent flavour, and promises to be a great acquisition to straw-berry-growers. The berry is large and handsome, varying in form from irregular to regular, of good colour and apparently prolific, sufficiently so, we believe, to make it a good market variety. The stalk is remarkably robust, and long, sustaining its fruit well above the soil. We think Mr. Arnold's persistent efforts to improve the character of our strawberries is deserving of all commendation.

#### RASPBERRIES.

Mr. A. M. Smith exhibits a collection of this fruit, embracing five named varieties and some seedlings, the latter not yet ripe. The named fruits are Elm City, Highland Hardy, Brandywine, Naomi and Ganargua, all in good condition.

Mr. Moyer also shows a fine sample of Highland Hardy.

Mr. Russell, of London, shows fine samples of White Grape and Rel Dutch Currants, also Downing's Seedling Gooseberry, grown from the bush sent him by the Association.

WM. SAUNDERS, J. M. DENTON, E. H. COOPER, R. KETTLEWELL, RICH. STEPHENS.

A vote of thanks was then passed to the Young Men's Christian Association for the use of their room; and the meeting adjourned at 10.15, P.M.

#### AUTUMN MEETING.

This meeting was held at Simcoe, in the lecture room of the Mechanics' Institute, on We lnesday, the 15th November, 1876.

The President took the Chair, and the Secretary read the minutes of the last meeting,

which were approved.

The meeting proceeded to the consideration of the best methods of drying fruit.

The President introduced Mr. W. G. Murdoch, of London, who is interested in a process of drying fruit, known as Reynold's Patent Fruit Evaporator.

Mr. Murdock proceeded to explain the advantages of Reynold's Evaporator, claiming for it that it is superior to any other now in use, because—

1st. It is more simple in its construction, and does not require an expert to operate it

successfully.

2nd. It will evaporate more fruit and do it better than any other machine of proportionate size or cost.

3rd. By the condenser, the saccharine matter is retained, and the watery portions of the fruit are taken out, so that when the same is supplied the fruit resumes its natural flavour.

The following description of one built in Chicago was submitted by Mr. Murdoch, which

gives a very good idea of its structure and mode of operation :-

The Evaporator is a cylindrical structure, seventeen feet in height, and having a diameter of eight feet. The peaches, apples and other fruits or vegetables to be dried, after being cut up, are placed on screens within the cylinder. A shaft, which, by means of cogs, any small boy can operate, serves to revolve the screens. A furnace keeps the air constantly heated to a temperature from 150° to 175° Fahrenheit. By gently revolving the screens the fruit is dried. About two hours is the time required for drying peaches; an hour and twenty minutes is sufficient for apples when properly prepared.

The steam and vapor rising from the fruit comes in contact with a cold water condenser

at the top of the cylinder, and is carried off.

This Evaporator has a capacity for drying two hundred bushels of fruit per day. Forty bushels are placed in the chamber at a time. The inventor claims that peaches can be dried at an expense of seven cents per pound, and when peaches are bought for 25 and 30 cents per bushel, there is quite a margin of profit remaining.

The Evaporator can be used for peaches, apples, pears, pumpkins, squashes, tomatoes.

corn, and other fruits and vegetables.

It is claimed for this invention that it preserves the natural colour of the fruit, and with

the natural colour it retains its flavour.

The machine of A. J. Reynolds differs essentially from all others in its application of heat. Its shelves of fruit, operated also by a crank and cog-wheels, have a rotary motion; the heat is introduced at the bottom of a cylinder, which may be of a size proportioned to the amount of the work to be done, within which rotate the fruit-shelves upon a spindle which supports them, and in the centre of a hollow drum, which only office is to occupy space, and thereby confine the heat to the material to be dried. Unlike the machine of Alden & Smith, the vapor created by the heat and process of drying is not allowed to escape directly at the top, but is there conducted into condensing tubes and flows off gradually. The shelves of fruit, when dried, are removed at once by opening a door of one side of the cylinder at the top. Heat is also introduced into the side of this machine through the medium of the smokepipe, which passes up alongside of the outer cylinder. It is claimed for this machine that it consumes less fuel and diffuses the heat more generally and continually than any other; that it may be used of so small a size as to be adapted to the top of a common stove, and from such a size up to the largest, which is 10 feet in diameter and is 16 feet high. The price varies from fifty to twelve hundred dollars.

When we consider the importance of the desiccation of fruit and vegetables, effecting the saving of so large a portion which is now lost; for keeping them for any length of time, and in all weather and climates, in view of their transportation—their weight is reduced at least

three-fourths—too much importance cannot be attached to the subject.

The apparatus consists of a circular condensing chamber, within which is a shaft with a great number of wire shelves attached, on which the fruit screens are placed and constantly revolved around fans in the hot air, the heat being supplied from a furnance at one side of the base of the shaft. Cold air is admitted through a valve to vary the heat, the cold water through another valve into the conductor, which is at the top of the cylinder. Convenient doors are constructed in the sides of the cylinder, so that the condition of the fruit can be ascertained at any moment, and withdrawn, if necessary, during the operation. The prepared fruit is laid on the screens of fine net-work, and placed on the wire shelves, fitted perfectly to receive them, and in a short space of time is taken out dry and ready to pack away. Peaches, apples, pears, green corn, beans, sweet and Irish potatoes, squash, tomatoes, pumpkins, string beans, and, in fact, anything in the fruit or vegetable line, can thus be preserved without the usual discoloration incident to drying by solar heat and natural atmosphere.

It cures apples thoroughly in one hour and twenty minutes and peaches in two hours, retaining in all cases the original colour and flavour of the fruits at the time they are prepared for the Evaporator.

Apples can be prepared and evaporated at a cost of 3 cents per pound for the dry product; Peaches (pared) at about 7 cents; Tomatoes, at 15 cents; Pumpkins and Squash, at about 4 cents; Raspberries from 1½ to 2 cents; Green Corn, 3 to 4 cents.

## AVERAGE YIELD AND WHOLESALE PRICES CURRENT OF EVAPORATED FRUITS AND VEGETABLES, DECEMBER 1st, 1875.

	Pounds.	Price p	er pound.
Apples, per bushel, yield from	$5\frac{3}{4}$ to $6$	18 to 2	0 Cents.
Peaches, pared, per bushel, yield	• 6	.40 to 4	5 "
Peaches, unpared, per bushel, yield from	8 to 9	.18 to 2	0 "
Squash, per 100 pounds, yield	7	.18 to 2	0 "
Pumpkins, per 100 pounds, yield	6	.18 to 2	0 "
Raspberries, per bushel, yield	8	.45 to 5	0 "
Blackberries, per bushel, yield	8	.30 to 3	5 "
Onions		. to 7	5 "
Corn	8	.16 to 2	0 "
Tomatoes	4	50 to 6	0 "
Potatoes	10	.16 to 2	0 "

Pumpkin and Squash flour, in  $\frac{1}{2}$  lb. packages, per dozen, \$3.00. Two table-spoonfuls make a pie.

#### OPERATION.

The fruit is nicely pared as rapidly as possible, and inserted into the Evaporator at the lower doors, with 175° Fahrenheit heat, and after 30 minutes is raised by the windlass, sufficient to admit of two more trays of fresh fruit at the same door, which is repeated until the fruit trays reach the upper doors and is sufficiently cured, when it is withdrawn through the upper doors.

With all delicate fruits the circulation of the drum and fruit over and off of the furnaces should be very slow, not more than ten revolutions per minute, as it gives a variety of heat

around the circle, preventing the baking or "kiln-drying" of the products.

Mr. Murdoch exhibited some samples of dried apples prepared by this Evaporator, and stated he was about erecting one at London, which he hoped to have in operation shortly.

The President called upon the Committee that had been appointed by the Directors, to examine different apparatus for drying fruit, and to collect what information they could on the subject, with a view to laying it before this meeting.

The Secretary, on behalf of the Committee, submitted the following

#### REPORT ON FRUIT DRYING.

Your Committee immediately entered into correspondence with parties interested in fruit drying, with a view of securing their presence at this meeting, with models of their various apparatus, samples of their products, &c. Their reply was to the effect that much more satisfactory information could be obtained by visiting the several establishments when in operation, and witnessing the working of the apparatus. Your Committee, in accordance with this suggestion, and with the power conferred upon them by the Directors, proceeded to make a personal examination of such Evaporators as were to be found within a convenient distance. Their first visit was to Lockport, N.Y., where they inspected an Evaporator in operation. Unfortunately, the proprietor was from home, and the foreman was both deaf and dumb. We were, however, very kindly permitted to go through the establishment and examine the various processes, and glean such information from the employees, who were mostly boys and girls, as we could. The apples that were being used were such as had fallen from the trees from various causes, a good deal bruised and otherwise defective, and such as heretofore would have been used for making cider or have gone to waste. These apples,

without any further preparation, not even that of wiping off the clay that adhered to them, were put upon a paring and coring machine, and the rind taken off, as well as such machines could do with such apples. A slicer was then brought to bear upon the apple while it was being revolved, which cut it spirally through of a nearly uniform thickness. The apple was then taken from the parer and passed to a boy, who, with a thin-bladed knife, rapidly removed any portions of rind still remaining, any bruised or otherwise unsound spots, and then made a longitudinal cut directly across the spiral cut of the slicer, which caused the apple to fall apart into slices, as though after paring and removing the core by punching it out, the apple had been sliced directly across from stem to blossom end. The fruit thus sliced was now spread by a girl upon a wire tray or sieve, and as fast as the trays were filled they were removed by a lad and taken to the Evaporator.

The Evaporator, in so far as we could see, differed in nothing from the oven of any of our power bakeries where soda biscuit are baked. Like those ovens, the heat was applied at the bottom, and through the oven ran an horizontal shaft with arms, upon which were suspended frames for receiving the wire trays, which, though the shaft was revolved, remained in a horizontal position. As fast as the fruit became sufficiently dry, these trays were taken out and others, filled with the fresh fruit, put in their places. These trays were received by another lad as they came from the oven, who examined the fruit to see if it was sufficiently dried, removing any slices that were not dry enough, and then emptying the dried fruit into

a box, passed the trays back to the table to be again filled with fresh fruit.

Owing to the absence of the proprietor we were unable to get any particulars as to the cost of erecting or working this Evaporator, how rapidly it performed its work, nor what was its capacity. But we were kindly permitted to bring with us a sample of the dried fruit,

which we have placed on the tables for inspection.

Your Committee then proceeded to Albion, where we had made arrangements to meet Mr. C. S. Cole, of Spencerport, under whose superintendance an Evaporator under Mr. Reynolds' patent had been erected and, for a short time, in operation. Mr. Cole met us at the station, in accordance with our appointment, but with the unfortunate announcement that the Evaporator we had come to see had burned down during the previous night. However, we proceeded to the place where it had been, and had an interview with the proprietor. He expressed himself well satisfied with the working of the Evaporator, and with the quality of the product. He had shipped only a few barrels of the dried apples, and had not yet had any returns from them, so that he could not tell what it would sell for by the barrel. Nor had he been able, during the short time in which he had been using the Evaporator, to systematise the work so as to get it in regular running order in the most advantageous and economical manner, so as to be in a position to say what the cost of drying the fruit actually was. The fire had so completely consumed the Evaporator and the building in which it stood, together with the contents, that we were unable to receive from him any samples of the dried fruit.

Mr. Cole thereupon suggested that we should proceed to Spencerport, and see the Evaporator that he had erected at that place, but which was not now in operation, on account of some changes that were being made in the furnace. We therefore accompanied Mr. Cole to Spencerport, who hospitably insisted upon entertaining us as his guests over the night. In the morning we went with him to see the machine, and found a large wooden cylinder, about eight feet in diameter and some twenty in length, placed perpendicularly upon a brick foundation. This cylindrical structure was held firmly together by iron bands or hoops, after the manner of a wooden vat, and had a horizontal opening near the bottom, and another near the top, with doors by which they could be closed at pleasure. Within the cylinder and at the centre was a vertical shaft running from top to bottom, which was geared with a cogwheel, so as to be made to revolve by turning a crank. To this shaft were attached supports for receiving the trays, which are put in at the bottom, and are raised by means of a lever perpendicularly, so as to be moved in a vertical direction from the bottom to the top. trays are made in the form of segments of a circle, so as to fit into the cylinder with sufficient accuracy to fill the entire circle of space, and are made by stretching wire cloth over a wooden frame, to the bottom of which are fastened iron feet of about four inches in length, which keep the trays at that distance apart from each other while they are being raised in a vertical direction by means of the lever.

In the side of the cylinder is a thermometer, placed so as to be visible from the outside, which enables the operator at all times to know the degree of heat that is being maintained.

within. Within the brick-work at the bottom, on which the wooden superstructure rests, is the furnace in which the heat is generated. The fuel used is anthracite coal. The smoke and gases escape through a pipe, which is carried in a flue up the side of the cylinder with openings into the cylinder, so as to economize any heat that may be given off from the pipe. The cylinder is covered over at the top, but has two or three small circular openings in it to admit of the escape of the vapour arising from the fruit. This machine did not have any pan of cold water at the top to serve as a condenser of the vapour, which we believe the patentee claims to be an important feature of his process.

After the fruit is prepared and placed upon the wire trays, a man, stationed at the door at the bottom of the wooden cylinder, places the tray upon the supports fixed to the revolving shaft, and by means of the crank makes the shaft to revolve so as to bring the tray that has just been put in, directly over the furnace. Meanwhile, another tray has been got ready and brought to him, this he places in another segment of the circle, and turns that over the furnace. This process is repeated until the circle of trays is complete, and the revolution of the shaft brings the tray first put in once more to the door, then by means of the lever the tray is raised vertically and a tray of fresh fruit is put in under the tray that was first put in, and so, by successive revolutions and elevations, the tray that was first put in arrives at the top, and comes to the door ready to be taken out. By this time the Evaporator is filled with trays of fruit in various stages of curing, from the tray of fresh fruit just put in at the bottom, to that at the top now fully dried and ready to be taken out.

A person now stationed at the top, removes the trays of dried fruit as fast as they are brought round and up to the door at the top, empties them of their dried fruit and sends them down to the floor below, to be again filled, placed into the Evaporator at the bottom, and again go through the process already described.

It will be at once seen that for the most economical working of the Evaporator it is necessary to have just enough persons preparing the fruit as can keep the trays supplied as fast as they are emptied, and to have relays of workmen, so that the process may go on night and day without interruption.

Although we did not see this evaporator in actual operation, we were able, with the help of the explanations so kindly and fully given to us by Mr. Cole, to fully understand the method of working it, so as to give you the details already presented. Here we obtained some samples of the dried apples, which we herewith submit for examination. The samples are of several varieties, as the Baldwin, Spy, St. Lawrence and others. It will be noticed that the colour of the fruit varies slightly with the variety, that of the Baldwin being of a more decided straw-colour than the samples of the other varieties, some of which are remarkably white.

We learned from Mr. Cole that there was at Brighton, near Rochester, an establishment for drying fruit with an Evaporator of somewhat different construction, and which is known as the Alden process. Having seen all that was to be seen at present of the Reynold's Evaporator, we decided to take the next train to Rochester, and proceed to Brighton. As Mr. Cole had business in Rochester, and was going there, he consented to ride with us out to Brighton and introduce us to Mr. Wing, the proprietor, with whom he was personally acquainted. We were so fortunate as to find Mr. Wing at home, and the Evaporator in operation, and received from him every possible courtesy and attention, and the fullest replies to our many inquiries. This Evaporator we found to consist of a long cubical box, instead of a cylinder, not quite square, but measuring perhaps four feet by three, placed vertically upon a brick chamber, in which is the furnace. This cubical box was some twenty or more feet in height, with the top end open. It was provided with two endless chains, placed opposite each other, and running from the bottom to the top on the inside, and from the top to the bottom on the outside. Near the bottom was a door where the fruit was put in, and at the top another where it was taken out. The endless chains were provided with supports for holding the trays, which were of a size to fill the entire cross section of the cubical chamber. These trays had also a wooden frame with wire cloth stretched upon them. The fruit was prepared in an adjoining room by young women, who pared, cored and sliced the apples in the same manner as seen at Lockport, and spread them on the trays. These were taken when ready, by an assistant and carried to the evaporating room, and placed on a table which stood between two of these tall cubical evaporators. There a young man received them, and gave the fruit any final adjustment it needed, and opening the door of one or the

other, as was needed, placed the tray in the chamber upon the supports which are attached to the endless chain. On the floor above, another young man, with a lever, gradually moves the chain so as to bring the trays slowly up from the bottom of the chamber to the top. Arrived there, the fruit is sufficiently dried, and, as the trays successively come to the top, he opens the door, takes out the trays, removes any pieces that are not sufficiently dried (if any), and then empties the dried fruit into a hopper, through which it falls to the floor below. The empty sieves he places upon a hoist, and sends them also to the lower floor.

There is no apparatus for condensing the vapour in this Alden machine; the heated air simply rises from the bottom to the open top, and, passing out there, carries with it the moisture taken up from the fruit. The motion of the trays is simply vertical, by means of the endless chain, the whole space of the chamber being occupied by the trays, without any

shaft or contrivance for giving them a rotary motion.

The dried fruit is allowed to remain exposed to the air for a few hours, so that it may absorb sufficient moisture to become somewhat elastic, in order that it may be closely packed in boxes or barrels without breaking, it being too brittle when it first comes from the Evaporator to bear pressure. It is put up in boxes, containing six pounds each, for family use;

also in barrels, for bakers and grocers.

The Messrs. Wing told your Committee that they had last year carefully computed the cost of dried apples, put up ready for market, including the price paid for the fruit, but nothing for the interest on machinery, building and fixtures, and found that it averaged seven cents per pound. They had also successfully dried sweet corn, squash, potatoes and onions; but in drying these vegetables they could not use the wire trays, because the wire discoloured the vegetables; but to obviate that they used a coarse netting stretched upon the frames.

We noticed also that there was in the store-room a quantity of dried cores and parings, and on inquiring why they had dried these, were told that last year they had sold a large quantity of these to the Jelly Manufacturing Company at six cents per pound, but that they

feared there would not be as good a market for these this season.

We have obtained from Mr. Wing a sample of their dried apple, and of the dried swect corn and potatoe dried by the Alden Evaporator; also some samples of jelly made from the

cores and parings, all of which we submit for your inspection.

Your Committee cannot express any decided opinion upon the relative qualities of the fruits dried by the several processes; that can only be settled by some practical tests in the use of them. To all outward appearance they seem to be very much alike. The chief difference seems to us to be one of economy in the construction and working of the several Evaporators. We are unable to give any particulars as to the cost of the one we saw at Lockport, but we understand that the cost of the Alden Evaporators varies from one to five thousand dollars, and the cost of the Reynolds Evaporator from fifty to twelve hundred dollars.

We believe that the time has come when some method of drying our fruit must command the attention of fruit-growers. There is always a quantity that from one cause and another can not be marketed in the fresh state. Indeed a great deal that is now put up and sent to market would be worth more to the owner if it was kept at home, for it only serves to lessen the price of the good fruit with which it is mixed. There is also an increasing demand for fruits in a form convenient for long transportation, as in ship's stores on long voyages, exploration parties, Government surveys and the like. The grocers and bakers in large cities find in the dried fruit a much more convenient and satisfactory material for pies, puddings, &c., than in the fresh fruit with its great liability to deterioration and decay. The dried fruit has an advantage in being less bulky and lighter than either the fresh or the canned fruit, thereby saving largely in the cost of transportation, besides being in a state to keep for an indefinite period.

The only questions that seem to your Committee, to require careful attention, are these, do the fruits dried by any of these processes so retain their natural flavour as to be generally palatable to consumers? And can the fruits be so economically dried by any of these processes

as to effect a saving to the fruit-growers?

All of which is respectfully submitted,

D. W. BEADLE, A. M. SMITH,

Committee.

Apples contain 85 per cent of water. Peaches, "84 ""Cherries, "80 ""

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Mr. P. E. Bucke, Ottawa, explained to the meeting the construction and working of another apparatus for drying fruit, known as the "Pacific Fruit and Vegetable Dryer." It consists of a long horizontal chamber, divided lengthwise into three separate compartments or chambers, through which currents of heated air are passing from a furnace upon which it is placed. The fruit is placed upon sieves or trays, and these are slid into a frame holding a number of these trays, the frame is fastened to a truck with wheels, and when the frame is filled with fruit, the truck with its load of trays is rolled gradually to the opposite end of the long chamber, there the truck is lifted to the second story and made to travel to the front, where the fruit can be taken out if sufficiently dry, or, if not dry enough, the truck can be raised to the third storey, and made to traverse that. The partition floors are so arranged with dampers in the opposite ends as to cause the heated air to pass through the dryer three times. The vapour from the fruit is condensed and made to pass out through an inverted syphon. It is designed to dry fruits, vegetables, meat, fish, &c., &c. It will also make candied fruits and raisins fully equal to the best imported. Mr. Bucke exhibited some candied fruit prepared by this Evaporator. It dries apples in from one hour and a half to two hours. The cost of this Evaporator is from \$30 to \$1,000, with a drying capacity of from 15 to 600 bushels per day. Mr. Bucke also exhibited some apples dried in France, and known as Normandy Pippins. The apple is dried whole, only the rind being removed.

The President appointed the following Committee to examine and report on the seedling

fruits on exhibition, viz., Messr. Robb, Jackson, Leslie, Ainslie and Dr. Clark.

The meeting proceeded to the discussion of the question, "What varieties of fruit do best about Simcoe?"

Mr. Ainslie, Simcoe, said that in grapes the Eumelan and Creveling did well this year; also the Salem, Concord, Delaware, and Hartford Prolific. In 1875, grapes scarcely ripened here, the season was so cold.

Mr. Hall said, Greenings and Spy do well among apples. The winter before last was so

severe that the peach trees were badly killed.

Mr. Slaight, of Waterford, named the Baldwin, Spy, Greening and Rox. Russet, these are the very best we have for shipping, and for home use in winter. If the tree is well trimmed, the Spy does very well. The fruit does not blow off easily. The Baldwin is our leading sort for market. The King of Tompkins is not likely to prove satisfactory; it is a somewhat shy bearer, and sometimes the fruit decays on the tree. Old trees will bear nice

fruit when well cared for, properly trimmed and manured.

Mr. Jackson, Simcoe.—Our best early apple is the Early Harvest; next to it is the Red Astracan. These grow magnificent. The Spitzenburgs do splendidly. Planted Northern Spy about fourteen years ago, and rank them next to the Spitzenburg, though if they are not picked early they do not keep as well, but show dry rot towards the spring. I do not think the flavour of the Greening quite equal to these. In truth, I esteem the Spitzenburg the best of all winter apples. The Baldwin is popular, and it sells well, but my first apple is the Spitzenburg, and next to it the Spy. The Snow apple is a favourite in the fall: it is then truly splendid. There have been thousands of barrels of apples shipped from this station this fall, for which the growers received from 75c. to \$1 per barrel, and the buyer furnished the barrel and packed the fruit. I grow of pears, the Bartlett, Flemish Beauty, Louise Bonne, White Doyenne, and Clapp's Favourite. The best one of all is the Bartlett. I do not think much of the Louise Bonne; the tree blighted this year, the only sort I ever had blighted. I think a great deal of Clapp's Favourite; the White Doyenne is also a fine sort. As to grapes, everybody ought to have the Concord. I depend on the Concord, Clinton, and Delaware; these never mildew, and are fruitful. The Salem does well here, but does not bear more than half as much as the Concord. The Hartford Prolific ripens early but unevenly. My soil is varied, having both sand and clay. Think this County of Norfolk produces some of the best fruit to be found in this Province. A good many grapes are grown about Port Rowan.

Peter Gilbert, Woodhouse Gore.—The great mistake that has been made here has been in planting too many kinds. Would recommend the Early Harvest, Sweet Bough, Fall Pippin, Snow Apple, and Fall Janetting. The Spy stands first for shipping; next to it for market and winter use, is the Baldwin. The Spitzenburg does well on a strong soil, and is valuable for home use. We have a good soil and climate for apples. We also grow strawberries, both for home use and market; the Wilson is the most valuable sort. As for rasp-

berries the American Black Cap is the best as yet for market, being very productive. I am trying the Philadelphia. My chief business is hop-growing; am cultivating fourteen acres of hops. The best yield I have had was 1,200 pounds to the acre.

The meeting was suddenly brought to a close by the announcement that it was train time, and the members from a distance were obliged to leave. There was a fine display of

fruit, both apples and late pears.

The following is the Report, as far as prepared by the Committee, on Seedling Fruits on Exhibitions:—

#### REPORT OF THE SEEDLING FRUIT COMMITTEE.

SIMCOE, 15th November, 1876.

The Committee have had brought before their notice specimens of seedling apples, as follows:—

No. 1, raised by Howell Morgan, Rednersville, Ont.

No. 2, " Mr. Essery, Petersville.
No. 3, " Mr. West, Westminster.
No. 4, " Mr. Colbiek, Hamilton.
No. 5, " Mr. Russell, London.

No. 1 is a handsome, medium-sized, flattish round apple, dark red cheek, slightly striped. The flesh is soft in texture, and flavour a pleasant sub-acid verging on sweetness. The specimens now exhibited are past their prime, but we would consider this a very promising variety in its season

No. 2 is a seedling from the Spitzenburg, but shows none of the characteristics of its

parent. It is of small size, sub-acid flavour, but in our opinion of no special value.

No. 3 is a nice medium to small apple, in its markings somewhat resembling the Wagner, flesh yellow, pleasant sub-acid, and evidently a good keeper. We consider it worthy of trial.

No. 4. A seedling from the Esopus Spitzenburg, much resembling it in colour and appearance, but smaller and more ribbed and variable in shape.

Report cut short by announcement that it was time to leave for the cars.

# REPORT OF COMMITTEE ON SOUTH WELLINGTON AND SOUTH WATERLOO.

To the President and Directors of the Fruit-Growers' Association of Ontario.

The Committee appointed to report upon the capabilities of the District lying upon the line of the Great Western Railway between Guelph and Hamburg, comprising part of South

Wellington and South Waterloo, beg leave to report:

They first commenced their duties in the neighbourhood of Guelph, by visiting the Model Farm. They find that there has been a great improvement made by the indefatigable exertions of Mr. Barron, the gardener there. He kindly showed the Committee the orehard and garden; the crop of fruit is excellent, and the soil seems well adapted for fruit culture. Of apples, the principal varieties cultivated are Northern Spy, Baldwin, R. Island Greening, Ribston Pippin, and Fall Pippin. The trees appeared healthy, and the apples large and fine, and in fact, superior to most seen in this region. There are a few pear trees, but the quality of the fruit was very fine of Flemish Beauty, White Doyenne, and Bartlett; also, some very fine Duchesse D'Angouleme. The trees are mostly standards. The orchard is on an elevated situation, and they have no doubt that both pears and apples can be cultivated to good advantage, as the soil is well adapted to fruit culture.

Mr. E. Fear, an extensive gardener in Guelph, says that the varieties of apples that have done best with him, are, the Red Astrachan, Early Harvest, Roxbury Russet, Northern Spy, and St. Lawrence. Of pears, the only varieties he has had any success with are, Flemish

Beauty, Belle Lucrative, and Lawrence, Standards. Dwarfs have done badly, and nearly all have perished. We may note that Mr. Fear's garden lays very low, and is an alluvial soil near the river.

We visited Messrs. Gilchrist's grounds, and found for the short time they have been on the place, that they have made progress. They have planted out a large number of fine young trees, which look well and healthy. They have a fine lot of young plum trees, among which we noticed some trees of Glass Seedling, in bearing; the fruit was fine, and about ripe at the time of our visit in the first week of October; the soil seems well adapted for fruit They have two and a half acres of very fine healthy strawberries, which they say yielded good crops of fine berries last summer, and proved very profitable from their nearness

to market, the garden being within the Town of Guelph.

Mr. William Stevenson, who owns a very extensive nursery in Guelph, reports that the winter of 1874-1875, was, in its effects, the most severe that he has known in twenty years' experience. Vast numbers of his pear trees and some of the tender sort of apples were killed to the ground, and not only young stock suffered, but large bearing trees; the Baldwins and Greenings suffered most, and perhaps next, the Early Harvest. In pears, the few that escaped wholly or partially were first, Clapp's Favourite, which stood the cold with impunity; next, Flemish Beauty; then Jaminette, Seckel and Oswego Beurre; and then on a descending scale to Bartlett and Duchesse D'Angouleme, which were nearly killed outright. He is of opinion that greater care is necessary in the selection of apples for this region, and that fewer kinds, of known hardiness, as Northern Spy, Greening, &c., would prove more profitable to the planter. He also suggests, and says that some discriminating planters are purchasing Johnaus Sweet and such hardy kinds, and top grafting at one year with choice varieties, and so obtaining an orchard of fine fruit. Respecting grapes, he considers the "Miles" the earliest grape we have, fully two weeks earlier than Hartford Prolific and Adirondae; he thinks the "Miles" deserves to be more extensively cultivated. It is a small black grape of about same quality as "Hartford Prolific." The Clinton is the only grape that will stand without protection. He says he is cultivating as rapidly as possible, an apple he obtained some years ago from a farmer, who said it was a seedling, he has never seen it at any exhibition. It is about the size of the Northern Spy and similar in appearance, of good flavour, bearing early, often in the nursery rows as prolific as the Duchess of Oldenburg and as hardy. We trust Mr. Stevenson will send some samples of this variety to the Association for their examination and report.

Mr. Noah Sunley, of Guelph, who has also an extensive nursery, is of the opinion that the apples best adapted for this region are, for summer, Duchess of Oldenburgh; fall, Gravenstein and Colvert; winter, Rhode Island Greening, Baldwin, and Northern Spy. Plums he classes—Lombard, as first for cropping and profit, and next, Smith's Orleans, Peach-plum, Jefferson, Washington and Imperial Gage. In pears, Flemish Beauty and

Bartlet.

Visited Mr. Birney's garden, near Guelph, and saw some very fine Duchesse d'Angouleme pears. He has some very fine apple trees, ten years old. From two Duchess Oldenburgs he gathered sixteen bushels of apples this year, and from young Northern Spy four

The Committee next visited the Agricultural Show of the township of Puslinch, and found there an excellent exhibition of fruit. For 12 fall apples the prizes awarded were-1st, Snow; 2nd, St. Lawrence; 3rd, Cranberry pippin. 12 winter—1st, Northern Spy, 2nd, R. I. Greening; 3rd, a pippin. There was also a very fine collection of 36 varieties of plums. The prizes were taken by Reine Claude de Bavay and Lombard, both fine specimens. Pears, Flemish Beauty and Duchesse d'Angouleme, both very good.

Mr. John Luing, Puslinch, finds Colvert, Northern Spy, R. I. Greening, and Ribston

Pippin profitable varieties. He sold the latter variety for \$3 35 per barrel.

Mr. James Anderson, Township of Puslinch, about four miles from Guelph, finds Red Astrachan, Duchess of Oldenburg and Early Harvest hardy and good bearers; for fall, Snow, St. Lawrence, good and very hardy; for winter, Golden Russet, Northern Spy, Rhode Island Greening and Baldwin; finds that the use of old earpet tied around the apple trees is very useful in diminishing the ravages of the codlin moth. He does not succeed with pears; the soil on his farm is generally too light. His young plum trees are coming into bearing, but he lost a great many last winter. Mr. Anderson has been very successful in the cultivation of gooseberries, raising the Whitesmith, Houghton Seedling. Downing Seedling. He has

been successful with Whitesmith, taking prizes the last eight years at the Guelph Horti cultural Show.

The Committee went through the south part of the Township of Eramosa, saw Mr. Anstee's orchard, containing fine, healthy trees, in good bearing. The soil seems well adapted to the growth of the apple and plum. The varieties with which most success is obtained are R. I. Greening, Northern Spy, Colvert, Baldwin, Ripston Pippin and Snow.

Visited Rockton Show, Beverley. For a township show, found a fine display of fruit of

Visited Rockton Show, Beverley. For a township show, found a fine display of fruit of the leading varieties. This township has been usually considered as very poor land; the fruit and other products exhibited would lead to a more favourable conclusion. The soil being in the north-west part of the township of a clay loam upon limestone rock, appears to be well adapted for fruit growing.

In the south part of the township pears grow well, as is evidenced by the samples of

Flemish Beauty and Bartlet shown.

Thomas Cowell, St. George, Dumfries, has planted 130 R. I. Greening, which are in good bearing and do not winter kill with him; this variety succeeds best. Baldwin is healthy; Northern Spy very long in bearing, and Spitzenburg liable to winter kill.

Northern Spy very long in bearing, and Spitzenburg liable to winter kill.

Richard Lawnson finds the Northern Spy best and most profitable; has lately planted an extensive orchard of this variety. Rhode Island Greening and Baldwin do well; Dwarf

Pear are all dying out.

Henry Howell says Northern Spy, Baldwin, and Golden Spy are the best with him; Roxbury Russet does not do well; Spitzenburg is dying out at 15 years old; Colvert is the

best fall apple. Of plums, Lombard do well.

Mr. Fairgreve, Galt, has an extensive orchard; ships a large quantity of apples; thinks that apples can be grown to profit; is of opinion that pears can be grown successfully, but that a great deal of time has been lost in the cultivation of Dwarfs, which are generally a

failure, and that pears on their own root will do well.

Your Committee, in conclusion, would remark that, of the section visited, the whole region is well adapted for the cultivation of the apple, and, to some extent, the pear. The size and quality of the apple and general thriftiness of the trees show that if the growers confine themselves to a few varieties of well known excellence and hardiness, apples can be grown to profit. From their observations they would recommend for summer apples, Red Astrachan, Early Harvest, Duchess of Oldenburg; for fall, Colvert, St. Lawrence, Snow and Gravenstein; winter, Rhode Island Greening, Northern Spy, Golden Russet, Ribston Pippin, Swaar. Pears are not extensively planted, so as to give the Committee an opportunity of expressing an opinion of any value; the most planted are dwarfs, and they are generally in bad condition and dying out. The opinion prevails among many that pears of hardy varieties on their own roots can be successfully cultivated, but the experiment has not yet been tried on a scale of sufficient extent to form a reliable opinion; however, the Flemish Beauty seems to be the pear for this region, from the fine specimens seen. Plums are extensively cultivated in gardens and nursery orchards, and reach a high state of perfection in this district, particularly in the neighbourhood of Guelph and the surrounding Townships of Eramosa and Puslinch, in fact there is no better locality, as is evinced by the plums shown from that quarter at the Exhibitions, both local and Provincial. The varieties most grown are Lombard, Yellow Egg. Smith's Orleans, Pond's Seedling, Washington, Jefferson, Imperial Gage, Green Gage, Columbia, and Lawrence's Favourite. It was reported to your Committee that peaches were grown in the neighbourhood of Branchton, but on enquiry they found such was not the case; a few trees of an almost wild variety were found; in fact the spring frost, that sometimes appears as late as the 10th of June, entirely precludes all possibility of cultivating the peach.

Before closing this Report there is one thing in the observations of your Committee worthy of remark, that they found in all cases the finest and most thrifty trees, and best specimens of fruit, where the orchards are on high, dry land, and exposed to the north and

west, and the soil rich loam, with fine clay loam subsoil.

All which is respectfully submitted.

GEORGE ELLIOTT,
DAVID CALDWELL,
Committee.

## PAPER ON DRAINAGE.

BY S. B. SMALE, Esq.

If a specimen of any native soil be subjected to analysis, it will be found that its chief constituent by weight is water, and the residuum of earthy matter, after the application of heat, will only be a small proportion of the whole mass as found in its natural condition. To those who have not given the subject of drainage more than passing attention, the above statement may excite surprise. Its correctness, however, can be readily verified by experiment. In order to render the assertion intelligible, it may be well to consider for a moment the composition of soils in general. The soil of our gardens and fields is made up of a due admixture of vegetable mould and certain loose and unconsolidated materials called earths. The vegetable mould, so called because it is composed of decayed vegetable and animal substances, and without which vegetable life could not exist, is always found at or very near the surface. Immediately underlying the surface mould are the earths. These are principally composed of particles which have been worn away from the various rocks, which constitute the earth's crust, usually called a process of disintegration. In the accumulation of these disintegrated particles to form earths, their arrangement must, of necessity, be such, on account of their angularity, that their surface cannot be in contact throughout, but interstices must exist between them, accounting for the porosity of all soils. It is these interspaces that the water in a soil occupies.

Nearly all soils naturally contain more water at certain seasons of the year than is necessary for or consistent with the perfect development of plant life. Drainage is the only effectual means of regulating the quantity of water in a given piece of land—that is, the land is kept in a more equable state as regards moisture than could be done by any other procedure. You will often see land naturally so retentive as to resemble a soft mortar-bed after a wet spell, which, if a few hot days succeed, will be thoroughly baked, and vegetation in such cases will either be stunted or cease entirely. Drains change this state of affairs altogether; by their aid the water is easily and quickly conducted away, and the soil rendered ary and

friable, so that the roots of trees, &c., readily permeate it.

When the water is drawn off by drainage the space which the water occupied is taken possession of by the air. Now the air transmits the heat and cold more slowly than water, so that, if air occupies the place of water in the interstices of the soil, the latter will feel all changes of temperature less rapidly. Deep drainage therefore tends to equalize the temperature of the earth's surface and to neutralize the effect of great and sudden changes in the air above. It is impossible to drain a subsoil too thoroughly from beneath, because the capillary attraction of the earth is always sufficient to draw up from beneath all the moisture that is essential to most forms of vegetable life, and in addition to the moisture thus drawn from below, the earth, when the air can freely circulate in it, has the power when dry to absorb a vast amount of moisture from the air as well as to yield it up to the air by evaporation when it holds an excess.

Drainage not only dries the soil but it at the same time has the effect of warming it, as will be seen from the foregoing. The importance of this to plant life can hardly be over estimated, for if the soil is wet it will be at the same time cold, water possessing the faculty of parting with its caloric with rapidity to surrounding objects. And it is well to bear in mind that it is not only in the summer season that the ground is warmed by being drained, but at all seasons of the year. Earth that has been thoroughly drained will not freeze to the same depth or extent during winter as undrained laud will, so that there will be less liability of young trees or other tender plants being winter-killed by the action of frost. Plants are "heaved up" by the freezing of wet land from necessity, in accordance with a well understood law of nature, that water, being reduced to a solid state by the application of cold, expands. All trees and shrubs maintain a certain amount of heat even in the depth of winter, and if reduced to a temperature below what is essential to their vitality for any great length of time, they die, as witness the destruction of fruit trees, &c., during the severe winter of 1874-5. Deep drainage is a means of furnishing heat to the tree or shrub during the cold season, by encouraging it to take deep root in the soil. Roots, occupying the subsoil which

is below the frost line, and only exposed to the even warmth of the unfrozen subsoil where the temperature is little influenced by the extremes of heat and cold above ground, are constantly conducting heat to the trunk and branches of the tree which are exposed to the freezing blasts of winter's wind. The greater the cold, the greater the call on these roots to maintain the equilibrium, and their ability to accomplish this will be in proportion to their number and the encouragement they have received to penetrate deeply into the soil. Thorough draining will enable us to plant, with a reasonable expectation of success, fruit trees and shrubs of the more tender sorts, in higher latitudes than would be considered safe without it.

Another advantage to be derived from drainage is that it increases the fertility of the soil, by allowing the air to circulate freely through it, a vast amount of plant food being brought into direct contact with the roots, which would, under other circumstances, never reach them. The three most essential elements of plant food are carbon, hydrogen and oxygen, and these elements, to be assimilated by the plant, must first reach it by being absorbed from the air. This work of absorption is performed, to some extent, by the leaves, but to a far greater extent by the roots. These elements are always found in the atmosphere. It may, therefore, be regarded as the great storehouse of organic fertility. The rain, in falling, carries these elements with it into the soil, bringing them into direct contact with the roots, so as to be easily absorbed. If the ground is saturated with water beforehand, the rain, after descending, simply washes the surface, without penetrating to any depth, and vegetation is deprived of this source of nourishment. How important then is it that the air should have free access to the soil, in order that it may carry these important elements of fertility within easy reach of the absorbing rootlets.

Draining also adds to the length of the growing season; if the land be not aided to rid itself of the great quantity of water poured into it during the wet season, growth will be late to commence in the spring, and will cease correspondingly early in the autumn. Some have put forward the idea that the growing season can by this means be lengthened three or four weeks. Should only half of this time be gained, it would be well worth contend-

ing for.

One of the greatest advantages to be derived from thorough drainage, is the improvement it produces in the sanitary condition of a district where it is put in operation. If the land contains an excess of water, the air above will be damp and cold, and a humid atmosphere is very retentive of miasmatic and other poisonous or noxious matters. Malarious fevers are notedly more prevalent in the low and swampy parts of a country; and when these low lands have been improved by drainage, diseases which were common in the locality previ-

ously have either ceased to exist, or have prevailed to a much less extent.

Drainage, to be effectual, must be done in a systematic manner. To dig a ditch here and there in low places, leaving it open, as is often seen done, is not only a careless and slovenly method of procedure, but will by no means accomplish the end in view. Constructing covered drains, and plenty of them, is the only advisable course to pursue, in order that the work may be done with efficiency. In these the channel for the water in the bottom of the drain is sometimes provided for by forming it of timbers; at other times by means of stone, such as are found on the surface of cultivated fields; but, better still, by drain tiles. Those made with wood or stone require a good deal more labour in their first construction, the ditch having to be dug much wider, &c., are apt to get out of order, and, besides, being unfit for mucky soils, do not at the best last very long. On the other hand, tiles are suitable for the purpose in all soils, require less labour, and, if laid in the drain in such a manner as to maintain their proper connection with each other, form a channel for the water at once capable and permanent. The tile drain is probably more expensive than the others, in localities where tiles are not easily obtained; but, when once down, it is preferable to the others in every point worthy of consideration. A deep main ditch should be dug through the lowest land, following the natural water-shed, and having a continuous fall. Short side ditches should be dug directly down the slopes to connect with the main ditch, but of a less depth, their distances apart depending upon the natural condition of the soil as to the amount of water it contains, varying from five to ten yards.

Wroxeter, Nov. 29th, 1876.

## REPORTS ON TREES AND PLANTS RECEIVED FROM THE ASSOCIATION.

# Report from Jonas Ness, Port Colborne.

The Wagner Apple bore some fine fruit. Hale's Early Peach grows well.
Beurre Clairgeau Pear is doing well.
McLaughlin Plum is doing well.
Clapp's Favourite Pear is a fine grower.
Salem Grape does not seem very promising.
Goodale Pear is a fine grower.
Glass Seedling Plum is growing nicely.

There is a new disease that has appeared in my orchard affecting the apple trees. It seems to be a sort of blight, which I first noticed on the Baldwin trees when in full bloom. The entire crop of R. I. Greening was destroyed by it. The blossoms and leaves had the appearance of having been scorched with fire. The Baldwin trees suffered the worst, but no variety escaped entirely. There were no signs of blight on my pear trees.

## Report from H. C. Finch, Brampton.

The Salem Grape has not made very much growth, although it looked healthy last year. This variety does not seem to do well in this part of the country.

The Gooseberry died.

The trees of 1873 have grown well; in fact Clapp's Favourite is a most vigorous grower, and has stood the winter without the slightest injury. It has bloomed for two seasons. The apple has not yet shown any sign of bloom.

# Report of Abishai Morse, Smithsville.

1870. The Eumelan Grape does well, bears bountifully, good.

1871. Beurre d'Anjou Pear, good, bears well.
Dr. Reeder Pear, thrifty, no fruit yet.

1872. Othello Grape, bears well, fruit poor. Coe's Golden Drop Plum, thrifty, no fruit. McLaughlin Plum, thrifty, fruit fine. Beurre Clairgeau Pear, good, first quality.

1873. All dead.

1874. Grimes' Golden Pippin, one tree, still living. Clapp's Favourite, one tree, living. Brandywine, one tree, living.

1875. Salem Grape is doing well. Gooseberry is dead.

# Report from William Copeland, Hespeler.

1873. Became a member this year.

The apple tree died, but two grafts which I cut off when I planted the tree and grafted, are living.

Clapp's Favourite Pear grew, and appears to be very hardy, and stands the winters well.

1874. The Downing Gooseberry sent up a number of shoots four or five inches long, but the mildew damaged it badly during the summer of 1875.

Salem Grape grew five or six inches, but the winter of 1874-5 killed it to the ground,

in spite of a thick covering of moss I gave it.

1875. The apple and pear trees are both looking healthy.

Our soil here is light and sandy, but trees grow well. The apple is much injured by the codling moth. The Baldwin is a little tender here. Plum trees do well, but

the curculio takes rather a big share to himself if not looked after. The currant measuring worm has nearly destroyed our currant bushes.

## Report of Thomas Cruse, Frontenac Co.

The fruit trees and grape vines sent to me, since 1870, have done well, with the exception of the Eumelan Grape, Grime's Golden Pippin, and Clapp's Favourite Pear; these did not survive the first winter. Delay on the way to my farm, in the rear of the county, may have been the cause of failure.

## Report of Walter Hartman.

Clapp's Favourite is thrifty and growing well. Grime's Golden Pippin sprouted from the root. I think it will make a tree yet. Salem Grape and Downing Gooseberry, both dead. Swayzie Pomme Grise made a good growth. Flemish Beauty Pear made very little growth, but seems healthy; both of them were received in good condition.

## Report by J. Morrison, Moore.

Of the Exotic grapes received by me from the Association in 1874, five have made an immense growth this year, and the other seven have done very well. Although received in 1874, I count nothing on their growth till 1875, as the first year they received very improper treatment and made no progress. This year the Muscat Hamburg bore a small bunch, and I was very much pleased with the quality of the fruit, although by the way I am no judge, if spared till this time next year I hope to report a very good crop.

The Salem grapes received in 1874, have not done well with me as yet; the first year they did very well, but on 16th April, 1875, a very severe frost occurred, and they never seemed to get over the shock. This season, on 29th same month, a severe frost occurred also, giving a great check to some of my raspberries, but the grapes seemed to take the heat and have done pretty well. The gooseberry died about last July, it never did well somehow.

The apple and pear trees sent here last year, arrived in very bad condition, very much broken and bruised, so much so that I failed to get but one member for the Association this year, in place of twenty-five the previous one. My own pear and apple trees have done very well, I pruned them severely before planting, and am well pleased with them, although they partook of the same bruises as the others.

The Codlin Moth has done great damage in this section this season, and the currant worm is making great inroads every season. I treat my bushes with Chinese Garden Powder which is an effectual remedy for the worm. I planted my orchard in 1874, and I have adopted the system of close pruning, much to the amusement of many of my neighbours, but the result is satisfactory to me, and I shall pursue it. My trees send out beautiful tops compared with those left to grow naturally, as is too much the practice here.

The plum tree received by me this year died spite of all attempts to save it; the roots were very much dried up when I got it. I have never given any winter protection to grapes or raspberries, and they have never suffered from winter killing. Spring frosts are our great bane; last winter, on three occasions, the thermometer marked 30° below zero. The first frost this fall cutting Dahlias, Balsams, &c., on 2nd October; again on 6th, another taking fruit tree and grape leaves.

## Report by Peter Gilbert, Simcoe.

The Pomme Grise apple I got from the Association last year did not grow. I think it was quite dead when sent. The pear has done splendidly. I was disappointed in not getting the Goodale pear instead of the Flemish Beauty, as I have got several of them growing already.

The Glass Seedling Plum which I got this spring, is doing well; has already grown shoots eight inches long. The other trees sent to members about here are all growing, as far as I

have learned.

We have a good section of country for fruit, and I think the Fruit-Growers' Association only needs to become better known to be largely supported in this county.

# Report by Francis H. Hora, Kingston.

Glen Lawrence, near Kingston.

1 send my report (if of any use to you). The reports do not seem to be in vogue with the members of our Society

#### PEARS.

Josephine de Malines—received 1871—has done very badly; nearly every year it has blighted. Bore three or four pears this year, but they were very gnarled and stunted.

Buerrè Clairgeau—received 1872—has been killed down every winter; is still alive, but

looks most miserable.

Bartlett—received 1873—Died the first season.

Goodale—received 1875—made no growth the first, but this season it has sent out three small shoots, which look healthy, and it will, I think, live after all.

#### APPLES.

Grimes Golden Pippin—received 1873—has grown beautifully, and is by far the handsomest young apple tree I have; but it has not yet borne any fruit; was covered with blossoms in the spring, but shared the fate of most of the apple trees about here, not one blossom set.

#### PLUMS.

Glass's Seedling-received 1876-is alive, and apparently doing well.

#### VINES.

Eumelan—received 1871—does not improve on an acquaintance; is by far the earliest of my vines, ripening fully a fortnight or three weeks before any other. Flavour of the fruit is decidedly good, but the stones are too large. It is a poor bearer; bunches very open and straggling. It may be relied on for ripening, without fail, every year, in this locality. It was the only variety that ripened with me last year.

Othello—received 1872—grows well and luxuriantly, but ripened here even later than

Othello—received 1872—grows well and luxuriantly, but ripened here even later than the Isabella; is very prolific, bears a fine handsome berry and bunch, but of an inferior acid flavour, and is scarcely eatable until very ripe; evidently not worth cultivating in this district.

Salem—received 1874—ripened its fruit well this year; but, whether owing to any peculiarity in my soil, I cannot tell, but mine leaves a very peculiar and unpleasant flavour in the mouth after eating it, which is very disagreeable and disappointing.

#### REMARKS.

Apples have failed completely around here this year.

All my vines ripened their fruit fully, and bore abundant crops, except the Sweetwater, which are badly injured by the Phylloxera. The varieties I have at present are the Eumelan, Delaware, Black Cluster, Sweetwater, Isabella, Concord, Othello, Salem—which ripened in the order here enumerated. Of all these, the Isabella is my favourite, being very vigorous, an enormous bearer, and the flavour of the fruit fine enough to suit my taste. It also makes an excellent wine. Only once (last year) in ten years has it failed to ripen.

My vines under glass were a complete failure. They, as well as the Sweetwater above-

mentioned, are badly affected by the Phylloxera.

The pears that hitherto have done best with me are the Clapp's Favourite, which, up to the present stands alone as never having shown any signs of blight; Beurre D'Anjou, next. Louise Bonne de Jersey, Vicar, Doyenne D'Etè, Annanas D'Etè, Glout Morceau, Duchess, Tyson, have also shown no blight this year, though they suffered badly last season. Flemish Beauty, Belle Lucrative, Josaphine de Malines, and Beurre Clairgeau have all blighted.

I think it was last year I saw a report of some very beautiful pears shown in England, grown in Carmarthenshire, South Wales. The exact locality was not mentioned; but as I was a resident of that county for several years, and had fine pear trees in my own garden, I

can corroborate the statement of their growing there in perfection; some of them of an age and size I will not attempt describing, only saying they would make very respectable forest trees here. But what I wish to allude to is, that the climate there is not only a very "weeping" one, but in my own garden and neighbourhood the trees actually grew in water, the soil all around being only elevated about two feet above the water level. I do not for a moment suppose pears would thrive here under similar circumstances; but I feel satisfied that the pear is a very thirsty feeder, and without plenty of moisture it is needless attempting to grow them. They evidently require a very moist and retentive soil. Are we not carrying drainage to an extreme? and is not the blight owing in a measure to an insufficiency of moisture to the tree just when it is most required?

I am sorry to see, in last year's Report, our President advocated the growth of grass around pear and apple trees, feeling confident such treatment is very injudicious, though I have hitherto advocated the system, and steadily persevered in it for the last ten years, and if any one can beat me in the number of trees I have succeeded in killing, I can only say I pity him. In a moist climate, like England, it may and does answer well enough, but if any one will only take the trouble in the height of summer, or even later in the fall, after the soil has been well refreshed with rain, to turn over some of the sods and see how every particle of moisture is taken up by the roots of the grass, I think he will easily be convinced none is left for the nourishment of the tree. For my part, I will take no longer to encourage grass. I have "paid too dearly for my hobby"—

added to which, I am convinced, it also encourages the "Borer."

A few words regarding the "Borer." I have before given my opinion that we are greatly indebted for the attentions of this persevering, troublesome visitor, to the fact that the seedling stocks, upon which the nursery now grafts, are, in most instances, quite unfit for the purpose, being tender; and, consequently, disease takes place at the junction, and then the Borer steps in, finding suitable food for its larvæ. I think the following bears upon the point:—Ten years since, I planted, amongst others, "a Russet," which soon became infested by the Borer By carefully cutting them out, however, it lived for five years, and bore a few apples. The fifth year the Borers were worse than ever, and the tree seemed about to succumb to their attacks. There was one small branch, low down, still alive, this I bent down and made a layer of it. It rooted, and the next year I took it off (the parent tree dying quite out the same season) and planted it within thirty feet of the parent tree, and now it is a fine, handsome, vigorous young tree, four years from its separation, and has never had a sign of a Borer upon it.

The Yankee Tree Pedlers have done a roaring trade around here the last summer. Besides disposing of quantities of app'e and pear trees at prices ranging higher then the local charges, under the plea of some peculiar mode of grafting on a certain quality of stocks, they have succeeded in bleeding the farmers (I know of several instances) to the tune of \$3 each for a vine, which they profes to be the earliest and hardiest known, guaranteeing its requiring no covering for the winter, of fine berry and flavour, called the "White Empress." Is anything known of this by the Association? Is there any truth in their statements, or is the whole thing a hoax? Perhaps the Association will let us know something about it at their

next meeting, if there is anything in it.

It is hard trying to hammer into my farming neighbours the advantages of becoming members of the F. G.'s Association. They prefer being victimized by travelling agents, who place before their eyes gaily-coloured prints of enormous apple trees, or huge specimens, preserved in spirits, in handsome glass vases, apples the size of turnips, plums as big as apples, and grapes that will require two bites to get through a berry. I fear our Association does not offer sufficiently tempting baits to catch new members. And, of all things, raspberries are the most contemptible around here; in fact, the only fruit that is at all valued, except by a few, is the apple.

Report of Charles E. Brown.

Yarmouth, Nova Scotia.

Our Fruit Grower's Association held a very successful Exhibition at Annapolis, Oct. 19th, the finest display of Apples tiley have made, the season having been favourable to size and colour.

I enclose a slip from the New York Tribune, reporting details of weight of some of the leading varieties. Yarmouth County, in a small collection of 23 varieties, exhibited by the writer, to illustrate our poverty and our progress, was fairly entitled to first prize for poor quality and small size—We shall never merit honours save for zeal and perseverance; if after patient years of experiment, some dozen or two of varieties may be found that will prosper and thrive in adversity, we shall reap our reward.

Alexander, Bishop's Bourne, early Strawberry, Grimes' Golden Pippin and King of Tompkin's County have borne fruit this year for the first time in this county, inland, at Carle-

ton, and are all good for us, the first and third remarkably so.

Mr. R. W. Shaw, Secretary and Treasurer of the Nova Scotia Fruit-Grower's Association, is making a laudable effort to get detailed fruit reports from each county in our Province for publication in his next report; if any valuable results are elicited, I will send you

a copy.

The Swayzie Pomme Grise Apple and the Goodale Pear received by us through the liberality of the Ontario Fruit-Grower's Association are doing well, all that I have seen, on both trees, in my own ground, the new growth is from two to three feet and several shoots on each, having done better than any other trees planted this spring, perhaps because younger. -The Downing Goseberry received last year, has also done well. I have two good sized bushes that will fruit next season—The Carleton Club strawberry plot (Wilson Albany), measured 16 of an acre, net sales in Yarmouth at 20c. per quart, \$195.00 in addition to consumption upon the place, not estimated.

### A FRUIT SHOW IN NOVA SCOTIA.

The annual exhibition of the Fruit-Growers' Association was held October 19th. Apples were the principle articles shown, and, perhaps, there was never seen a finer display. Some may not know that the finest apples raised in the world grow in Nova Scotia, but so it is. Five collections were shown, each containing ten varieties, two dozen of each sort grown by the exhibitor. Besides these collections, 462 dozens of some fifty kinds were exhibited

by more than a hundred persons, each showing one dozen of each sort.

The largest apple (Chebucto Beauty) weighed 18½ ounces; the second largest (Cayuga Red-Streak) 17 ounces. The best dozen shown (Emperor Alexander) weighed 10 pounds 6 ounces. The fruit was placed upon tables 45 inches in width, each dozen arranged across the table. In very many cases but 10 or 11 could be placed in a row; the other one or two had to be placed on top. First, second, third, and, in some cases, fourth prizes were given to the best dozens, the Association retaining the ones which took prizes. Those, I believe, it is intended to have exhibited in the United States. The weight of other kinds was:—

	~		
· P00	unds and	Sing	gle
	ounces.	apple.	
Gravenstein, dozen	6 7	13	ozs.
Yellow Bellefleur, dozen		10	66
Ribston Pippin, dozen		9	66
Nonpareil, dozen		9	66
King of Tomkins Co., dozen	7 11	12	66
Blenheim Pippin, dozen		12	66
Northern Spy. dozen		12	66
Rhode Island Greening, dozen		$12\frac{1}{2}$	66
Blue Pearmain, dozen		11	"
Esopus Spitzenburg, dozen		$7\frac{1}{2}$	66
Gloria Mundi, dozen	9 12	$13\frac{7}{4}$	66
Chebucto Beauty, dozen		$18\frac{1}{3}$	66
Calkin's Pippin, dozen		9	66
Porter, dozen		$6\frac{1}{2}$	46
Yellow Newton Pippin, dozen		6	66
Clyde Beauty, dozen		13	66
Baldwin, dozen		91	6.6
Data will, dozen	0	2	

In pears, 85 dozens were shown, the largest collection containing 20 kinds. In Crab apples, six varieties in dishes. In plums, 13 sorts, one dozen of each. The largest dozen of these (Bradshaw) weighed  $27\frac{1}{2}$  ounces. In grapes grown in the open air, 12 varieties. The largest two bunches (Isabella) turned the scale at 15 ounces.

# REPORT OF OUR FRUIT PROSPECTS FOR THE YEAR 1876.

## BY B. GOTT, ARKONA.

Never did a season open to us so propitiously, and the fruit-grower's heart was enlarged and delighted at the sure and bright prospects of abundance of rich and delicious fruits. The illusion, however, soon began to burst, and sober realities began to appear. It is seldom that extremes prevail in this department; on the whole one year with another, the final results are wonderfully equalized. We are never totally destitute, and we never have an unprofitable abundance of fruit; and this promising and deceptive year is no exception to this grand economic rule. I say deceptive, for although the forces of nature, when intelligently and understandingly interpreted, never positively deceive us, yet we very frequently appear and feel as though we were so acted upon. And so we feel with respect to some of our choice and valuable fruits this year. We require an almost inexhaustible supply of the grace of patience, and a deep investigation into the essential nature of things, lest we should grow weary and faint by this work. With respect to the present year, however, I do not wish to be understood that we are wholly disappointed in our cherished expectations; very far from it. We have a large and fine crop of most of our fruits, but the product unfortunately is not so abundant as the appearance in early spring led us to expect. Our peaches this year. especially the finer sorts, will be very scarce, notwithstanding their superabundant and excellent spring display. Hale's Early are just ripening their fruit, and are quite showy, and would be very profitable were they not quite so soft. Crawford's Early and Late are the best of all the improved peaches for this country, if we could only get an abundance of fruit. But when we look through as fine trees as ever stood, or peach-grower could desire, and count the halfdozen or dozen on a tree, and reflect that these are sold by the bushel, we feel the satisfaction is too small. Suppose we got \$10 per bushel for them, where is the equivalent for all our fond care and anxiety, our labour and pain? We get by far the best satisfaction from our home-grown seedlings. They are hardy, and the fruit is good; mostly white-fleshed, dark red-checked, large and luscious, and ripening about the first week in September. Our crop this year of these will be considerable, and some of them are as large and handsome as Mountain Rose, and last year sold readily from the orchard at \$3 per bushel. Peach-growing is very promising in this section, and along our neighbouring lake shores.

Our plums, I must say, cannot be depended upon as an annual paying crop, especially for the past few seasons, not that the country or the climate are wholly to be blamed for this, for there cannot be a better plum region than we have here, where they grow and thrive, and blossom to one's heart's content; but the fruit, where does it go to? We used to have our trees breaking down with their ripening treasures; but now it disappears as if by magic at a very early stage. Our enemies seem to have the best of the bargain; it is a one-sided contract; they get the whole, and we look disappointed and vexed, and get none. "Only

leaves!" is written on the trees from year to year.

Our Apples are to us as our wheat among our grains—most desirable; or, as the gold among the metals—most precious and most valuable. They are among the fruits the first in importance, and a necessity in every family. Fortunately for us, we can raise as choice, handsome, and as perfectly developed specimens (and in the greatest possible variety) as any country can produce. Our list of varieties that grow and flourish here would take in dozens of the best of Pomona's treasures for summer, autumn and winter use. 'Tis true, here also eternal vigilance is the price of apples;—careful planting, constant watching, unceasing warfare with insect enemies, must be done before we can get apples of our own raising fresh from the trees. Our insect enemies to this fruit are very numerous and very voracious, seemingly increasing every year, both in variety and in quantity—several leaf-eating insects

appearing this year that I have never noticed before. During the first part of this spring the tent caterpillars appeared in such enormous numbers as to threaten a sweeping desolation and destruction, not only to our apples but to all our broad-leaved trees; even forest trees. as well as whole orchards of very large trees, were stripped as by a sudden withering scourge. They did not wait to tent, but seemed in perpetual motion, over trees and bushes, fields and fences, looking for feedings fresh and pastures green, and kept up their constant coming until far on into July. From this cause many of our trees and best bearing orchards are denuded and entirely relieved of all their precious and much desired burden of fruit. But even this was not a total and general unmitigated destruction; some good orchards all through the country are well loaded with fruit, keeping up an admirable and generous equilibrium to supply the needs and urgent wants of dependent man. We have had a foretaste of this valuable and highly relished crop in our early Harvests and Red Astracans. These varieties this year were the finest and best developed specimens I ever remember seeing; their development was perfect, without a spot or a blemish to mar their regular, rounded and beautiful forms. The supply was large, but the demand was also large. Autumn and winter apples in this section promise to be extremely fine, and a very abundant and profitable gathering, to gladden the heart of the patient and careful apple grower.

It is very interesting to the observer of the progress of the fruit interests of this country, to see the extent and the carefulness with which new plantations are constantly made. During the last spring planting season the quantities set were enormous in every part of the country, and the planting was done in most cases with an interest and an intelligent carefulness that would go very far to ensure their living, and after well being. Our people are seemingly just awaking to the full realization and importance of this matter. Dwarfs and crab-apples, however, do not seem to be much in favour, and not many are planted or grown. Pears and cherries among us have not received the amount of attention their merits deserve; but what we have planted and judiciously cared for, have returned well for the expenditure laid out upon them. I am glad to see these fruits becoming more interesting and more enquired for. We believe they would do remarkably well on our varied and well adapted soils in this excellent fruit section, and hope they will be planted much more freely. In cherries especially, I am more and more convinced our main dependence in this country must be upon the Dukes and Morellos, May and Royal Duke, English Morello, Montmorency, Late Richmond, &c. These do most remarkably well, are easily transplanted, and give good and early satisfaction to the intelligent and careful grower Our soil and climate are well adapted to the growth and excellent development of this early and delicious fruit, and it is much and eagerly sought after at good prices in our markets. Quinces, Apricots and Nectarines have

not as yet entered into our calculations.

Grapes are comparatively a new idea to us, and in this section we are not as yet properly awakened up to it in all its importance and bearings on our fruit wealth. That they can be grown is already sufficiently tested; and it is our opinion they can be grown in large and paying quantities, for we have the soils and locations in abundance, all along our lake shores and river townships, where grapes would luxuriate and produce enormously the finest possible specimens; and as for rigorous climate, it can be frustrated in its effects upon this crop by the practice of laying down for winter protection. On my own grounds I am trying a number of different varieties, some of which I have tested to my entire satisfaction; and it would seem from this experience that Hartford Prolific is one of the best and one of the most profitable of all our hardy and popular varieties. The vine is the most indomitable and rampant grower, producing the most perfect, hardy and well-ripened wood in abundance. The fruit also is in the greatest profusion, coming in in the last weeks of August, at a time when the appetite is keen and the market is spare; its large, black, well-ripened bunches readily pass off at remunerative prices. Its praises are in every mouth, and so might be also its fruit, when our people are properly waked up to its everywhere excellent and worthy qualities. The vines are hardy and good growers, and its fruit is simply delicious. We have also a fine show of Delaware and Ionas, loaded with fine bunches of fruit. These appear to behave with us remarkably creditable. We are also trying some five or six of Rogers' best Hybrids; these are good and so far satisfactory, and in a short time we hope to be able to report upon Marthas and Rebeccas, Salems and Israellas, Eumelans and Ive's Seedlings, and many others of undoubted excellence.

The importance of our Strawberry crop, I am pleased to report, is gradually and slowly

developing itself from year to year, and although growers in this section are few, its value seems to be be very generally attested. The variety mostly grown is Wilson's Albany, which is considered the best and most readily managed; and the method of cultivation is a sort of slip-shod mass practice, allowed to bear as long as it will, and then turn down. The market is keen, at remunerative prices, and never overstocked. The industry is worthy of better skill and better attention, for its early and luscious fruits are everywhere prized.

Raspberries and Blackberries are not as yet much planted among us, the natural growth being considered more than abundantly sufficient for all family purposes. But as this supply is growing wondrously less every year, the intelligent and practical cultivator will soon have to take the matter in hand, as we cannot well afford to do without this seasonable and salutary product. I have planted several best American tested and Canada tested varieties, and

their behaviour is satisfactory and very pleasing.

As for Gooseberries and Currants, the product is everywhere abundant. They are nature's own free bountiful offerings, almost independent of man's recklessness and carelessness. The mode of cultivation is the old original plan of rowing between the apple trees or along the fence, without any further attention. The varieties are—of Currants, Red and White Dutch; and of Gooseberries, Houghton's Seedling. Black Currants are not much grown, although very scarce in the market.

Cranberries, Huckleberries, Dewberries or Mulberries in this section are not as yet touched by our fruit-growers. These must be reserved for generations yet in the distant

future

Thus I have attempted very briefly and imperfectly to glance at the various fruit interests of this new and promising country in their various prospects at the present time. I am pleased to see a growing and improving attention and intelligence given to these things. Interest and earnest inquiry is everywhere being awakened into life and determined activity; and barriers are being resolutely removed from the onward progress of this interesting work. And the time may not be very far in the distant future when the whole surface of our fair country shall be made to bloom and blossom as the rose, and the most perfect and luscious fruits be everywhere developed in greatest profusion for the healthfulness and pure enjoyment of all our people.

Arkona Nurseries, August 15th, 1876.

#### CANADA ORLEANS.

There is a Plum that has been known in and around Hamilton for a long time by the name of German Plum, a very indefinite name for so good a plum. It is believed to have been raised by the old settlers, and has been grown by them and their friends from suckers. I have never seen the plum at any Exhibition, save in Hamilton. The tree grows stout, and makes short jointed wood with very prominent buds and bears well. The finest is very handsome, far surpassing McLaughlin in appearance and flavour. The colour is a purplish red, covering nearly the whole fruit. If I were confined to one variety, I should choose "Canada Orleans" for profit and satisfaction. I have grown the plum for over twenty years.

JOHN FRIED.

Hamilton, 2nd September, 1876.

Some hardy varieties of Apple mentioned in the Report of the Fruit Committee of the Montreal Agricultural and Horticultural Society, 1876:—

#### BLINKBONNY.

Raised by the late Robert Cleghorn, in Blinkbonny Garden, between Sherbrooke and Berthelot Streets, Montreal. Tree thrifty grower, forming a spreading open head of medium size, as hardy as the Farmeuse, and bears well every year. Fruit medium to small, oblate or roundish oblate, baisin very shallow, calyx closed, coxe small; skin whitish-yellow, often

prettily blushed on the sunny side; flesh white, rather firm, moderately juicy, pleasantly subacid. Its use is for the table only, not profitable for market. Season from 25th August to . 15th September.

The Early Harvest begins to ripen about the 10th of August, so that this variety is about

fifteen days later.

#### PEACH OF MONTREAL.

Imported by the late Francis des Rivières from France, and named by his gardener "Irish Peach;" but it is not known by that name, nor is it the "Peach," "Irish Peach," or "American Peach" described by Downing. The tree is extra hardy and long lived, grows freely in the nursery, and in the orchard forms a large spreading head; it bears early and alternate heavy and moderate crops. Fruit above medium, oblong conic; skin greenish yellow, with reddish blush where exposed to the sun; flesh white, tender, juicy, sub-acid, pleasant; quality, second-rate, some think first-rate; use, table, kitchen and market; season, beginning of September. It bruises easily and shows its bruises; yet, if carefully handled, may be grown very profitably for a near market.

#### JOHN RICHARDSON.

This large handsome fruit was imported from England or Scotland more than forty-five years ago. The original name was lost, and it was called after the importer. The tree is strong and thrifty in growth, with an upright, though gradually spreading head; not early to bear, but bearing a more than moderate crop regularly every year. Fruit large, at times very large, but mostly even in size, roundish oblong; colour, greenish-yellow, mostly covered with stripes and splashes of red; flesh, yellowish, fine grained, tender, juicy, mildly sub-acid and pleasant in flavour; use, kitchen, market, and perhaps the table; season, September loth till November.

## REPORTS ON SEEDLING FRUITS.

#### THE GATINEAU BELLE.

Amongst the novelties sent to Philadelphia was a seedling apple, called the "Gatineau Belle." It was of good size, with a dull, dark red skin, yellow fleshed. The specimen shown came from a graft obtained by Mr. Bell from the original stock, grown about twenty miles north of Ottawa City. The tree is perfectly hardy, bears early from the graft, and though the specimen truit shown was not first-class in quality, it was considered very desirable for northern latitudes.

The Committee regret the fruit shown was, however, a little past ripe when it came

under their notice. Its character will be better established on a further trial.

#### SEEDLING PEAR.

Inclosed you will find three pears of the same tree as those shown by me at Belleville one year ago, but they are not more than one-third as large. The tree was raised from a Flemish Beauty seed.

Yours truly,

JOHN McGILL.

These pears are scarcely in such good order as those shown at Belleville. We are inclined to think that they do not attain to the excellence of the parent, the Flemish Beauty.

### HISTORY OF MR. GREGORY'S SEEDLING APPLE.

## (Reported on page 33, last year's Report.)

I see by the report of the Fruit-Growers' Association that the seedling apples that I sent to the Belleville meeting were received. I have been long looking for some word from them. 273

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I thought they had gone astray, as the letter I sent with the description was returned from

the Dead Letter Office some time after.

The apple I sent is a seedling. It attracted my attention when quite small. I planted it, and to-day it is the finest looking tree in my orchard, and is admired by every one that sees it. It is a strong, upright grower, and an early bearer, the fruit keeping until the middle of January. I am cultivating it in the nursery, and it is one of the finest nursery trees I have. The original tree is twelve years old. I am pleased to hear the Committee speak so favourable of it. Should you or any of the Committee happen this way, you are invited to call and inspect the tree, also the young stock.

The crabs I sent were also seedlings from the large yellow crab. My soil is a clay loam.

I sent the fruit to compete for the prize. Hoping to hear from you,

I remain, yours truly,

A. T. GREGORY,

# LETTER FROM DANIEL B. HOOVER, ALMIRA POST OFFICE.

To the President of the Fruit-Growers' Association.

Dear Sir,—I have the pleasure to send a few of my seedling apples to you for examination by the Committee. I am sorry they are almost too ripe. Origin of the tree:—The seed was brought from Dover County, Penn., U.S., in the year 1812, and is supposed to have been sown the following year, thus making the tree to be nearly 62 years old. It is very hardy, no blight, scarcely a dead limb on it. The small twigs are wiry, with a knob in the fork. I send a specimen enclosed. The small twigs grow in a weeping-willow style. The leaves are a pale green. It is a heavy bearer every other year; still it bears some every year. The soil is a heavy clay, fruit well flavoured, good for eating, fair for cooking; ripe in September. The tree is now standing on lot 34, Con. 6, in the Township of Markham, County of York, Ont.

The apples arrived, but were over ripe. It is a valuable seedling, not so much because of the excellence of the fruit, as from the hardihood and prolificness of the tree. The fruit is of fine form, medium size, and while the flavour is in no way distinctive, the apple will please a large number of people.

Mr. James Reid exhibited at the Provincial Show at Hamilton a superior seedling plum; mauve coloured, sweet, firm, and worthy of propagation and trial.

## HYBRID SEEDLING GRAPES.

Mr. W. H. Mills, of Hamilton, formerly President of the Fruit-Growers' Association of Ontario, presented a number of very remarkable seedling grapes of his own production,

through the delightful art of hybridization.

Mr. Mills has been long and favourably known for his successful efforts in the production of new and valuable fruits. He has, with great prudence and discretion, never sent out any questionable products of his patient and persevering labour. The country has thus been a great gainer in that respect, as producers of new fruit, in too many instances, have often prematurely issued crude and unworthy fruits, as claimants on public favour. Mr. Mills has carefully avoided this rock, and in so far deserves every meed of praise.

First in order comes the "Augusta," a black grape of very large size, of Bowood museat shape, immense cluster loose in the branch, and likely to prove a valuable grape under glass,

or in more southern localities than ours.

The "Ella" is a small dark-coloured grape, a little larger than the Delaware, of superior flavour, free of pulp, early (we say very early), ripe now, and a most desirable grape, being spoken of most highly by the Judges at this Provincial Exhibition. Next in order comes the "Excelsior," which, compared with the Delaware, is larger in berry, and quite equal, if not superior, to the Delaware.

"La Vega" is a red grape, medium berry, close in cluster, larger than the Diana in bunch, the sweetest known hardy grape, and most suitable for the production of wine, as it possesses as much saccharing matter as to afford alcohol enough to preserve it.

as much saccharine matter as to afford alcohol enough to preserve it.

The "Sultana" is a grape about the size of Concord in cluster and berry; the parentage is Muscat Hamburg and Concord. This has a rich, aromatic and most pleasant flavour, showing its muscat origin, and so firm on the bunch that it may be freely handled without any fear of injuring or breaking off the berries.

We understand Mr. Mills is preparing to disseminate these fruits, and we are satisfied our country will be greatly benefited, when they have been fairly tested, throughout the

Province and the United States.

Signed on behalf of the Committee appointed by the President of the F.G.A., to examine and Report on Mr. Mills' hybrids.

ROBERT BURNET.

Hamilton, 22nd September, 1876.

The *Times* says of the above hybrid grapes: "We notice that the hybrid grapes so favourably spoken of by the Committee appointed by the President of the Fruit Growers' Association, the report of which appeared in yesterday's issue, has received an Extra Prize by the judges on Fruit. In respect of fruit of superior excellence, which we understand Mr. Mills' to be, it perhaps might be as well that the Agricultural and Arts Board should give a diploma, which would be a guarantee to buyers, that the variety so distinguished was indeed of superior quality and excellence.

This Diploma was, we understand, presented to Mr. W. H. Mills, by the Agricultural

and Arts Association of Ontario, for successful hybridation of grapes.

The Spectator says of these hybrids: Mr. W. H. Mills, of this city, exhibits several new varieties of hybrid grapes. Mr. Mills has been working for ten years at the production of these hybrids and has brought them to a degree of perfection which must commend them to public approbation. The variety which he has named "Augusta" is one of the largest out-door grown grapes, which we have seen, and has an excellent flavour. The 'Ella,' is a small black grape with a peculiarly sweet flavour. Besides these, are the "Excelsior," red and of moderate size. The "Muscatella" white, the "La Vega" red, "Sultana" black. The "Pomona," which in appearance and in all its qualities very much resembles the "Diana." The production of new varieties of any fruit is a work of great labour and of unwearying diligence. If the success of Mr. Mills is as great as it appears to us to be, his new productions deserve the attentive consideration of all horticulturists.

#### ONTARIO APPLES IN NOVA SCOTIA.

The following extract from a letter received from a gentleman in Yarmouth, N. S., will show the estimation in which our apples are held.

YARMOUTH, N. S., 20th November, 1876,

GAGE J. MILLER, ESQ.

Dear Sir,—The 20 barrels of apples came safely to hand on Saturday, 18th inst., by steamer from Halifax, all in perfect order, and I have no hesitation in saying that no such packages of apples were ever seen in this market. American apples are usually put up in old barrels of all descriptions, and are usually rough in appearance and very insufficiently coopered. It was refreshing to look at the barrels merely, generous in size, bright and new, and staunch and strong, not a hoop or a nail started, and not a shake to the contents. The apples contained therein are in keeping with so attractive an exterior. I have opened and have ready for inspection one barrel of each variety, to show my friends what Ontario fruit and men are like, However much I was pleased with the lot sent me last year, through Mr. Beadle, I am more than pleased with these of yours, which

are, I think, all finer, with the single exception of the Swaar, not so large this year. The Fameuse are fine and delicious, the Swayzie Pomme Grise are the same, Northern Spy, very fine and fragrant, indeed all are fine, and I have no doubt will give perfect satisfaction in the using, and prove good all through. You may count upon me for a customer hereafter, and as many of my friends as agree with me in thinking well enough of the best to be willing to pay only a fair price for it. I shall send specimens of all the varieties to a large and wealthy grocer in Halifax, from whom you may hear.

Have you not the Ribstone Pippin? Those sent last year were perfect. The expenses on this lot were to Montreal \$8.40; through from Montreal to Yarmouth, \$9.02; cartage and wharfage in Yarmouth, \$1.40; total, \$18.82, making the expenses about 94c. per barrel, and the total cost a trifle less than \$4 per barrel, at which I consider

these apples cheaper than any other in the market.

The foregoing letter has been kindly placed at the service of the Association by Mr. Gage J. Miller, of Virgil, Niagara Township, County of Lincoln; but as your Secretary had no permission from the writer of it to give his name to the public, he has withheld his name, yet at the same time would assure the members that he is an earnest and painstaking member of our Association, and has done much to bring the transactions of our Society and the fruits of our Province to the notice of gentlemen resident in Nova Scotia. We are indebted to him for much valuable information concerning the fruit productions of Nova Scotia, which has appeared in our Report, and if our fruit-growers are wise, they will avail themselves of the information contained in this letter, and profit by the lessons it teaches on the subject of sending to market only perfect fruit, neatly put up, in clean and tidy packages.

#### REPORT OF THE COMMITTEE ON ESSAYS.

To D. W. Beadle, Esq., Secretary of the F. G. Association, St. Catharines, Ont.

DEAR SIR,—We agree upon the awards to the Essays as follows:—
SHELTER.—First Prize, "A Shelter from the Storm;" Second Prize, "Shelter or no Shelter."

FRUIT EXHIBITIONS.—First Prize, "Strive to Excel;" Second Prize, "Est natura hominum novitatis avida."

UTILIZING SURPLUS FRUITS.—On this subject there is only one essay, and it is not sufficiently comprehensive. We therefore judge it worthy only of a second prize. The essay bears the motto, "He who successfully plants a new industry, or restores an old one, is a benefactor to his country."

Yours truly,

HENRY MACPHERSON,
GEO. LESLIE, JR.

#### REPORT OF THE SECRETARY ON PRIZE ESSAYS.

To the Directors of the Fruit-Growers' Association.

Gentlemen,—I find on opening the envelopes bearing the several mottoes, that the essay bearing the motto "A shelter from the Storm," was written by John M. McAinsh, St. Mary's, Ont. The essay having for its motto, "Shelter or no Shelter," was written by George Peacock, Mount Salem, Ont.; the one with the motto, "Strive to Excel," was

written by A. Hood, Brussels, Ont.; and that accompanied by the motto "Est natura hominum novitatis avida," was written by George Mill, Warwick, Ont. The essay on the best methods of utilizing our surplus autumn fruits, and which had for its motto, "He who successfully plants a new industry, or restores an old one to vigour, is a benefactor of his country," was written by P. E. Bucke, Ottawa, Ont.

All of which is respectfully submitted.

D. W. BEADLE, Secretary.

St. Catherines, 30th December, 1876.

## FIRST PRIZE ESSAY ON SHELTER FOR FRUIT-GROWING.

Motto-"A shelter from the storm."

By John M. McAinsh, St. Mary's.

Shelter for fruit-growing is a subject which is pressing itself upon the attention of Canadian fruit-growers more forcibly year after year. In years gone by the almost unbroken forest with which the country was then covered formed a sufficient shelter for fruit trees, but now the necessity of sheltering them from the fierce, sweeping, frosty winds is becoming greater every year, just in proportion as the country is being cleared up. For it is a well known fact that the degrees of cold are greatly increased in those situations which are exposed to the cold, sharp, biting winds which so frequently sweep through the country during the winter season. And it is another well known fact that we have many fine varieties of fruit, which in various parts of the country are just a little too tender to stand the severity of our winters unprotected, but if sufficiently sheltered would do well. Among apples in the colder sections of the country, the Baldwin, Rhode Island Greening, and Swaar, are found to be tender, but in the milder sections they thrive well and bear abundantly. The large majority of our good pears, the peach, quince, and most of the finer varieties of cherries, can only be grown in the milder parts of the country. Now, although we cannot expect that the successful cultivation of these fruits can be extended into the coldest sections, yet if they were properly sheltered, they could be grown with success a considerable distance further north than they are when they are left un-

Protecting fruit trees from the fierce cold winds of winter is not the only benefit to be gained by shelter. Another very important advantage ought not to be overlooked. During the autumn and fall of the year we have often high wind storms, which blow down the unripe fruit. Apples and pears, especially winter apples, are often seriously damaged by being blown down and bruised, instead of being properly hand-picked, which they require to be so that they may keep well either for home consumption or for shipping to distant markets. Where fruit trees are properly sheltered this damage will be to a large extent prevented.

There is another point in connection with this question of shelter which deserves, at least, a passing notice. By some the idea will be discarded as useless, while by others it will be highly appreciated. As evergreens are generally used for shelter, they can be arranged so as to adorn and beautify our country homes. They make a beautiful appearance, especially during the winter months when the garden, fields, and everything else

present a bleak and naked appearance.

In some cases a few fruit-trees can be planted so as to be sheltered by buildings. Peaches are sometimes grown in this way, thrive and bear fruit, where, if they had been

planted in the open orchard, they would have perished.

The proper way to protect the grape from the cold of winter is different from that of other fruits. The trunk or stem being unable to support the weight of its branches, it requires to be trained and fastened to a trellis of some kind. This flexible nature of the vine is taken advantage of to take it down from the trellis, lay it on the ground, and cover it over with a few inches of earth. The best time to perform this operation is during the month of November, just when the ground begins to freeze. This covering requires to be taken off and the vine again tied up to the trellis in the spring, as soon as all danger of hard frosts is over. Treated in this way it can be safely wintered without injury. Care, however, should be taken in laying down the vines to have them where they will not be soaked in standing water, which would seriously injure them. Covering them with brush, old straw, and such like is objectionable on account of the danger of harbouring mice.

With the exception of sheltering a few trees or bushes with buildings or high board fences, and the grape, which can be sheltered by laying down as already described, the best way of sheltering fruit trees, which are planted out in regular orchard form, is by planting a belt of evergreens on the most exposed sides. Deciduous trees, which shed their leaves in the fall of the year, answer very well for autumn or fall shelter, but in win-

ter one evergreen is worth a great many trees with only naked branches.

We have several species of native evergreens which are found growing wild in the woods in some parts of the country, which will serve a good end for purposes of shelter. The chief of these is the common White Pine. When found growing in the forest it is generally a tall tree, the trunk being mostly destitute of living branches. But when it is transplanted young it throws out branches quite low and forms a tolerable good shelter. The Balsam Fir is a very handsome tree while young and makes good shelter, but as it grows older its lower limbs decay, which greatly impairs its beauty and usefulness as a screen. The common White Cedar, if planted out young, can be trained to form an excellent hedge. In planting out a belt of native evergreens it would be a good plan to have it composed partly of White Pine and Balsam Fir, and partly of Cedar. The Cedar could be trained to form a screen low down near the ground, while the Pine and Balsam would throw out their branches higher, and thus increase the height of the screen.

In some parts of the country a belt of evergreens, composed of the species which I have described, could be procured and planted at a trifling cost. It must be borne in mind, however, that they cannot be so successfully transplanted as trees which are properly grown in the nursery. This is on account of being shaded with larger trees, and also not being transplanted in the nursery, they are sparingly supplied with fine fibrous roots, which makes their chance of living less certain. If they are dug up and planted in a careless manner, a large proportion of them will be almost certain to die out. But where they are dug up carefully and properly planted, a good proportion of them may be

expected to live.

But while a belt of our native evergreens will answer a good purpose for shelter, and be not altogether destitute of beauty, they are every way inferior to the popular Norway Spruce, which is a hardy and very handsome tree, a good grower, and, as a windbreak, is not surpassed by any. If properly trained, it throws out branches close to the ground, which do not die out like the balsam and some other evergreens, and where shelter only is required, there is no other which can surpass it for general utility. But where beauty and ornament, as well as shelter, is desired, it will be well to plant different species and varieties, which will contrast finely with each other. The Austrian, or Black Pine is a very robust, hardy tree, of rapid growth, with very dark green leaves, which presents a beautiful appearance when planted in close contrast with other more lightly coloured evergreens. The Nordman's Silver Fir is said by those who are acquainted with it to be of a majestic and symmetrical form, very hardy, and retaining the dark green colour of its foliage throughout the year. These three varieties will be found the best, but those who desire a more extensive assortment can consult the nurserymen's catalogues, where they will find a large and varied collection to choose from.

As to the best time to transplant evergreens, the general opinion of our best Canadian horticulturists is in favour of spring planting. They can be transplanted later in the season than dedicuous trees which shed their leaves in the fall of the year. The middle of May will as a general thing be found to be a very suitable time. An idea seems to prevail with some that evergreens will succeed with very little care, either in transplanting or in their after cultivation. Now, although they are hardy, and will sometimes make a little growth in spite of neglect and poor cultivation, yet, like other plants and trees, they will thrive just in proportion as they are properly attended to. In diging up the trees care should be taken not to mutilate the roots. Many trees die every year from having the young, fine fibrous roots cut off in transplanting. After being dug

up, until they are again planted, the roots should be carefully kept moist and protected from the influence of the sun and wind. In planting they ought to get just as good care and attention as fruit trees. The first season after transplanting they will be greatly benefitted by mulching the ground around the roots with a covering of half rotten straw or other material. Mulching will be especially beneficial if the season is dry and hot. The after cultivation consists in keeping the surface of the ground around the roots loose and mellow. Care however should be taken not to extend this cultivation deeper than two or three inches, as the roots of evergreens naturally run near the surface. But where material can be procured, mulching from time to time as required will answer as well or perhaps better than cultivation. If they are properly trained to throw out branches close to the ground, those branches will soon shade the ground so that cultivation and mulching can gradually be dispensed with. An occasional top-dressing with manure around the roots will add greatly to the health, growth, and beauty of the trees.

Evergreens require to be pruned in an entirely different manner from fruit trees. Fruit trees require to have the tops kept open, so as to freely admit the sun and air, in order to bring the fruit to perfection. Evergreens, on the contrary, require the tops to be kept as close and compact as possible. An error, which some fall into, in trimming the trunk to a height of three or four feet before allowing them to branch out, should especially be avoided. This gives them a naked appearance, and greatly impairs their beauty and usefulness. They ought to throw out their branches as close to the ground as pos-

sible, being there the widest, and gradually narrowing to a point at the top.

In planting out a belt of evergreens for shelter, it will be necessary to plant them in a double row. The trees ought to be about ten feet apart in the rows, and the rows about eight feet apart, each tree being opposite the space in the other row. In planting out a young orchard this belt ought to be planted at the same time as the fruit trees. In fact, if it were planted out two or three years previously, it would be so much the better, and perhaps, in some of the coldest sections of the country it may be necessary to have this belt well established in the soil and grown large enough to afford shelter before fruit trees can be planted. Experience, however, in any locality, will determine whether or not this is necessary. The cost of planting out a belt of evergreens is an item of considerable importance. An orchard 20 rods in length each way would contain 400 square rods or two and a half acres, which would make a very good sized orchard. If this were sheltered on two sides it would take a belt 40 rods in length. With a double row and the trees ten feet apart in the row, it would take about 135 trees. Where trees are bought in small quantities, nursery men usually charge 50c. for good sized, well grown evergreens. But if a large quantity were taken they could be got at a reduced rate, probably at the rate of 30 or 35c. each. 135 trees at 35c.each would be \$47.25, or nearly \$1.20 per rod in length. Calculating at the same rate, an orchard of one acre would be about  $12\frac{1}{2}$  rods on each side. To shelter two sides of it would require about \$5 trees, costing about \$30.-06. I notice, however, that some nurserymen offer Norway Spruce about two feet high at \$20 per hundred. In some cases these, for various reasons, would be preferable to the larger sized and higher priced trees. The cost of preparing the ground and planting out the trees would vary according to the individual circumstances of the planter. These figures will give only a general idea of the cost, which will often vary a good deal according to times and circumstances.

Wherever it can be conveniently done, I would advise intending tree planters to go to the nursery, inspect the stock, and select a good article for themselves. In many cases they will be amply repaid for their extra trouble. But above all things avoid buying poor,

inferior trees, which are dear at any price.

A good deal of censure has been passed on our Canadian Farmers and fruit-growers for not paying more attention to the planting out trees for shelter. It ought to be borne in mind however, that in settling a new country a great deal of labour is required, to clear the land, erect buildings and fences, plant orchards, and do many other things too numerous to mention. Many things have to be left undone, for a time, for want of the time and means to do them. In many parts of the country, I think the time has come when more attention can be given the subject of shelter. Probably the time is not far distant when our fruit-growers especially, will wake up in earnest, and practically give attention to this subject.

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## SECOND PRIZE ESSAY ON THE BEST SHELTER FOR FRUIT-GROWING.

Motto.—"Shelter or no Shelter."

BY GEORGE PEACOCK, MOUNT SALEM.

No SHELTER.—We have neither time nor money to waste in purchasing and planting trees for shade, and shelter and ornament, which produce nothing; we must plant corn and potatoes from which we receive a profit every time we plant.

SHELTER.—Shelter is found to be profitable inasmuch as crops are increased in quantity

and improved in quality, often in proportion to the shelter applied.

We have a King of Tompkins tree which was severely injured by exposure to high cold It has fruited twice since, and has not borne half a peck of apples in two years. Another tree, of the same sort and age, was in a sheltered situation, and it has, in the same time, produced six bushels of nice fruit. A strawberry bed nicely sheltered with straw or other material will frequently produce four or even ten times as much fruit as a bed exposed to frost and wind. This we all know who have tried it. Grape vines will yield abundance of fruit in autumn if sheltered in winter, and so on with all our fruits. He who spends time and money for shelter will receive a handsome profit every year.

No Shelter.—We frequently have frost in the spring during calm nights, just when apples and pears and peaches and plums are in blossom, which annually destroys one or more of these kinds of fruit. But should there be a light breeze when these spring frosts occur, the fruit is saved. Will not a sheltered orchard be deprived of the benefit of the welcome

breeze.

SHELTER.—These destructive spring frosts are mostly local and very variable in extent and destructiveness, happening most frequently on cold soils and low situations. But to guard against fencing out the gentle and beneficial breezes, we would leave open spaces in the shelter belts on the north and south sides of the orchard. On the east and west we would

have continuous wind breaks for the garden and orchard.

No SHELTER .- Shelter encourages birds to come, which eat the fruit. This year the birds ate and carried off and otherwise destroyed a bushel or two of cherries from my few The canary birds picked the seeds out of my strawberries, completely spoiling a bushel or more of nice fruit. The sorts most attacked were those whose fruit were most exposed to view, growing on long stems; and those whose seeds are prominent on the berry. Russell's Prolific suffered most from these little yellow birds, which came in great numbers in early spring to shelter in my evergreen trees.

SHELTER. — O yes, birds come. Evergreens have a peculiar attraction for small birds who need shelter in the spring. Our young pines and cedars are frequently crowded with little birds—all of them insectivorous—many of them remaining through the summer.

We must here give a brief account of our bird farming.

About eleven years ago we planted a small orchard, but for some years we had scarcely any or no birds in it. Why? There were no shelter trees-no evergreens. Birds will not build on a rail fence no more than men will build on the sand of the sea shore, it is unsafe. They cannot find a place to build a nest in, therefore they seek a sheltered location and

leave the orchard to be devoured by worms.

After some years we planted evergreens for shelter to the orchard, the migrating birds gave us a call, some remaining a few hours, others a few days. They were gone; did not return. There were neither sufficient shelter nor protection to induce them to stay. By and by when a few remained they were exposed to cats, skunks, snakes, birds of prey. They were continually harrassed and hunted, eggs and young ones were destroyed. After some observation it was deemed advisable to use special means with all these enemies of the birds. We have now increased our stock to upwards of one hundred and twenty nests in one season, all counted, and in the orchard of about four acres. The young ones in the nests vary from two to nineteen, suppose five to each nest with the old ones, will give us upwards of eight hundred birds. A large majority of them never eat fruit, live on insects.

No Shelter.—Shelter is favourable to noxious insects. They attack roots, stems, bark, leaves, buds, blossoms, and fruit, and do great damage to every garden and orchard. With

the increase of insects by shelter the fruit will all be ruined.

SHELTER.—Some useful traps of rags, paper, ropes, boards, have been attached to the stems of apple-trees, and have done good service in taking the Codling worm (carpocapsa pomonella). A lighted lamp placed in a tub half filled with soap suds, and left among the trees, on a calm night in June, is a servicable trap for nocturnal insects. We have by this simple means taken 150 moths in one night. Hand picking is a sure method of destroying many insects such as caterpillars, rosebugs, curculios. But to all the traps and contrivances let us add, bird farming; by the former methods we take insects by hundreds, by the latter, by tens of thousands. Let us have shelter and birds.

No Shelter.—Shelter increases mice which destroy both trees and fruit. Who has not lost some of his highly prized apple trees and pear trees by these little pests of the orchard. Nor are they satisfied with the destruction of trees and fruit, the grain, the vegetables, the trees planted for shelter or for hedges suffer severely by the continued gnawing of these little

quadrupeds.

Some people say a naked orchard, surrounded by a wire fence, is the best preventative

against mice.

SHELTER.—Mice have to be seen to by fruit-growers, or young orchards suffer much some seasons.

Clean cultivation is one of the means of prevention. Washing the stems of young trees in the beginning of winter, with a putty made of lime, sulphur, and cow dung, has proved a good protection against mice. Make the mixture thin enough to be applied with a whitewash brush. Place sheaves of corn or oats or any grain on which mice delight to feast in various parts of the orchard; they will collect under the sheaves where they can be dispatched at pleasure. We have taken twenty mice in half an hour from sheaves placed in various parts of the orchard where they were most likely to run. By practising these three methods our mice have been kept in check so that very little damage has been done to trees or fruit.

NO SHELTER.—It is said that thievish boys, as well as larger "boys" hide in shelters around orchards. Some of the latter selling quantities of dried fruit without possessing a

single tree.

SHELTER.—Nice fruits have ever been desirable to all, and tempting to those who have not been properly trained in youth. Good evergreen hedges will hide an orchard, the

temptation will be removed and more honesty will be practised by orchard robbers.

No Shelter.—Large trees for shelter will cast a gloomy and pernicious shade over the fruit trees during the morning and evening. Shaded apples and pears are spotted, and greenish and dwarfish, and almost tasteless.

SHELTER.—Large spreading trees if planted too close to orchards would soon have limbs

hanging over the fruit trees, and the fruit would be spoiled.

· Shelter belts should consist of Norway spruce, Scotch pine, native pine, European larch, or mainly of such trees as grow in a conical shape, having no extending limbs to hang over other trees.

No Shelter.—Who has planted trees for orchard shelter? And what are the benefits derived from such shelter?

SHELTER.—Mr. Ezekiel Chute of the first concession, Malahide, has an orchard shel-

tered mostly with native pines, planted on the south and west sides.

The pines grew more rapidly than the orchard trees, and have proved to be an effectual wind break, although consisting of only one row of pines planted 6 or 8 feet apart. The orchard bears well and often. The fruit is not blown from the trees. The fruit not injured by insects remains on the trees till ripe. The pine hedge with picket fence is counted a profitable investment. The main objection, insects are numerous more so than in unsheltered orchards. Bird farming is entirely neglected; their enemies have free access to the orchard at all times, hence the wormy fruit.

Mr. Maw, of Luton, has an effectual hedge of Osage Orange. It serves as a good windbreak for a small orchard and keeps out all intruders. He never thought of caring for birds,

hence trees and fruit suffer from worms.

On Joseph Harvey's place is a thriving young pine hedge, already affording shelter to

the house, the garden and the orchard, causing the snow to blanket the ground where it was formerly swept away by the wind.

No Shelter. What trees should be planted to serve at once for a shelter, to keep out

thieves, and return a profit to the planters.

SHELTER.—Shelter for gardens and orchards should possess ornament, utility and profit. Let gardens of less than two or three acres be surrounded with cedars, Highland cranberries (vibernum oxycoccus) and Berberry bushes, and planted close enough to make a good hedge. The cranberries are sold at 10 cents a quart. They make nice jelly, and deserve more attention by fruit-growers.

To shelter larger orchards tall trees are required. Let ten acres be surrounded with a row of Norway spruce, six or eight feet apart, and a row of sugar maple, the same distance apart, and one row of buckthorn (rhamnus catharticus) planted one foot apart for hedge.

Four hundred maple trees would be needed. They would yield from five hundred to fifteen hundred pounds of sugar at ten cents a pound. For the space occupied and the time of coming in to profit, the maple trees would be but little, if any, behind some popular apples and pears; of course yielding lightly at first. The sugar season interferes with no other work, but, as it were, apart from all other crops, a pleasant and bountiful gift from our wonderful climate.

An orchard of fifty acres encompassed by a double row of maples six or eight feet apart and two double rows passing through the middle of the fifty acres, and dividing into four twelve and half acre lots, would require about twenty-five hundred maple trees, from which seven hundred dollars might be obtained for sugar in one season. Outside of the maples should be planted Scotch pine and Norway spruce to complete the shelter. Scores of trees may be used for shelter, so every person may choose for himself the kinds most suiting to his fancy.

Shelter often does great benefit to the fruit garden by causing snow to remain longer on

the ground.

Four years ago we had a peach limb partly split from the tree; the part of the limb resting on the ground was covered with snow during a part of the winter, and in spring it was covered with blossoms. The remaining portion of the tree, with the others in the orchard, had very few blossoms. A similar circumstance took place with a tree resting on the shingles of a building ten feet high. This was on a previous winter.

My young peach trees are now allowed to send out limbs close to the ground. They are not trimmed up, but trimmed down or shortened in, and when in leaf have the appearance of flat bottomed hay-cocks, that the lower branches may have the benefit of snow shelter. The canes of some tender raspberries and blackberries require to be laid on the ground and covered

with a few inches of earth.

Grape vines should be similarly treated and delayed a little in the spring till danger of

frost is past.

All the sorts of strawberries should be covered in the fall; fortunately the strawberry flourishes under sheet or blanket or quilt, for it matters not what the covering is, only it gives shelter. The tops of carrots, turnips, mangles, potatoes, tomatoes, cabbages, asparagus, or any kind of straw, or corn stalks, all or any of them, afford successful shelter for the "queen" of berries. But she delights most in a covering of forest leaves, and if mixed with a little black muck scraped from the surface of the woods, the succeeding crop will be all that can be desired.

Special shelter should be provided in certain cases for nice or desirable fruit when there is danger of spring frost. This may be done by covering a few blossoms or a few small branches with two or three thicknesses of paper; a paper flour bag of about a bushel is handy for this purpose. Be careful to tie the bags nicely after placing them on the tree. Gratifying success will often follow this little trouble.

We have saved melons by placing shingles over them when there was danger of frost.

Hundreds of hills may be shingled in half an hour.

# FIRST PRIZE ESSAY ON "FRUIT EXHIBITIONS, AND HOW TO SECURE FROM THEM THE BEST RESULTS."

Motto :-- "Strive to Excel."

BY A. HOOD, BRUSSELS, ONT.

The objects of Fruit Exhibitions are three-fold:—First, to stimulate producers to improve their modes of cultivation so as to grow superior samples of fruit. Second, to encourage the efforts of those engaged in endeavouring to produce, impart or propagate new varieties superior in quality and productiveness, and better adapted to our climate than we now possess; and thirdly, to place before intending planters and purchasers, samples of the different kinds of fruit, so that they may be able to select from the innu-

merable varieties in cultivation, those which they would prefer to grow or use.

The first two of the above objects are to a great extent attained by offering prizes to the most successful; though it may be questioned if the distinction acquired by success in achieving the best results, is not a much more powerful incentive than any money prizes that are offered; be that as it may, the object is attained, and Fruit Exhibitions are the means through which that attainment is effected; but the object (perhaps not less important) that of educating intending planters, of enabling them to judge for themselves of the fruits produced by the different varieties of trees, to learn what are the best kinds to plant, so as to accomplish the objects they have in view, the adaptability of the different kinds of trees to the soil they possess, and the climate in which they have to operate; is very imperfectly accomplished.

That Ontario is well-adapted for fruit-growing has been already proved; that a great extension of this industry will take place can scarcely be doubted; and that the successful development of the fruit-growing interests ve y much depends on the dissemination of sound practical knowledge will not be questioned; how far Fruit Exhibitions may contribute to this success, and the best means of accomplishing this object it is the aim of

this essay to inquire.

The more a knowledge of fruits and fruit-growing is disseminated, the greater will be the number of individuals entering into that fieldof industry as a means of livelihood, and the larger will be the aggregate crop of fruit raised in the country; therefore, as the money value of the fruit produced on an acre of land is greater than that of almost any other crop; the more extended the cultivation, the more the country will be enriched; always supposing, of course, that a market can be found for all that is produced; but the value of a more extended knowledge is not confined to those who raise fruits for market; all land owners, small or large, who wish to plant for home use, are as desirous of planting

the best kinds of fruit trees as those who grow for profit.

With the present accessible sources of information what means has an individual desirous of planting an orchard of learning the right kinds of trees to grow so as to be suitable for the purposes for which he requires the fruit, whether for market, for domestic use, for cooking, for eating, and in the case of grapes, for preserving, or for wine? The answer may be; from books, from Reports of the Fruit Growers' Association, from horticultural magazines, &c., but none of these will give him an exact idea of the size, colour and general appearance of the fruits described, and no description will enable him to select from half-a-dozen plates of apples or pears, any one to which he could give the correct name. All the reading then that he could command would leave him in the dark, as to that which he most particularly wishes to know; and unless he had a friend who could show him samples of different fruits he might turn in vain to any other quarter for the information he requires; where then is he to learn what is so important unless at a Fruit Exhibition, and what more appropriate place for furnishing such knowledge can be imagined.

The question is, have Fruit Exhibitions in the past furnished such information, and cannot a plan be devised for the future that shall be better adapted for disseminating among

the people a knowledge of the fruits that are successfully grown in this Dominion, than any that has yet been tried?

What is it then that the people desire to know, and how can Fruit Exhibitions assist

them in attaining this knowledge?

We answer, that an individual intending to plant an orchard, wishes to know a great many things, which he finds considerable difficulty in learning: he desires to know which are the summer varieties of apples and pears, which are the fall and which are the winter; • he desires to know the qualities of each of these varieties; —that is, the size, colour, flavour and keeping qualities; whether suitable for dessert, for cooking, or for both; the position they hold in the market; the productiveness, hardiness and healthiness of the trees on which they grow; the earliness or lateness of coming into bearing; and the kind of soil in which each variety is supposed to attain the greatest perfection; -this information might be furnished as far as at present known, by a printed card being attached to each variety, giving the name and qualities of that particular kind as above enumerated; and another card might be attached to the specimens shown by each exhibitor, naming the place where grown, stating the quality and kind of soil and sub-soil; whether under drained, subsoiled or both; how manured, cropped and cultivated; if fruit forced by thinning out; if sheltered from prevailing winds; age of tree, and whether dwarf, standard or half-standard. This last card would be the means through which the information is to be obtained or completed that may be communicated in the first.

The desirability of some such method of obtaining more precise information than is at present possessed, has been suggested by reading reports of the Fruit-Growers Association of Ontario and the Fruit-Growers Society of Western New York, in which it is impossible not to notice the wide difference of opinion expressed by orchardists, nurserymen, amateurs; men who stand first and foremost in their respective departments; men who are looked up to as the best judges in anything relating to fruit; men whose opinions and judgments are not given without due consideration; and the truthfulness of whose utterance cannot be called into question: as an instance it may be mentioned that two members of the Western N. Y. F. G. A., stated that the Delaware grape does not keep well; another member is surprised to hear that it is not a good keeper, he had kept it firm till the middle of January; a third stated that the Delaware mildews; a fourth that that it had no mildew; and so on till there is scarcely any fruit on the merits of which

all are perfectly agreed.

Now each of these gentlemen might have been quite correct in stating their own experience, the difference in results in each case being attributed to difference of soils; but such conflicting statements are very embarrassing to learners, and renders it impossible for them to arrive at any certain conclusion respecting the attributes of any variety of either apples, pears or grapes. This uncertainty is very deplorable and can only be overcome or removed by a more accurate knowledge of the precise kind of soil that suits each variety, and the precise latitude in which it attains the greatest perfection; such knowledge may

be obtained, it is believed, by the plan proposed.

We would have suggested the desirability of discontinuing altogether the practice of giving prizes for collections of fruits; as such prizes are more calculated to stimulate to the cultivation of a large number of varieties than to the attainment of particular excellence in any; this we think, it should not be the object of the Association to promote; and besides it has the effect of rendering impossible that uniformity in exhibitions which we think very desirable. It would be a very great improvement if all the specimens of each variety could be placed together, and the summer, fall, and winter apples and pears placed in rotation according to the time of ripening, which would have been indicated by the position on the table; and all that is to be seen of any variety could then be seen at once; the soil and condition of growth of the best specimens could be noted by any observer, and the labour of the judges would be much simplified. Should it be thought objectionable to discard altogether the practice of giving prizes for collections, this might still be done without interfering with the plan proposed, by giving an extra prize to the exhibitor securing the greatest number of individual prizes.

There are, of course, works to be had which contain all the information as far as is at present known connected with the subjects referred to; but we aim at having the virtues

of the different fruits placed before the public in a more popular form, not to supersede books, but to whet the appetite for their perusal; and we also wish to gain such a mass of information through the medium of the particulars to be furnished by exhibitors, as will enable future writers to give a very much more complete description of the peculiarities of constitution of the different trees and vines, as regards climate, soil, and treat-

ment, than is at present possible.

An individual living in the colder sections of the Dominion, or in the interior of the western portion of Ontario, who contemplates planting an orchard, is anxious to know whether the trees he might prefer are sufficiently hardy to succeed on the soil in which he intends to plant them; and to learn this, he perhaps turns to the reports sent in from different sections to the Fruit-Grower's Association, and published in their Annual Report. Suppose the trees he wisher to learn about are the Baldwin, or R. I. Greening apples; he will find in those reports that in some localities they have failed, and in others, that he would consider more rigorous, they have succeeded; that in some places south perhaps of where he lives the trees are reported as sickly or injured by the winter; while in other places north they are doing well; this conflicting evidence unaccompanied as it is by any more precise information, is not only useless but embarrassing, it proves certainly that the tree in question will succeed further north on certain soils and with particular treatment, but knowing nothing of the soil, or the treatment, that fact is of little use; it might be that the soil is deficient in lime, and in the other not; in one case it may be well drained, and in the other wet; in one case the tree may be sheltered, and in the other exposed; or there may be fifty other things that would make the difference, but not knowing what these fifty things are, the other part of the information loses its value, and the man is left in doubt as to whether it would be safe for him to plant those

A pomological map has been suggested, but the habits and requirements of the different kinds of trees must be better understood before such a map could be made. Strong clay loams are said to be the best soils for the pear, and yet some kinds will flourish in almost pure sand; which are the kinds that suit each particular soil? May not some kinds that do best on heavy soils in a southern latitude do better on light soils further north? May not some grapes that do not ripen well on clay loams, become perfectly ripe in the same latitude on sandy loams? May not the best wine grape in the south give place to some sweeter variety for the same purpose in the north? if so, in what latitude can each kind be successfully ripened on clay, and what on sand, and which kind of soil gives the best flavour for the table or for wine? Considerable information might be gained in the way suggested on all those topics.

The best samples of fruit that can possibly be grown are to be found at fruit exhibitions, and it is to be presumed of course that the best samples are grown under the most favourable conditions; let those conditions be made known and the public are then in possession of a number of valuable facts to be used as guides for future operations, but where these facts are not made known, nothing is added to our knowledge on those

subjects.

The same defect may be noticed in other exhibitions for which we are now endeavouring to point out a remedy in regard to fruit. What benefit, for instance,—is it to the farmers of this Province, to know that Mr. So and So took the first prize for wheat, unless they are allowed to know a great many other things at the same time? the fact of a first prize being taken, adds nothing to the fund of agricultural knowledge, and the farming community are not in the least benefited; but let the conditions under which the prize wheat was grown be made known, and some useful knowledge may be gained.

There is another advantage attending the plan proposed, and that is, that consumers of fruit may learn what are the best kind for domestic purposes, and will be able to ask for the kinds they wish to buy by name, instead of (as is too much the case) buying from appearance, without knowing anything of qualities. They might learn by looking at the descriptions attached to the specimens, that the Baldwin, R. I. Greening, Northern Spy, or any of the Russetts, are apples that will keep well through the winter, and may then procure those kinds for that purpose, instead of suffering the disappointment that often arises from buying more showy but less durable varieties, or getting an apple only fit for

cooking when one for dessert is wanted; the consumption of fruit too, might in this way be considerably increased, for what family is there that would not use more and lay in a larger supply, when they know they are buying the kinds that will suit; and who that ever buys Concord grapes for their fine appearance and large bunches, would not buy oftener and consume more, did they but know the delightful qualities and excellent flavour of the small but delicious little Delaware.

There is another way of exhibiting fruit that might be attended with good results and that is, exhibiting to those who may become our customers. The apple in South America, or even in the West Indies may be as great a luxury as oranges or pine apples are with us, and would most likely sell for as high prices as oranges do here. Why then might they not be exported to those places and sold at remunerative prices? The apple is perhaps the only fruit that we can successfully export, and our climate is undoubtedly so well suited to its production that there is no reason why a large business of that kind should not be done; could this business be increased by making our productions better known in the way suggested, it would be a result well worthy of an effort for its attainment.

It is a matter of regret that so many of our fruits cannot be shown in perfection at the time 'Agricultural Exhibitions are usually held, such as Strawberries, Raspberries, Gooseberries, Currants, Cherries and Plums, and the earlier varieties of Apples and Pears, which must therefore ever be absent or only present in a very imperfect state, at those annual gatherings; and thus the whole interest in Fruit Exhibitions is made to centre in fall and winter Apples and Pears, Grapes and Peaches: these latter may be the most important of our fruits, but most of the former can be cultivated by thousands who have too little ground for the latter, and they are perhaps more important from a domestic point of view as including all the principal preserving fruits; and if there be any advantages in the way of improved cultivation, and production of new varieties (as we believe there are) connected with Fruit Exhibitions, the small fruits above enumerated are deprived of those advantages altogether; this, we repeat, is matter of regret, but we hope not without remedy.

It has several times been suggested that the Fruit-Growers' Association might enlarge the sphere of its usefulness, by including the Horticultural as well as the Pomological field in which to conduct their operations, and we are very much disposed to regard such a change with favour, as promising to extend the sphere of usefulness of the Society as well as to create a greater interest in their discussions and reports. There is of course always something new, something interesting, to engage the attention of members at their meetings, but this new matter cannot fully occupy the whole of the time at disposal, consequently the same subjects are brought forward and discussed over and over again, with very little edification to members, or information to the public; but should they be allowed to introduce Horticultural as well as Pomological subjects, the field of inquiry would be so extended that new and interesting questions for discussion would be practically inexhaustible, and the reports of such discussions doubly interesting.

Another advantage of such a union would be, that members who have not room to plant trees, might be allowed to select certain shrubs, bulbs, or seeds, in lieu of the trees usually distributed.

Now as regards the small fruits referred to, although we doubt the success of any exhibition that might be held for their special benefit, we have no doubt of the success of an Horticultural and fruit show combined, and of such there might be one or two held during the season, to suit the times of ripening of, say, Strawberries and Plums, under the auspices of the combined Association, without interfering in the least with the present fall exhibitions, in connection with the various Agricultural Societies; with a great deal of benefit to the small fruit class referred to, and a great deal of pleasure to the lovers and cultivators of flowers and vegetables.

We are of opinion that could such a change as is here suggested be made in the constitution of the Society, the number of members would be more than doubled, and the funds correspondingly increased; and were this to be coupled with a proper method of classification, and with explanatory cards as proposed, much more information would be diffused, and much greater benefit derived from such exhibitions than is at present the case.

# SECOND PRIZE ESSAY ON "FRUIT EXHIBITIONS, AND HOW TO SECURE FROM THEM THE BEST RESULTS."

Motto-"Est natura hominum novitatis avida."

BY GEO. MILL, WARWICK, ONT.

Fruit Exhibitions when properly conducted are of great utility, in more ways than one. The desire to excel in our profession is quite laudable when kept within due bounds, and a little friendly competition with those of our own calling is a spur to exertion and perseverance. Exhibitions also bring fruit-growers together, and make them better acquainted, and when men who follow any particular profession become acquainted, they begin to be communicative, and by and by they discover that even the best informed have still something to learn. Fruit-growing in this Province engages the attention of a large number of first-class men, consequently it is highly important for mutual instruction that those men come together to ask and answer questions, to criticise and to be criticised.

But the benefit of Fruit Exhibitions does not end with bringing the Brotherhood together for mutual instruction. They, help to draw the attention of the public to the importance of fruit-growing, to convince our landholders, large and small, that they have an exhaustless mine of wealth lying at their feet, comparatively undeveloped. It is true that the Fruit-Growers Association has done, and is doing much to promote a taste for fruit-growing throughout the Province, but at the same time there is still much to be done, in getting the public thoroughly interested in the matter. And although at present we have a sufficient amount of intelligence and enthusiasm in our ranks to keep the ball rolling, yet fruit-growing cannot make progress, and be permanently successful unless the community are more enlightened concerning its importance.

Fruit Exhibitions have a good effect on the intelligence of the community in general. We all require recreation, and the examination of an assortment of well-grown fruit is certainly a recreation of the purest kind. It is a fact worthy of consideration, that few, if any, of our criminals come from the ranks of those who take delight in growing fine fruit. Of all hobbies, fruit-growing is one of the most innocent and beneficial. A fruit exhibition is calculated to awaken curiosity and stir up a spirit of inquiry, and wherever these exist, intelligence will invariably follow to a greater or less extent. When there is no elevating recreations to break the monotony of life, people will sink into listless in-

difference, if not something worse, and progress will be at an end.

In offering a few suggestions on the proper manner of conducting Fruit Exhibitions, so that the aforementioned and other beneficial results may be secured, it may be remarked that institutions of all kinds are considerably influenced by local circumstances and national peculiarities. As we are a mixed population in this Province, it is necessary that we should endeavour to manage our Fruit Exhibitions in such a manner as to make them popular with all classes. Consequently, everything connected with them should be managed with the strictest integrity. The confidence of the public can neither be gained nor retained if there is the least suspicion of unfair dealing. The judges ought to be men thoroughly qualified for their work. It is generally understood that the man who grows good fruit gives tangible proof that he is better qualified to judge the productions of his neighbours than the man who does not grow good fruit. And here, by the way, we would respectfully suggest that it would be well for the F. G. A. to adopt a criterion of what a first, second, and third-class apple, pear, or other fruit ought to be, so that our judges would have some definite standard to guide them in their decisions. The opinions of judges are often exceedingly varied in what constitutes first-class fruit. Some consider that the largest fruit is the best, others think that flavour is before size, and some maintain that size, flavour, form and colour ought all to be taken into consideration. We hope that a Committee of some of our most experienced fruit-growers will be appointed to give a certain sound on this matter. Judges at Fruit Exhibitions should be men of sterling character who will deal out even-handed justice to everyone. If there is reason to suspect that the Judges and Directors of Fruit Exhibitions are in the practice of "having men's persons in admiration because of advantage," that Exhibition will go down. Everything connected with a Fruit Exhibition should be done in such an open straightforward manner as to gain the confidence of every worthy person in the community, and render suspicion almost impossible.

The prosperity of an exhibition does not depend altogether on any particular cause, but on various causes, and each of them requires a due share of attention. Notwithstanding the advantages of Horticultural Societies, it is a fact that they have often been total failures. Sometimes this has been occasioned through jealousies among exhibitors, disagreement among managers, dissatisfaction with the judges, &c. Now although we may not get things absolutely perfect, yet it would be well to try and avoid those dangerous reefs on which so many societies have been wrecked. In framing rules for a Fruit Exhibition everything ought to be specified with the greatest clearness, and committed to writing. To keep a Fruit Exhibition prosperous, much depends on the vigilance, punctuality, good sense and courtesy of the Secretary. When an exact account is kept of all the affairs of an exhibition and everything done up in thorough business style, there will be no oppor-

tunity for grumbling.

When Fruit Exhibitions are conducted in one unvarying course, however excellent it may be, year after year, they are apt to become insipid. As the matter stands at present our local Fruit Exhibitions are connected with Township and County Agricultural This is no doubt for various reasons as good an arrangement as could be made. Still there might be a little more variety in the management of the fruit department, both at Township and County Shows. In every County and Township throughout the Province, we have men from different parts of the world who are frequently in possession of. a large amount of information on fruit culture in all its branches. Now if the information of those men were utilized it would give more variety and zest to our exhibitions than they possess at present. We respectfully suggest that the Directors of our County and Township Fruit Exhibitions devote a portion of every show-day for the purpose of reading papers and discussions on fruit cultivation, and that parties in the neighbourhood who possess a fair amount of talent and information be induced to prepare something for every exhibition. It is true that we are now in possession of many important facts, and that these facts are generally the result of long experience in fruit-growing. It is well to bear in mind however, that we are more likely to make judicious experiments and observations when we are thoroughly acquainted with the physiology and vital actions of plants, and the external forces by which they are regulated. Consequently it would be well to try and make our local exhibitions schools to a certain extent for teaching vegetable physiology and cognate subjects. A synopsis of the more valuable matter might be inserted in the Annual Report of the F. G. A., and thus much useful talent now dormant would be brought into exercise, and many important facts, hints and suggestions, through the medium of the press, would be made patent to the world.

Fruit Exhibitions should be attractive. If we had Fruit and Flower Exhibitions combined, it would add considerably to their attractiveness, and the fascinating science of floriculture would be more appreciated. By giving special prizes for the best collections of indigenous plants and insects, correctly named, the study of Botany and Entomology would be encouraged, and these twin sciences be generally recognized as valuable auxiliaries to the fruit-grower. Finally, let every member of our Fruit Exhibitions endeavour to do his best to make them interesting and attractive, and they will without doubt be a

success.

# PRIZE ESSAY ON "METHODS OF UTILIZING OUR SURPLUS AUTUMN FRUITS."

Motto.—" He who successfully plants a new industry, or rectores an old one to vigour, is a benefactor to his country."

### BY P. E. BUCKE, OTTAWA.

Of late years much attention has been turned to some practical method of preparing fruits which cannot be disposed of at the time of ripening, so that the time of selling and using them may be prolonged, and also that it may be made transportable to distant markets, where from climatic influences—too much cold or too much heat—they cannot be grown.

The earliest method, and indeed the only one known for many years, was the art of boiling fruit in sugar, about pound for pound, which was found to keep it so perfectly from decay, that it was called "preserved." More recently other modes have been discovered, such as excluding the atmosphere by means of air-tight glass jars or tin cans, and the different me-

thods of drying.

As a matter of commercial convenience, the drying process appears likely to take the lead, as the smallness of the bulk and the less liability there is in the breaking of the package greatly reduces the expense in putting up and conveying to distant markets. Drying has many advantages over the exclusion of air, amongst these I may mention the expense of sugar is saved, and the trouble of drying is not so great as canning. Having made many inquiries and examined several of the newest inventions, I find that "Old Sol," for the purpose of drying has been greatly improved upon, and that even the string of apples, nicely pared and cored by deft hands at an evening bee, and hung around the kitchen stove, there to be covered with flies, dust and smoke whilst drying, is fast becoming one of the practices of the past, as improved methods of expelling the moisture from the fruit are being introduced. The Alden process is considered one of the most perfect, but the apparatus is only suitable for a large city, or some centre accessible by conveying railways. This method is in practical use in New York City, and I understand the machine cost \$2,000. From all I can learn, it scarcely pays to keep it going. Other machines are constructed on a principle somewhat similar to a separator attached to a threshing machine; the trays containing the fruit are placed on a platform which gradually moves from the fire at an angle of nearly 45 degrees, the heat ascending with it. The construction is simple, and probably it performs its work satisfactorally, but it is bulky, and the mode of working it by no means compact. The "Pacific Fruit and Vegetable Dryer," from all I can learn, and from samples of dried substances made by it, which I have secured, appears to me to comprise all the efficiency of any of the drying machines yet introduced into the market, and is neither bulky nor expensive. This machine can be built of any size suitable to the locality where required, one drying fifteen bushels per day may be constructed for thirty dollars, whilst one having a capacity of six hundred bushels per day will cost one thousand dollars. One of these machines will dry meat in from nine to ten hours, and will desicate vegetables as well as fruit. Peaches in halves, or tomatoes, take nearly five hours in drying—these latter make a good imitation of the dried fig of commerce. The inventors claim for this machine that it will dry more fruit, with less labour or fuel, than any other dryer or evaporator. It will dry fruit, meat, fish, tobacco and lumber, and all animal and vegetable substances, and will make conserves, raisins, and candied fruits equal to the best imported, it will dry green corn, string beans, squash, pumpkins, Irish and sweet potatoes, and, in fact, any other vegetable can be rapidly and perfectly cured, so as to keep in any climate for any length of time. So clean and free from dust are the articles operated upon when finished, that they can be cooked at any time without washing. The amount of moisture contained in the article dried, of course, affects the time of drying. Apples can be cured in from one and a half to two hours, and other articles according to quality. The dryer is so arranged that the moisture is conducted to the outside without allowing the heated air to escape or the cold air to enter, this alone enables a uniform temperature to be kept up, and greatly economises fuel. Coal, coke or wood can be equally well used in it, and 19

no special furnace is required. An ordinary stove, when used, can be easily disconnected from the dryer and removed for other purposes. The heated compartments are so under control that it is impossible to burn or seorch the fruit, as the heat in the different chambers can be increased or decreased at the will of the operator. All the work is done within easy reach of the attendant whilst standing on the ground. The sides are partially made of glass, so that the fruit is readily examined without opening and closing the doors, thereby economising fuel and heat. It is claimed also it is the only machine that can make raisins. Its cheapness of construction and simplicity of operation certainly ought to win favour for it. There are no pipes to burst, and no boiler to explode, and there is no danger from fire Enclosed herewith are samples of the work performed, from which the Committee can judge for themselves of its efficiency, for my own part, I am quite satisfied, from personal examination of the apparatus, that most of the points claimed may be relied upon as correct, though I did not see it actually at work.

Another method of curing apples only, has come under my notice, it is much practiced in Europe, and the article produced is called the Normandy Pippin or Biffin. These are of considerable commercial value, and the mode of preparation is as follows:—The fruit after being pared – not cored—is placed in a cool oven, and as it begins to soften, is removed six or seven times in succession, and is flattened each time by a gentle pressure gradually applied, so soon as it becomes soft enough to bear it, after which it is set aside to cool, when cold it

is put into clean dishes or glass plates.

The sour, or tart varieties, are the most esteemed. If the process is well managed, the appearance of the fruit is much superior to the dry leathery chips usually seen here in groceries, and the flavour is very delicious. These apples may be prepared for the table in a variety of ways, simply soaking them in water twenty-four hours, and using a little powdered white sugar and cream over them, they make a very nice dish, but they may be cooked with sago, stewed, or made into pies. They keep their flavour for years in any climate, and are in every way a thoroughly remarkable commodity, as they can be packed in boxes or barrels, and transported equally as easy as any of the dried fruits. They can be prepared in an ordinary stove oven, or on a large scale in a fruit-dryer. Their introduction into England from the continent has already met with success, so that it is no new venture; all we have to do is to compete with those already in the market. I enclose samples of the fruit for trial by the committee, expressly procured from England for this occasion, and I should see no reason why our surplus apples should not be treated in this way, as well as by the ordinary drying process. I should have mentioned the retail prices of these dried apples in England, is 10d. sterling per pound, equal to 21 cents, it will therefore be seen there is a large margin for profit.

## REPORT FOR 1876.—TO THE FRUIT ASSOCIATION OF ONTARIO.

This season's fruit in the neighbourhood of Almira, Markham Township, is not good; apples not half a crop, poor quality. I suppose it is owing to the great heat and drought of this past summer. The trees are also failing very fast, the limbs are dying in all directions, on the trees. The black spotted disease has nearly ruined my three large golden russet trees. The Tolman Sweets are fresh and healthy. Some of my old seedling trees are also healthy. The trunks of the most of my old trees are of sound appearance, but the limbs get affected with black spots, say from four to fifteen inches long, all cracked open, which will in all cases cause death.

No tame plums this year. Trees are doing well again. The black knot is leaving again. Young sprouts came through safe the two last seasons.

No cherries. The black knot has destroyed nearly all the common kinds.

Gooseberries bore abundantly. Raspberries, both black, red and orange, bore heavy. Currants a good crop. No trouble growing gooseberries and currants if hellebore is applied.

# REPORT OF TREES RECEIVED FROM FRUIT-GROWERS' ASSOCIATION FOR THE LAST THREE YEARS.

The Salem Grape and Downing Gooseberries I received in the spring of 1874, are doing well. The gooseberry is a good grower, and bore the second year half dozen berries. This year a good quantity, fair size, free from mildew. The Salem Grape did very little the first two summers, but this summer made up lost time. It grew four or five feet, which I cut back; about one-half did not bear yet.

The trees for 1875 I did not get till some time in June. They were sent about twelve miles away from my place to a railroad station, but still I got them and threw them in water, root and branch, to swell for half a day, then I planted them carefully. The F. Beauty pear tree soon started growing; it made a good growth this year. The Swayzie Pomme Gris apple was nearly dead. Put out a few sickly leaves, last spring it sprouted near the ground. I reckon it a gone case.

The Glass seedling plum for 1876 (by rail), came in splendid condition, accompanied with some cuttings, I suppose from the same tree, which I thank you for. The tree made a good growth, in spite of the great heat and drought. The cuttings I grafted on tame plums; they

nearly all grew, some of them two feet.

I remain, yours, &c.,
D. S. HOOVER,
Almira P. O.

Markham, January 17th, 1877.

## PREMIUMS FOR ESSAYS FOR 1877.

The Directors offer the following premiums:

First.—TWENTY-FIVE DOLLARS for the best Essay on Hybridization, and its Canadian results.

Second.—FIFTEEN DOLLARS for the second best Essay on the same subject.

Third.—TWENTY-FIVE DOLLARS for the best Essay on the most profitable fertilizer for fruit-growing.

Fourth.—FIFTEN DOLLARS for the second best Essay on the same subject.

Fifth.—TWENTY-FIVE DOLLARS for the best Essay on the results accruing from the trees and plants distributed by the Association.

Sixth--FIFTEEN DOLLARS for the second best Essay on the same subject.

Seventh.—TWENTY-FIVE DOLLARS for the best Essay on the best mode of acquiring statistics with regard to the quantity of orcharding in Ontario, and the average annual product.

Eighth.—FIFTEEN DOLLARS for the second best Essay on the same subject.

#### MEETINGS FOR 1877.

The winter meeting will be held in Hamilton, on Wednesday, the 7th February, 1877, at Ten o'clock A.M.

The Summer Meeting will be held at Stratford, on Wednesday the 18th July, 1877, at

The Fall Meeting will be held at Port Hope, on Wednesday the 31st October, 1877, at Ten o'clock, A.M.

## PRIZE LIST.

### PERMANENT PRIZES,

First.—An Honorary Medal to the originator of any new fruit, which, having been thoroughly tested for a series of years, is found to be worthy of being placed among the fruits of its class for cultivation in Ontario.

Second.—FIFTY DOLLARS for the best Canadian Seedling Late Winter Apple, to be at

least equal to the old popular varieties now in cultivation.

Third.—THIRTY DOLLARS for the best Canadian Seedling Harvest Apple, of like merit.

Fourth.—TWENTY DOLLARS for the best Canadian Seedling Autumn Apple, of same excellence.

#### ANNUAL PRIZES.

### PRIZES FOR 1877.

First.—Awards may be made by the Committee on Seedling Fruits of sums not exceeding Ten Dollars for any seedling fruit that may be submitted to them during the year, which they may deem worthy, although they may not yet be prepared to advise the directors to bestow either of the permanent prizes. Such award shall not in any measure disqualify the exhibitor from eventually receiving, for the same fruit, one of the permanent prizes.

Second.—FIVE DOLLARS for the best Winter Seedling Apple, fruit to be grown in 1877,

and exhibited at the succeeding Winter Meeting of the Association.

Third .- FIVE DOLLARS for the best Autumn Seeding Apple, to be shown at the next

Autumn meeting of the Association.

Fourth.—FIVE DOLLARS for the best Summer Seedling Apple, to be sent, when in condition for examination, to the President, Rev. R. Burnet, London, all charges prepaid, and to be by him submitted to the Committee on Seedling Fruits.

Fifth.—FIVE DOLLARS for the best Seedling Winter Pear, fruit grown in 1877, and

exhibited at the succeeding Winter Meeting of the Association .

Sixth.—FIVE DOLLARS for the best Seedling Autumn Pear, to be shown at the Provincial Exhibition.

Seventh.—FIVE DOLLARS for the best Seedling Summer Pear, to be sent, when in condition to be examined, to the President, Rev. R. Burnet, London, carriage prepaid, for submission to the Committee on Seedling Fruits.

Eighth.—FIVE DOLLARS for the best Seedling Plum, to be sent to the President, when

in season.

Ninth.—FIVE DOLLARS for the best Seediing Peach, to be sent to the President, when in season.

Tenth.—FIVE DOLLARS for the best Seedling Grape, of any colour, to be sent to the President, when ripe.

Eleventh.—FIVE DOLLARS for the best Seedling Strawberry, to be sent, if possible, to be Summer Meeting; if not possible, then to the President.

Twelfth.—FIVE DOLLARS for the best Seedling Raspberry, to be sent, if possible, to be Summer Meeting; but if that be impracticable, then to the President when in season.

Thirteenth.—FIVE DOLLARS for the best Seedling Gooseberry, that is not subject to mildew, whether of European or American parentage, or a cross between them; to be sent o the Summer Meeting, if possible, otherwise to the President.

Fourteenth.—FIVE DOLLARS for the best Seedling Blackberry, sufficiently hardy to en-

dure the climate of Ontario. Fruit to be sent to the President when ripe.

Should two or more Seedlings of equal merit be shown, the prize shall be awarded to each. The Committee shall in all cases withhold the prize altogether, if they do not deem the fruit worthy.

A Seedling to which one of these annual prizes has been awarded cannot compete a second

i me in this class, but may compete in the class of Permanent Prizes.

A Seedling Apple which has received one of the money prizes in the class of Permanent Prizes, cannot again receive a money reward, but may be offered in competition for the Honorary Medal.

#### CERTIFICATES OF MERIT.

Seedling fruits which have received any of the foregoing money prizes may be offered in

competition for certificates of merit.

The Committee on Seedling Fruits will report to the Directors those fruits which they think to be worthy of a Certificate of Merit. The Directors will then make full inquiry and examination concerning the character of the fruit, including size, appearance and quality, the habit, vigour, health, hardihood and productiveness of the tree or plant, and its general adaptation to the climate of Ontario, and bestow such Certificate, if any, as they may think it worthy to receive.

A fruit which has received a Certificate of Merit may be offered in competition for the

Honorary Medal.

The Honorary Medal may be given any number of times to the same person for different fruits, but only once for any one fruit.

## CONDITIONS OF COMPETITION.

Seedling fruits offered in competition for these prizes must be shown in quantities of not less than half a dozen of specimens of each sort, if they be Apples, Pears, Plums or Peaches; if Grapes, not less than three bunches; if Berries, not less than one pint. Each sort or variety must be accompanied by a statement, signed by the person sending the fruit, setting forth the origin of the tree or plant, if known; if the origin be unknown, then so much of the history of the tree or plant yielding the fruit sent, as may be ascertained—its vigour, hardihood and productiveness, the character of the soil in which it is growing, and what, in the estimation of the sender, are the peculiar excellencies of the fruit. This rule must be observed in all cases, whether the fruit be shown at the meetings of the Association or sent to the President for the examination of the Committee.

#### Conditions of Membership.

The annual fee is ONE DOLLAR, payable on the first day of January in each year, and may be sent to Sccretary-Treasurer, D. W. Beadle, Esq., St. Catharines.

Any person remitting the fees of old or new members, with their names and post-office address, may retain ten per cent. of the amount for his trouble. This arrangement is in lieu of the extra allowance in trees formerly given for each club of five members.

### THE FRUIT-GROWERS' ASSOCIATION OF ONTARIO

seeks to collect, arrange, and disseminate information on the subject of Fruit Culture.

These objects are secured in the following manner:-

By holding meetings every year in different localities, of which all members receive notice by circular; by reporting and preserving discussions; by procuring and publishing valuable essays by skilled fruit-growers; by appointing committees to make personal examinations of different sections of the Province, and report upon the peculiar characteristics of the soil, climate, and special conditions of fruit culture therein; by illustrating the Annual Report with coloured lithographs, drawn from nature, of the new fruits raised by our Canadian hybridists; by disseminating among the members trees or plants of some new fruit that promises to be valuable throughout the Province, only exacting that the members will make a report for a few years to the Secretary, as to the man-

ner these succeed with them; by rewarding essayists, and, as far as practicable, the efforts

of our hybridists.

In calling the attention of your neighbours to the advantages and benefits derived from becoming a member of this Association, you will confer a favour on your friends, and receive ten per cent. of the amount you may collect as a recognition of your services.

R. Burnet,
President.

# EXPLANATION.

To the Members of the Fruit Growers' Association of Ontario.

Gentlemen,—It has been impossible for the Directors to procure plants of Mr. Saunders' Hybrid Raspberry to send to you this spring, as was expected and promised. Mr. Saunders placed his stock in the hands of Mr. Charles Arnold to propagate. Mr. Arnold found that the variety was very stubborn, and would not propagate readily in the open air, and he therefore placed the plants in the hands of a skilled propagator, under glass, and he undertook to propagate them by means of bottom heat. He failed to make them root, and succeeded in furnishing Mr. Arnold with a few dozen plants, when it was expected that he would have raised one or two thousand. In consequence of this failure, the Directors have arranged with Mr. Arnold to send you his "Diadem" Raspberry (figured in the last Report, 1875), and a couple of plants of some of his new and promising seedling Strawberry Hybrids. The Directors regret the disappointment you will feel in not receiving what you expected, but you will see that it was unavoidable.

Your most obedient Servant,

D. W. Beadle, Secretary.

# CENTENNIAL EXHIBITION.

It was not until near the end of June, 1876, that the directors were informed that the Government of Ontario desired the Fruit-Growers' Association to make an exhibit of the fruits of this Province, at the International Exhibition, which was then being held in Philadelphia. The directors had been requested during the winter to favour the Advisory Board with their suggestions, and several interviews had transpired upon the subject, but it was not until the Honourable the Commissioner of Agriculture seriously took the mat-

ter in hand, that any definite action was taken by the Government.

The delay thus caused was a serious hindrance to the successful carrying out of so great an undertaking. Time, that should have been used by the directors in maturing plans and devising the best ways and means, had been lost through indecision, and the opportunity for thinning of fruit, and for careful attention during the growing season, by the members who could raise specimen fruits, had gone by. It was possible now only to prepare and send out, as speedily as possible, circulars, informing the members that it had been determined to make an exhibit of our fruits, and requesting them to contribute the best they could. Special circulars were sent to gentlemen of known zeal in fruit culture, asking them to make active exertions in their several neighbourhoods to secure a fair representation of the fruits of their several localities, and to act as forwarders for any who were willing to send fruits. These gentlemen were supplied with fruit-labels, address-cards, and all necessary instructions when and how to pack and forward the fruit. In addition, articles were prepared and published in the newspapers, inviting all to contribute whatever they might have in the way of fruits. By these methods the directors sought to secure such a collection of all kinds of autumnal fruits from every county as would be a fair representation of the fruit productions of the whole Province.

To these requests most cordial responses were received from every quarter, with the assurance that every thing that could be done, should be cheerfully done to further the undertaking. The Owen Sound Horticultural Society offered special prizes of ten dollars for the best collection of apples, and five dollars for the second best, the two collections taking prizes to become the property of the Society, for the purpose of being sent to the Centennial Exhibition. But the replies that came in to these requests soon made it manifest that the Centennial had fallen upon a season that was, in many respects, exceptionally unfortunate. From Goderich, Owen Sound, Meaford, Clarksburg, and Guelph, came the very disheartening report that the plum crop, usually so abundant and of such fine quality, was a total failure throughout all that section; while correspondence from all points between the Great Lakes and the Detroit and Niagara Rivers, revealed the fact that the pear crop was unusually light, and that in many places the extreme heat and drought had very seriously affected the apple crop. This unfortunate state of things, however, could not be changed, and the directors took the only course open for them, they increased their efforts to secure specimens of such fruits as were to be had, and succeeded in obtaining them from so many different parts of the Province, from Ottawa to Windsor, from Niagara to Owen Sound, that the whole Province may be said to have been fairly represented.

The Niagara District has been so long noted for the beauty, excellence and variety of its fruits, that great expectations were entertained, both in regard to the quantity and quality of the samples that would be sent from that section. But even that favoured district seemed to be suffering from a great variety of ills, which most seriously injured many of the fruits; so that but very few growers found that they had anything that could be considered worthy of exhibition. Six contributors at Niagara sent twenty plates of apples, eight of pears, sixteen of plums, two of peaches, and three of grapes. At St. Catharines, five contributors sent eight varieties of apples and two of pears. One con-

tributor sent from Port Dalhousie five plates of pears, five of gooseberries, and five of raspberries. Three contributors at Jordan sent two varieties of pears, three of plums, one of peaches, two of gooseberries, and three of currants. One contributor sent thirteen varieties of apples from Beamsville, and three contributors at Drummondville sent one plate of peaches, twenty-four of grapes, and two of currants. Three contributors at Grimsby sent forty plates of apples, eleven of pears, and nine of peaches. It is worthy of mention that the grapes sent from Niagara were those known as Exotic grapes, and that these were grown by Mayor Paffard in the open air, although in this climate they are usually grown only under glass. Mr. Paffard has been able to raise them in the open air with marked success for a number of years, in part because of the very favourable climate, and the influences of the lake and river upon the humidity and temperature of the atmosphere, and in no small part because of his own skill and attention. For these grapes Mr. Paffard was awarded the International Medal and Diploma. There was nothing else to note specially in the samples from this district, save that some of the gooseberries were very fine seedling varieties, raised by Mr. W. H. Read, of Port Dalhousie.

The collection of fruits from the Hamilton district was very fine indeed. The variety of articles sent was very great, and the quality of the samples unsurpassed. For the fullness, variety and quality of the exhibit from this district, the Association owe much to the untiring efforts and good judgment of Mr. John Freed, of Hamilton. He was indefatigable in his exertions, and personally superintended the packing and forwarding of the samples which the members in Hamilton and vicinity contributed in most generous profusion. Sixty-seven contributors sent from Hamilton one hundred and eighty plates of apples, sixty-three of pears, sixty-two of plums, eight of peaches, four of cherries, ninety-one of grapes, twenty-one of currants, twenty-eight of gooseberries, thirteen of raspberries, one of quinces, one of black walnuts, one of hickory nuts, and one of pea-nuts. Two contributors at Nelson, and two at East Flamboro' sent sixteen plates of apples, and

one at Saltfleet sent a plate of pears.

One of the varieties of plums shown from this district, and called the Canada Orleans, is a variety not generally known nor disseminated, but one that is held in high estimation, particularly as a very profitable market plum, by those who have grown it. The collection of apples sent by Mr. Warren Holton, of Hamilton, was one of more than ordinary interest on account of the number of new and interesting varieties it contained. The grapes from this district were remarkably fine and interesting. The collection included five new hybrid grapes, raised by Mr. W. H. Mills, of Hamilton, whose skill as a fruit-raiser and hybridist is well known to the members of the Association. These new grapes possess many very interesting and valuable qualities, and some of them seem destined to attract the attention of Canadian grape-growers. Two of the exhibitors of grapes from this district were honoured by the Centennial Commissioners with the International Medal and Diploma; namely, Mr. William Young, of Hamilton, for his splendid sample of Salem grapes, and Mr. W. N. Taylor, of Hamilton, for his unusually fine specimens of the Clinton grape, and Mr. Donald Smith, of Hamilton, for extra fine samples of apples. The samples of pea-nuts sent by Mr. Wm. Hill, of Hamilton, attracted no little attention, from the fact that the plants were sent entire, with the pods of nuts adhering to the roots.

Although the Exhibition from the Brantford District was not as large as was expected, nor indeed as large as it ought to have been, yet the samples sent were among the very best, and in many respects it was one of the most instructive. There were many interesting and valuable new hybrid apples, shown by Mr. Chas. Arnold, of Paris, one of which, the Association propose to disseminate, by sending a tree to every member of the Association, in 1879. There was also exhibited a most singular sport from the Esopus Spitzenburg, grown by Mr. H. Moyle, of Paris. Mr. Arnold's collection of hybrid grapes was very attractive, and received much attention, especially from those gentlemen who knew how to appreciate the labours of such a distinguished and careful hybridist, whose skill in this peculiarly delicate and difficult art, has won for him a world-wide reputation. The Commissioners conferred the International Medal and Diploma upon Mr. Arnold, for his excellent and instructive collection of apples, and a second medal and diploma for his seedling Grapes; and upon Mr. Thomas H. Parker, of Woodstock, for his most magnificent samples of grapes grown under glass. The exhibit from the Brantford District, com-

prised thirteen contributors at Brantford, who sent eighty-two plates of apples, and eight of plums; nine contributors at Paris, who sent thirty-seven plates of apples, seventeen plates of pears, twenty of plums, thirteen of grapes, seven of currants, ten of gooseberries, five of raspberries, and two of cherries; and four contributors at Woodstock, who sent one plate of apples, one of pears, two of plums, and two of grapes. It is noticeable that no fruits were sent from the County of Norfolk whatever, though that county claims, and justly,

to grow as fine fruit as any other in Ontario.

From the Galt District, there came to the Centennial, apples and plums. Six contributors at Galt sending fifty plates of apples, and one at Berlin, sending from his own grounds thirty varieties of plums. The plums were very fine samples indeed, and were specially welcomed by those having the charge of the Exhibition, because of the great scarcity of this fruit in Ontario, this year. Mr. Simon Roy, who so very generously helped the Association to make a creditable exhibit of plums, is well known as an enthusiastic cultivator of this fruit, and has himself produced some valuable new varieties. In his collection was a fine plate of the "Glass Seedling," which proved to be a fruit of such large size, and of so many good qualities, that the Association last year sent a tree of it to every member. It is a matter of surprise that the Centennial Commissioner did not award a medal to Mr. Roy for his very instructive and valuable collection of plums, and it can be accounted for only upon the ground that the judges did not notice the fact, that this fine collection was

grown by one exhibitor.

The London District contributed a very large and varied collection, representing a greater number of localities than any other. Thanks are due to Mr. Wm. Saunders and his assistants for their unwearied attention to the collecting, packing, and forwarding of so large a quantity of fruits, and which contributed so largely to the success of the exhibit. Two of the exhibitors in this district were distinguished by the award of the International Medal and Diploma. These were Mr. Hugh Scott, Jr., of Delaware, for his unusually fine samples of Northern Spy apples; and Mr. James McKay, Masonville, for a fine new variety called the London Pippin. There were a number of new varieties of apple sent from this district, such as the Canadian Pippin, Col. Talbot's Canadian, London Beauty, Caradoc Favourite, and other varieties not yet named, some of which may yet prove worthy of a Centennial Medal and Diploma. There were also some very fine looking, showy seedling peaches sent by Mr. Charles Gustin, of Forest, which may prove to be of great value in that section of the country. The new hybrid raspberries, gooseberries, and black currants sent by Mr. Wm. Saunders, of London, added very much to the interest of the small fruit exhibit.

There were thirty-six London contributors, who sent eighty-eight plates of apples, fifty-four plates of pears, twenty-five plates of plums, five of cherries, sixteen of grapes, seventeen of currants, nineteen of gooseberries, six of raspberries, one of butternuts, one of hazel nuts, three of black walnuts, one of berberries, and one of English medlars. There were nineteen contributors at Westminster, who sent seventy four plates of apples, fourteen of pears, eight of plums, one of cherries, four of peaches, one of raspberries, one of butternuts, and one of black walnuts. In Delaware there were thirteen contributors, who sent fifty-seven plates of apples and three of pears. Four contributors, at Arva, sent four varieties of apples and one of gooseberries. Caradoc, Talbotville, Mount Salem, Grovesend, and Strathroy, had each two contributors, sending sixty-two plates of apples, one of pears, and two of plums. Lambeth, Thorndale, Masonville, Petersville, St Marys, Glanworth, Wyoming, Pondmills, Dulwich, Komoka, Byron, Mount Bridges, Union, Port Stanley, Elgin, Yarmouth, McGillivray, Kertch, and Forest, had each one contributor, and these sent ninety plates of apples, eight of pears, five of plums, and four of peaches. Eight varieties of apples were sent by three contributors at St. Thomas.

The Toronto District suffered so severely from extreme heat and drought that but few persons had the courage to send fruits to the Exhibition. One gentleman in reply to our inquiries remarked that there was literally nothing to send, that the whole country was dried up to mere dust and ready to be blown away. For the fruits that were sent from this district we are indebted to the efforts of Mr. Geo. Leslie, Jun. There were only four contributors in this district, but these sent thirty-seven varieties of apples, twenty-three of pears, fifteen of plums, thirteen of grapes, besides a variety of currants, gooseberries, raspberries, peaches, and nectarines. A plate of the Lord Palmerston Peach, sent by

the Honourable D. L. Macpherson, attracted much attention, on account of the great size and beauty of the fruit, and because it was one of those new varieties recently sent out by Mr. Rivers, of Sawbridgeworth, England, which has rarely been fruited in this country. The exotic varieties of grapes, grown under glass, were very much admired,

rivalling in size and beauty the fairest productions of California.

The Windsor District was represented by only one contributer, Mr. James Dougall, of Windsor. From Mr. Dougall's well-known zeal and interest in all matters relating to the welfare of the Province, and his enthusiasm in the culture of fruit, to say nothing of his untiring efforts to extend the sphere of the usefulness of this Association, it is safe to say that the number of exhibitors from the fine fruit-growing County of Essex would have been largely increased, had Mr. Dougall's health permitted him to take that active part in securing collections of fruit that he would have gladly done. As it is, the collection sent from his own grounds was a noble representation of the fruit-growing capacities of that district, and most justly merited the high distinction conferred upon it by the award of the International Centennial Medal and Diploma. For full particulars relating to the varieties shown by Mr. Dougall reference is made to the list of exhibitors and the varieties of fruit sent from each district that accompanies this report. The new varieties of French apples grown upon trees imported directly from France were examined with much interest, and pronounced by competent judges one of the most instructive exhibits in the whole of the fruit exhibition.

Although the Owen Sound District was not able to contribute plums in the profusion, variety, and excellence for which that region is so worthily noted, yet there came from those parts a most splendid collection of apples. There were at Owen Sound nineteen contributors, who sent eighty-nine plates of apples; at Derby, there were thirteen, who sent eighty-eight plates of apples; from Sydenham, three contributors sent thirty-seven plates of apples. Kincardine, Kilsyth, St. Vincent, Meaford, Sarawack, and Tiverton, had each one contributor, who sent in all, seventeen plates of apples and nine of plums. On referring to the list of varietics sent from this district, it will be seen that a very large number of our most valued standard sorts are grown there, to which are added a few varieties, which, from their names, seem to have originated there. The action of the Owen Sound Horticultural Society, already mentioned, is deserving of great praise, for to them

in large measure, is to be attributed the fulness of their contribution.

The Belleville District also made very liberal contributions. Thanks are justly due to Mr. P. C. Dempsey, of Albury, who gave much valuable time to the careful selection, packing, and forwarding of the fruits from this district. At Belleville, five contributors sent seven varieties of apples and three of grapes; five at Albury sent thirty-five plates of apples, eight of pears, ten of grapes, and six of currants; there were at Wallbridge, four contributors, who sent nineteen plates of apples and six of grapes; Trenton and Rednors-ville had each two contributors, sending six varieties of apples and four of pears; Ameliasburg, Frankford, Bloomfield and Colborne, had each one contributor, and these sent fiftysix varieties of apple and four of pear. The large collection sent by Mr. John P. Williams, of Bloomfield, is deserving of special mention, creditable alike to his skill as a cultivator, and his judgment in the selection of varieties. In the list of varieties from this section, will be found some names of sorts which have probably originated in this district, and proved to be of such value, that they have been preserved, and more or less widely disseminated. Such are the Seedling Red, and Seedling Yellow Apples, Seedling Snow, Redner's Seedling, Baxter Seedling, Bay of Quinté Favourite, Albury, &c., which may prove to possess qualities that make them worthy of being more widely disseminated. From this district comes the famous "Burnet" Grape, a fine coloured engraving of which illustrates this report. An unfortunate accident destroyed all the good samples of this variety on their way to the Centennial, and consequently, only a bunch of small size, grown upon a layer, was left to be exhibited. The thanks of every member of the Association are due to Mr. P. E. Dempsey, the raiser of this beautiful and excellent variety, for placing it at the disposal of the Association, so that the members can all receive a plant of it in the spring of 1878.

In the Ottawa District, Mr. P. E. Bucke, was at considerable pains to secure such a collection, as would convey a correct impression of the fruit products of that valley. Ten contributors sent in all twelve plates of apples, five of plums, nine of grapes, twelve of

currants, six of gooseberries, and a plate of butternuts. A glance at the list of varieties of apple will show that only the most hardy sorts will thrive in this district, and that the attention of cultivators must be turned to the selection of those kinds which can resist great extremes of cold. Dr. Bell deserves much from his neighbours, for calling their attention to a variety which he noticed growing upon the Gatineau, fruiting abundantly, and bearing with impunity the rigours of the climate. This apple he has rescued from oblivion by grafting it upon trees in his own garden, and giving it the name of the Gatineau Belle. Much, beyond question, may be done in this direction, to obtain a selection of sorts that will be valuable in the valley of the Ottawa, and places of similar climate.

After mature deliberation, the Directors decided to send to the Centennial Exhibition some samples of our summer fruits. The object they had in view was two-fold. The first, to call attention to our Province, and make visitors to the Centennial acquainted with the fine quality of our small fruits; the second, to prepare the way for the grand display in the months of September and October, and to profit by the experience that would in this way be gained, so that there might be no blundering or disappointment when the burden of the great display was to be borne. Accordingly, consignments of cherries, eurrants, gooseberries and raspberries were forwarded from Ottawa, Belleville, Paris, London, St. Catharines, Toronto, Hamilton and Drummondville. These arrived in good condition, with the exception of some of the cherries and the softer varieties of raspberries, and attracted much attention from their fine size and beautiful appearance. As soon as the fruit began to fail from exposure, under the intense heat of last July, it was replaced by fresh arrivals, so that for about a fortnight the tables were kept constantly supplied with fresh samples, which gave the display a neat and attractive appearance. For this exhibit of cherries and early fruits, the Association received from the United States Commissioners the International Medal and Diploma.

It will thus be seen that the first and most important object which the Directors had in view in making this midsummer exhibit, was fully realized; as to the advantage gained from the experience thus obtained, the magnitude and beauty of the autumn display, which elicited so much praise from every appreciative visitor, and such enconiums from the

press, doth fully testify.

The time fixed for the grand display was from the 4th of September to the 14th of October. A large building was devoted exclusively to the exhibition of fruits, known as Pomological Hall. Here were displayed the finest fruits of many of the States of the Union. California sent her magnificent grapes, rivalling in size and beauty the productions of sunny Italy, and, with them, her showy pears and plums, with figs and pomegranates. Kansas and Nebraska sent from their virgin soils and western elimate apples that, in size and general appearance, could hardly be excelled. Iowa was there with the fruits of her prairie soil, and Michigan made a beautiful display of apples, pears and peaches. Wisconsin sent apples and grapes, and Minnesota sent from her cold climate some sixty varieties, some of which, from their great hardihood, have received the title of iron clads. Ohio made a fine display of her fruits. Massachusetts sent three hundred varieties of pears. Pennsylvania and New Jersey contributed far less than would have been expected, considering their proximity to the place of exhibition. New York, as a State, was very poorly represented, though some fine fruits were shown by some of her nurserymen and amateurs. Some very nice grapes came from Connecticut, and peaches from Delaware and Virginia. The fruit was arranged upon tables stretching out fully two hundred feet in length, and when there were loaded with all these various fruits the sight was beautiful beyond description; the place seemed like the garden of the Hesperides, bright with every tint of colour, and redolent with the most ravishing perfume.

In this great exhibition the display of this Association covered two tables extending the entire length of the hall, and comprised fourteen hundred and eighty plates of apples, two hundred plates of pears, two hundred and ninety plates of plums, one hundred and seventy plates of grapes, twenty-six plates of peaches, eighty-six plates of erab apples, and some twenty plates of miscellaneous fruits, nuts, &c. And this display was kept up as far as practicable by shipments of fresh specimens, so that our exhibit remained substantially the same until the close of the fruit exhibition on the 14th of October. It so happened that the space allotted to Ontario was upon the north side of the building, the walls of which were tastefully decorated with flags bearing the Cross of St. George, and the entrance to our section

festooned with our colours; while upon every panel and upon every post was blazoned in large capitals the words "Canada—Fruit Growers' Association of Ontario." After the Pomological Hall was closed, the Superintendent of this department requested that a selection of our fruits be made and placed on exhibition in Agricultural Hall. This selection covered a table about fifty feet long, and remained for examination until the close of the exhibition.

The members of the Association have reason to feel proud of the part we took in this most magnificent gathering of fruits that the world has ever seen. We have no need to speak in terms of praise of our exhibit of fruit; others in no way interested have spoken for us. If the remarks of visitors and the exclamations of passers by may be taken as an indication of the impression produced upon the public mind, then was our exhibit a great surprise and gratification. Again and again were the gentlemen in charge assured by the visitors to our tables, that they had no idea that fruits of such beauty and excellence could be grown in Canada, and that it was especially astouishing to them to find that they were, at least, equal to their own. And as often did gentlemen who were interested in the success of the fruit display as a whole, express their thanks for the contribution that Ontario had made. esteeming it alike creditable to ourselves and complimentary to them. The reports of the Association for 1875, of which a thousand copies were sent to the Centennial, were eagerly sought after, and given as freely to all who took an interest in them. In this way our Society, and somewhat of our capacity for fruit-growing, will become known to many kindred societies and individual pomologists, not only in every State in the United States, but in Spain, Russia, France, Portugal, Germany, Brazil, and indeed in nearly every country represented at this great exhibition.

Nor were the praises bestowed upon our fruits left to die upon the air, but they are to be found in many of the reports which were written for other than Canadian readers by journalistic correspondents, and most satisfactory of all, in the recommendations of the judges, and the awards of the Centennial Commissioners. A distinguished western pomologist, Mr. G. C. Pearson, writing at Danville, Illinois, gives a comparative view of the fruits from the different parts of the States and Canada. Of the fruit from California he says, "the quality "of the grapes and pears is excellent, but the apples are second and third-rate, and the "peaches are not extra. Kansas is not excelled in the size and general appearance of the "apple, but the quality of such large apple is never high. Nebraska has a fine show of really "good apples, pears and grapes. Iowa has also a large show of many varieties. Wisconsin "shows nice apples and fair grapes. The most interesting and instructive display of apples "is from Minnesota, embracing sixty varieties, though only a few are to be commended. "Ohio has a good exhibit of pears, apples, and other fruit. Pennsylvania has a fair show of "pears, that of apples is not large. New Jersey has a few individual exhibits which are "scattered here and there. Massachusetts presents three hundred varieties of pears, proba-"bly the best in quality in the Exhibition. Connecticut has a good show of pears and apples, and samples of the best Delaware grapes. The District of Colombia has a first rate show "of pears. From New York, Ellwanger and Barry, presents a variety of all kinds of apples "and pears. Michigan has the best show of winter apples, as it well may, for it has the most "extensive apple orchards in the world. Decidedly the best show, taking into consideration "variety, quality. number and taste, is from Ontario, Canada."

A writer in the New York Graphic of October the 11th, says:—" Probably the finest show of various fruit is made by the Fruit-Growers' Association of Ontario, Canada. The present display occupies the entire north side of the Pomological Building, and is composed of apples, plums, pears, crab-apples, peaches, grapes, and a variety of nuts, including walnuts, butternuts. hickory:nuts, hazel-nuts and pea-nuts. The same Association in July last, made a display of gooseberries, currants, raspberries and cherries. These were highly commended by the Judges." After speaking in detail of some of the fruits that attracted his attention, he adds:—"it would be impossible in a notice like this to do justice to the entire collection. As a representative collection it could not be surpassed. The arrangement and classification, reflect much credit upon the officers of the Association, and especially upon the gentlemen who are in charge. It must be doubly gratifying to them that this very beautiful display of the fruits of the Province attracts such universal attention. Their exhibit has contributed much to the beauty and attractiveness of the Pomological Department, and they are

to be congratulated upon the fruit-producing capabilities of their soil and climate, and the

taste and enterprise of their fruit-growers."

A Correspondent of the Detroit Press, writes:—"Pomological Hall is now a scene of beauty and activity difficult to describe. We cannot claim exclusive honour for the United States in this magnificent exhibition of the fruits of the earth. Our neighbours north of the great falls and the great lakes actually led off in this friendly rivalry. Canada has commanded our respect and challenged our admiration in nearly all the departments of the great International Fair. The display is under the methodical management of the Fruit-Growers' Association of the Province of Ontario. It consists of Apples, Pears, Plums, Peaches, Grapes and Nuts. One beauty of the Canada exhibit is, that there are several plates of a kind from different parts of the Province, showing the variations in the same variety caused by differences in climate and soil."

Mr. Thomas Meehan, a gentleman of the very highest ability in all fruit matters, thus speaks of our exhibit in the Gardeners' Monthly, during the great week ending September 16th, "Canada received great praise. She has made continuous exhibits from the opening through the Fruit-Growers' Association of Ontario, and on this occasion excelled even herself. The Plums especially attracted universal praise." In a letter to one of our Directors he said, "The collection of fruit from the Fruit Growers' Association of Ontario is very fine, and will receive the highest commendations of the Committee in their preliminary reports."

This is the testimony that is given by our neighbours to the excellence of our exhibits, a generous acknowledgment that in the Centennial Fruit Exhibit Ontario took the lead in the extent of her exhibition, and in the variety, quality and flavour of her fruits. But the testimony does not end here. The awards that have been made by the Centennial Commissioners tell of the opinions of gentleman selected for their knowledge of fruits and qualifications to judge of their merits, and these able and experienced judges have awarded to our display no less than fifteen Medals and Diplomas. These are as follows:

- 1. Fruit Growers' Association of Ontario, early berries and fruits.
- 2. " " collection of fruit.
- 3. " " pears.
- 4. " " " " grapes.
  5. " " " " apples.
- 6. Charles Arnold, Paris, collection of apples.
- 7. James Dougall, Windsor, collection of apples.
- 8. Hugh Scott, London, apples.
- 9. James McStay, London, apples, the London Pippin.
- 10. Charles Arnold, Paris, seedling grapes.
- 11. William Young, Hamilton, Salem grapes.
- 12. W. F. Taylor, Hamilton, Clinton grapes.
- 13. Thomas H. Parker, Woodstock, grapes grown under glass.
- 14. H. Pafford, Niagara, Exotic grapes, grown in open air.
- 15. Donald Smith, Hamilton, apples.

Without question, it is but just to say that the display from Ontario was the most comprehensive and the most instructive exhibit of fruits that was made by any State or Province at the Centennial. Our collection of plums, notwithstanding the unfortunate failure of our plum crop, was the largest and most complete of any. Indeed, if all the plums sent by other exhibitors were gathered into one collection, it would not have equalled in merit that from Ontario. Our apples did not, as a whole, equal in size those that came from the richer soils and brighter skies of the south-western states, nor at the commencement of the exhibition (in the beginning of September) were they as highly coloured, but they far excelled them in flavour, and in keeping qualities; and as the season advanced, and the middle of October drew on, our display of apples stood confessedly at the head, both in the beauty of the specimens and in their intrinsic worth, while at no time were they surpassed in the variety, value, and completeness of the collection. In pears and peaches we were excelled by only a few collections, notwithstanding the fact already mentioned that the season proved very unfavourable in Ontario to these fruits, and the further fact that but a portion of our Province is adapted to the growing of many varieties of peaches or pears. Our display of

grapes was also, the most complete. In open air culture, we could not equal the grapes from California, but our exotic varieties, grown under glass, were fully up to them in size of bunch and berry and beauty of colouring. The specimens of hardy grapes grown in the open air in Ontario, were as fine in appearance as those shown from the States, where the climate is supposed to be more favourable to their culture than ours, and it may safely be stated that no State of the Union exhibited so full and exhaustive a collection of hardy varieties of grapes. Again, our midsummer collection of berries were not only not equalled, but no such collections were exhibited that could at all compare with ours in quality.

Of the individual contributors, who without any expectation of personal honour or distinction have contributed so generously of whatever they might have that seemed likely to enhance the beauty, or the value, or the instructiveness of our Provincial exhibit, it is impossible to speak in sufficient terms of acknowledgment. Every consideration of an individual or selfish character was wholly forgotten in the one'desire to make the fruit exhibit of Ontario a faithful and worthy representation of the products of our soil and climate in the hands of energetic and intelligent cultivators. The success that has crowned their efforts is their reward. In addition to the awards made by the United States Commissioners, the Canadian Commission have awarded to the Ontario Fruit-Growers' Association the CANADIAN GOLD MEDAL, in token of their recognition of the value of the exhibit of the Association. Thus, it seems, that notwithstanding the many untoward circumstances with which the Directors had to contend, our display has been able to secure most honourable recognition both at home and abroad.

The members of the Association may justly congratulate each other and the Province on the great success of our display. It has done much to enlighten the people of other lands, and even many of our neighbours over the border, in regard to the true character of the productions of our Province. It has served to dissipate a very prevalent impression that we dwell in a most inhospitable region of snow and ice; one in which the tiller of the soil may hope indeed to be able during the short summer to wrest from the ungenerous earth enough to maintain life during the long, dark, dreary winters; but where he may never hope to taste fruit, much less to raise for exportation the luscious fruits of temperate climes. By the wise and liberal determination of the Commissioner of Agriculture, to make, through the Fruit-Growers' Association of Ontario, a display of the various fruits of the Province, more has been done to break down unfounded prejudices, and to disseminate throughout the world correct information with regard to the true nature of our climate and soil, and the excellence and beauty of its productions, than could have been done by an army of Emigration Agents, or by a whole circulating library of books of information on the climate and productions of Ontario.

The following is a list of the exhibitors, showing the District in which they reside, and the fruits contributed by them, together with a list of varieties of the different fruits sent from each district.

#### NIAGARA DISTRICT.

- 1. J. Niven, Niagara, Apples, 11 varieties.
- 2. Nathan Pawling, St. Catharines, Apples, 4 varieties; Pears.
- 3. A. M. Smith & Co., Grimsby, Apples, 30 varieties; Pears, 7 varieties; Peaches, 9 varieties.
- 4. David Bradt, Stamford, Apples.
- Gage J. Miller, Virgil, Apples, 9 varieties; Pears, 4 varieties; Plums, 6 varieties; peaches, 2 varieties.
- 6. Thos. Farmer, St. Catharines, apples, 2 varieties.
- 7. Jas. W. Johnson, St. Catharines, apples.
- 8. Thos. Keyes, St. Catharines, apples.
- 9. Geo. Walker, Beamsville, apples, 13 varieties.
- 10. Robert Best, Niagara, apples, plums.
- 11. J. G. Teneyck, Grimsby, apples, pears.
- 12. J. B. Bowslaugh, Grimsby, pears.
- 13. A. H. Pettit, Grimsby, pears.
- 14. Allen Moyer, Jordan Station, pears, 2 varieties; plums, 2 varieties; peaches, gooseberries, 2 varieties; currants, 2 varieties.
- 15. John Crysler, Niagara, pears.

16. R. N. Ball, Niagara, pears, 3 varieties.

17. W. H. Read, Port Dalhousie, pears, 5 varieties; gooseberries, 5 varieties of seed-lings, and raspberries.

18. Dr. Comfort, St. Catharines, pears.

19. J. McKenzie, Niagara, plums.

20. D. Swinton, Niagara, plums, 2 varieties.

21. Henry Paffard, plums, 4 varieties; grapes, 3 varieties.

22. A. E. Thomas, Jordan, plums.

23. C. H. Biggar, Drummondville, grapes, 12 varieties.

24. W. S. Corwin, Drummondville, grapes, 6 varieties; peaches.

25. R. Currie, Niagara, peaches.

26. Solomon Misener, Jordan, currants.

27. Geo. Biggar, Drummondville, currants, 2 varieties.

The following varieties of the different fruits were sent from this district; namely:

### Varieties of Apples.

Swayzic Pomme Grise, Snow Apples, Rhode Island Greening, Baldwin, Twenty-ounce Apple, Northern Spy, Roxbury Russet, Seek-no-further, King of Tompkins County, Esopus Spitzenburg, Montreal Pomme Grise, Alexander, St. Lawrence, Hubbardston Nonsuch, Swaar, Talman Sweet, Twenty ounce Pippin, Newton Pippin, Rambo, Flushing Spitzenburg, Yellow Belleflower, Golden Russet,

Duchess of Oldenburg, Gloria Mundi, Transcendant Crab, Montreal Beauty Crab, Yellow Siberian Crab, Chenango Strawberry, Gravenstein, Peck's Pleasant, Fall Pippin, Vandevere, Cranberry Pippin, Colvert, Blenheim Orange, Wagener, Red Russet, American Mother, Virginia Sweet, Ribston Pippin, Early Strawberry, Hyslop Crab, Soulard Crab, Red Siberian Crab,

And several Seedling varieties of promise.

#### Varieties of Pears.

Seckel,
De Tongres,
Duchesse d'Angouleme,
Louise Bonne de Jersey,
Tyson,
Gansel's Bergamot,
Winter Nelis,
Beurre Bosc,
Beurre Clairgeau,

White Doyenne, Belle Lucrative, Bartlett, Grey Doyenne, Flemish Beauty, Buffam, Beurre d'Anjou, Beurre Diel.

### Varieties of Plums.

Bradshaw, Green Gage, Blue Plum, Imperial Gage, Lombard, Red Egg, Wild Plums,

Yellow Egg, Sugar Plum, Smith's Orleans, English Damson, Shropshire Damson, Pond's Seedling.

### Varieties of Grapes.

White Chasselas, Black Hamburg, Creveling, Delaware, Concord, Lindley, Salem, Wilder,

Sweet Water,
Hartford Prolifie,
Agawam,
Rebecca,
Isabella,
Maxatawney,
Tokalon,
Merrimack.

All of these were grown in the open air.

### Varieties of Peaches.

Early Crawford, Large Early York, Royal Kensington, Early Barnard, Sweet Water,

Ikler, Lemon Cling, Jacque's Rareripe, Old Mixon Free, Honest John.

# Varieties of Gooseberries.

Downing, Read's Gem, Read's Prolific, Read's Pear-shaped, Houghton, Read's Yellow, Read's Canada.

# Varieties of Currents.

Black Naples, Cherry Currant,

La Versailles, White Grape.

# Varieties of Raspberries.

Franconia, Philadelphia, Read's Prolific,

Clarke, Brinkle's Orange, Mammoth Cluster.

### HAMILTON DISTRICT.

28. Joseph Cline, Hamilton, apples, 6 varieties; plums, hickory nuts.

29. Duncan Lamonte, Hamilton, apples, 6 varieties.

30. L. P. Stipes, Hamilton, apples, 8 varieties; pears, 3 varieties, plums.

31. Wm. J. Young, Hamilton, apples, pears, 4 varieties; plums, grapes, 4 varieties raspberries, cherries, gooseberries and currants.

32. J. Harvey, Hamilton, apples, 9 varieties; pears.

33. R. M. Wanzer, Hamilton, apples, 3 varieties; pears, 10 varieties.

34. M. Aikman, Hamilton, apples, 4 varieties.

35. E. Blagden, East Flanboro', apples, 10 varieties.

36. Thos. Harper, Hamilton, apples, 2 varieties.37. Samuel Smith, Hamilton, apples, 11 varieties.

- 38. William Hill, Hamilton, apples, 18 varieties; peaches, 5 varieties; pea nuts.
- 39. E. Brown, Hamilton, apples, 2 varieties.40. Wm. Calder, Hamilton, apples, 3 varieties.41. Wm. Cline, Hamilton, apples, 4 varieties.
- 42. P. W. Dayfoot, Hamilton, apples, 7 varieties.

43. S. J. Tovill, Hamilton, apples. 44. J. Ansley, Hamilton, apples.

45. John A. Bruce, Hamilton, apples, 8 varieties. 46. A. E. Van Norman, Hamilton, apples, 2 varieties.

47. J. H. Biggar, Hamilton, apples.

48. Rev. Jas. Shaw, Hamilton, apples, 5 varieties; plums.

49. Lewis Springer, Hamilton, apples, 5 varieties. 50. Wm. Lottridge, Hamilton, apples, 2 varieties.

51. Warren Holton, Hamilton, apples, 20 varieties; pears, 3 varieties; peaches, raspberries, cherries, gooseberries and currants.

52. Wm. Raynor, Hamilton, apples, plums.

- 53. John Freed, Hamilton, apples, 11 varieties; pears, 9 varieties; grapes, 26 varieties; raspberries, cherries, gooseberries, currants, quinces.
- 54. E. C. Fearnside, Hamilton, apples, 8 varieties; pears, 3 varieties; plums, 8 varieties; raspberries, cherries, currants and gooseberries.

55. J. Bowman, Hamilton, apples, 3 varieties.56. W. Molyneaux, Nelson, apples, 3 varieties.

57. D. Ashbaugh, Hamilton, apples, 2 varieties.

Joseph Rymal, Hamilton, apples, 6 varieties; black walnuts.
 W. P. Moore, Hamilton, apples, 3 varieties.

60. Mr. Freeman, Hamilton, apples.

61. Geo. Kilvington, Hamilton, apples, 3 varieties; pears, grapes, 2 varieties.

62. A. W. Taylor, Hamilton, apples, 5 varieties.

63. John Proctor, Hamilton, apples, 3 varieties; peaches, grapes.

64. A. J. Binckley, Hamilton, apples.

65. George Rutherford, Hamilton, apples, 2 varieties.

66. Philip Gage, Hamilton, apples, 4 varieties.

67. David Bradt, Hamilton, apples.68. M. Waterbury, Hamilton, apples.

69. Mrs. Drew, Hamilton, apples, 2 varieties.70. E. Corbett, Nelson, apples, 2 varieties.

71. J. Tansley, East Flamboro, apples.

72. Mrs. Grant, Hamilton, apples, 4 varieties; plums, 2 varieties.

73. Mrs. Skinner, Hamilton, apples, 5 varieties; pears, 10 varieties; plums, 2 varieties; raspberries, cherries, gooseberries and currants.

74. Mr. Elliott, Hamilton, apples, 4 varieties.

75. Donald Smith, Hamilton, apples, 3 varieties.

76. Thos. Harper, Hamilton, apples.77. Lyman Moore, Hamilton, apples.

- 78. J. Stewart, Hamilton, pears, 3 varieties.
- 79. Wm. Raynor, Hamilton, pears, 4 varieties.

80. A. Grossman, Hamilton, pears. 81. Geo. Roach, Hamilton, pears.

82. Joseph Lister, Hamilton, pears; grapes.

83. R. J. Howes, Hamilton, pears, 10 varieties; plums, 19 varieties; cherries, raspberries, currants, and gooseberries.

84. Thos. Campbell, Hamilton, pears, 4 varieties; plums.

- 85. W. P. Strickland, Hamilton, pears.
- 86. David Murray, Hamilton, pears; grapes.

87. G. Crossthwaite, Saltfleet, pears.

88. Samuel Burner, Hamilton, plums, 12 varieties; raspberries, currants, gooseberries, and cherries.

89. Ascot Williams, Hamilton, plums, 4 varieties.

- 90. H. W. Bull, Hamilton, plums. 91. Mrs. Yalding, Hamilton, plums.
- 92. A. Sutherland, Hamilton, plums, 4 varieties. 93. Matthew Bell, Hamilton, grapes, 17 varieties.

94. Wm. Taylor, Hamilton, grapes.

- 95. W. H. Mills, Hamilton, grapes, 5 varieties new Hybrids. 96. Wm. Young, Hamilton, grapes, 4 varieties.
- 96. Wm. Young, Hamilton, grapes, 4 varieties. 97. Samuel Woodley, Hamilton, grapes, 6 varieties. 98. John Garrett, Hamilton, grapes, 5 varieties. 99. W. Haskins, Hamilton, grapes, 2 varieties. 100. H. Semmens, Hamilton, grapes, 10 varieties.

101. Col. Aikman, seedling peach.

### From this District were sent the following

### Varieties of Apple.

Blenheim Pippin, Fallawater, Roxbury Russet, Swaar, Early Strawberry, King of Tompkins County, Talman Sweet, Northern Spy, Snow Apple, Hawthornden, English Russet, Black Gilleflower. Sweet Bough, Esopus Spitzenburg, Twenty Ounce Pippin, Monmouth Pippin, Wagener, Sops of Wine, Gloria Mundi, Vandevere, Rhode Island Greening, Montreal Pomme Grise, Cayuga Red Streak, Cooper's Market, Franklin Golden Pippin, Irish Peach Apple, Rambo, Fall Janetting, Golden Sweet, Hawley, Borassau, Duchess of Oldenburg,

Spur's Sweeting, Maiden's Blush, Golden Russet, Baldwin, Cheeseboro' Russet, Gravenstein, Red Astracan, Swayzie Pomme Grise, Barton Seedling, Colvert, Chenango Strawberry, Red Quanenden, St. Lawrence, Land's Strawberry, Seek-no-further, Lowell, Ribston Pippin, Summer Pearmain, Hubbardston None-such, White Belleflower, Jersey Blue, Newton Pippin, Grimes' Golden Pippin, Porter, Johnson's Sweeting, Utter's Red, London Pippin, Perry Russet, Jonathan, Benoni, White Pippin, Tart Bough,

Black Apple, Black Detroit, Primate, Twin Apple, Jewett's Fine Red, Niagara Russet, Hortley, Dominie, Sherwood's Favourite, Alexander, Autumn Strawberry, Garden Royal, Orange Crab, Transcendant Crab, Large Yellow Crab, Hyslop Crab, Lady Apple, Fall Pippin, Hoary Morning, Pumpkin Sweet, Ohio Nonpareil, Haas,

Ben Davis, Blue Pearmain, King of Pippins, Early Red Streak, Lacquier, Virginia Greening, Smoke-house, Rymal's Favourite, Cornish Gilliflower, Dutch Mignonne, Menagerie, Norton's Melon, English Codlin, Flushing Spitzenburg, Pennock, Yellow Belleflower, Pomme Royal, General Grant Crab, Lady Crab, Golden Beauty Crab, Purple Crab, Large Red Siberian Crab.

And several seedling varieties of promise.

### Varieties of Pear.

Beurre d'Amalis, Beurre Clairgeau, Beurre Superfin, Jalousie de Fontenay, White Doyenne, Louise Bonne de Jersey, . Flemish Beauty, Buffam, Beurre d'Anjou, Belle Angevine, Easter Beurre, Napoleon, Howell, Urbaniste, Duchesse d'Angouleme, Winter Nelis, Uvedale St. Germain,

Beurre Bosc, Paul Ambre, Bartlett, Doyenne Boussock, Seckel, Grey Doyenne, Passe Colmar, Oswego Beurre, Beurre Diel, Belle Lucrative, Washington, Henry the Fourth, Chaptal, Gansels Bergamot Steven's Gennessee. Clapp's Favourite.

# Varieties of Plums.

Prince's Yellow Gage,
Coe's Golden Drop,
Lombard,
Dominie Dull,
Washington,
Yellow Egg,
Duane's Purple,
Victoria,
Bleecker's Yellow Gage,
Reine Claude de Bavay,
Imperial Gage,
Italian Prune,

Belgian Purple, Smith's Orleans, General Hand, Peach Plum, Sugar Plum, Orange Plum, Frost Gage, Green Gage, Red Gage, Bradshaw, Canada Orleans, Damson, Isabella, Jefferson, Lawrence's Favourite, Columbia, Bingham, McLaughlin, Prince of Wales, Pond's Seedling, Purple Gage, Blue Plum.

### Varieties of Grapes.

Gaertner or Rogers No. 14, Hartford Prolific, Senasqua, W. South Iona, Lindley or Rogers No. 9, Othello, Ontario, Tokalon, Concord, Clinton, Essex or Rogers No. 41, Wilder or Rogers No. 4, Catawba, Adirondac, Merrimac or Rogers No. 19, Salem, Allen's Hybrid. Rogers No. 1 or Goethe,

Agawam or Rogers No. 15. Rebecca, Rogers No. 33. Croton. Isabella, Israella, Rogers No. 43 or Barry, Delaware, Diana Hamburgh, Herbert or Rogers No. 44. Walter, Arnold's No. 2 or Cornucopia, Massasoit or Rogers No. 3, Martha, Arnold's No. 8 or Brant, Autuchon, Eumelan, Creveling,

And five varieties of new Hybrids raised by Mr. W. H. Mills. Also the following Exotic varieties grown under glass:—

White Nice,
Mill Hill Hamburgh,
Muscat of Alexandria,
Black St. Peters,
Rose Chasselas,

Sweet Water. Muscat Hamburgh, Golden Hamburgh, Black Hamburgh, Lady Downs.

# Varieties of Peach.

Large Early York, Jacque's Rareripe, Cooledge's Favourite, Royal George, Large Seedling, Crawford's Early, Honest John.

# Varieties of Raspberry.

Franconia, Fastolff, Yellow Antwerp, Golden Thornless, Mammoth Cluster, Red Antwerp, Large Red, Brinckle's Orange, Philadelphia, Doolittle.

# Varieties of Cherry.

Tradescant's Black Heart Butner's Yellow,

Mayduke, Early Richmond.

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### Varieties of Gooseberry.

Leader, Yellow Sulphur, London Red, White Smith, Nelson's Wave. Freedom, Smith's Improved, Companion, Roaring Lion, Warrington, White Eagle, Green Ocean, Walter's Twig.

### Varieties of Currant.

Cherry Currant, La Versailles, Black Naples, White Dutch, Champaign,

Red Dutch, Victoria, Black English, White Grape.

### Miscellaneous.

Peanuts, showing entire plant with nuts, Quinces,

Hickory Nuts. Black Walnuts.

#### BRANTFORD DISTRICT.

102. H. Moyle, Paris, apples, 3 varieties.

103. Chas. Arnold, Paris, apples, 28 varieties; pears, 17 varieties; plums, 19 varieties cherries, goosberries, 4 varieties; grapes, 5 varieties; eurrants, 6 varieties.

104. A. H. Baird, Paris, apples, 4 varieties.

105. J. Little, Paris, apples, 4 varieties; grapes, 4 varieties.

106. John Cowherd, Brantford, apples, 9 varieties.
107. Frank Irvin, Brantford, apples, 7 varieties.

108. Brantford Horticultural Society, apples, plums 2 varieties; and collection of wild plums; also two cases of summer small fruits.

109. George Pike, Brantford, apples.

110. R. Hamilton, Brantford, apples, 3 varieties. 111. Geo. Smith, Brantford, apples.

112. P. Turnbull, Brantford, apples, 15 varieties. 113. D. Osborne, Brantford, apples, 7 varieties. 114. James Cowherd, Brantford, apples, 31 varieties.

115. Thos. D. Crawford, Brantford, apples.

116. A. Ramey, Brantford, apples and plums. 117. R. Pierce, Brantford, apples, 3 varieties.

118. Thos. Charleton, Brantford, apples, 2 varieties.

119. W. H. Beatty, Woodstock, apples. 120. Richard White, Woodstock, pears.

121. C. Whitlaw, Paris, plums, 7 varieties; currants.
122. Andrew Newton, Woodstock, plums, 2 varieties.
123. T. H. Parker, Woodstock, exotic grapes, 2 varieties.

124. A. Hart, Paris, grapes.

125. J. Carnie, Paris, grapes, 2 varieties; currants, gooseberries.

126. Mrs. Menie, Paris, gooseberries, 2 varieties.

127. John Arnold, Paris, gooseberries.

128. John White, Paris, gooseberries.

The following are the varieties that were sent from this district.

# Varieties of Apples.

Esopus Spitzenburg, Pomme Royale, Cox's Orange Pippin, Arnold's Hybrid, No. 2, Arnold's Hybrid, No. 5, Norton's Melon, Prior's Red, Snow Apple, Lady Apple, Swayzie Pomme Grise, Red Astracan, Hawley, St. Lawrence, Early Red Hybrid, Early Harvest, Early Yellow Hybrid, Yellow Belleflower, Montreal Pomme Grise, Fallawater, Early Joe, Alexander. Rhode Island Greening, Newton Pippin, Talman Sweet, Maiden's Blush, Fall Pippin, Flower of Gennessee. Baldwin, Nonpareil, Keswic Codlin, Hubbardson Nonsuch, Belmont, Pound Sweet, Blenheim Pippin, Transcendant Crab,

Mother Eve, a singular sport from Esopus Spitzenburg. Ontario, hybrid of C. Arnold, Ella, hybrid of C. Arnold, Early Strawberry, Golden Sweet, Wagener, Golden Russet, Hawthornden, Gravenstein, Benoni, Sops of Wine, Arnold's Hybrid No. 6, Sweet Bough, Early Rose, Grime's Golden Pippin, Northern Spy, Ribston Pippin, Duchess of Oldenburgh, Summer Queen, Irish Peach Apple, Chenango Strawberry, Seek-no-further, Borassau, Swaar, Christina Apple, Cayuga Red Streak, Rambo, English Russet, Wine-sap, King of Tompkin's County. Dyer, Vandevere. Fall Janetting, Roxbury Russet, Arnold's Beauty.

Eight varieties of Crabs raised by James Cowherd, and several promising seedlings.

### Varieties of Pear.

Bartlett,
President,
Rousellet Stuttgard,
Negley,
Goodale,
Flemish Beauty,
Buffam,
Jealousie de Fontenay,
Winter Nelis,

Tyson,
Rutter,
Sheldon,
Louise Bonne de Jersey,
Seckel,
Belle Lucrative,
White Doyenne,
Brandywine.

### Varieties of Plum.

Shropshire Damson,
Yellow Gage,
Wild Goose (wild enough),
Columbia,
Bradshaw.
Conger's Sweet,
Washington,
Smith's Orleans,
General Hand,
Late Damson,
Red Egg,
Green Gage,

Duane's Purple,
German Prune,
Monroe Gage,
Mirabelle,
Jefferson,
Imperial Gage,
Royal Hative.
Lombard,
Pond's Seedling,
Webster's Gage,
Collection of Native Wild Plums.

### Varieties of Grapes.

Hartford Prolific, Cornucopia, Othello, Brant, Canada, Antuchon.

And the following Exotic Varieties grown under glass :-

Black Hamburgh, Black Prince, Black St. Peter, Golden Champion, Sweet Water.

### Varieties of Gooseberry.

Old English Red, Hart's Seedling, Downing, Early Yellow, Yellow Jacket, Arnold's Seedling, White Smith, Phænix.

### Varieties of Currant.

Black Grape Currant, Victoria, Cherry Currant, White Grape Currant, La Versailles.

# Varieties of Raspberry.

Arnold's Yellow Hybrid, Clarke, Mammoth Cluster, Davison's Thornless, Franconia, Philadelphia, Yellow Cap, Arnold's Red Hybrid

### Varieties of Cherry.

English Morello, Black Eagle, Early Richmond, Napoleon Bigareau.

#### Galt District.

129. Hugh Fairgrieve, Galt, apples, 7 varieties.

130. Geo. Jaffray, Galt, apples, 3 varieties.

131. John Lee, Galt, apples, 20 varieties.
132. David Gibson, Galt, apples, 5 varieties.
133. Rev. W. Andrews, Galt, apples, 2 varieties.

134. John Rutherford, Galt, apples, 13 varieties.

135. Simon Roy, Berlin, plums, 30 varieties.

### Varieties of Apples.

Beauty of Kent, St. Lawrence, Ribston Pippin, Baldwin, Canada Red, King of Tompkin's Co. Rhode Island Greening, Snow Apple, Fall Pippin, Early Joe, Pomme Royal, Rambo, Gravenstein, Twenty Ounce Apple, Green Pippin, Borassa.

Hawley, Sassafras Sweet, Hubbardston Nonsuch, Northern Spy, Summer Pearmain, Swaar, Seek-no-further, Yellow Bellefleur, Alexander, pitzenburgh, Swayzie Pomme Grise, Hawley, Norton's Melon, Pennock, Lawrence Queen.

### Varieties of Plums.

Orleans, Victoria, Shropshire Damson, Bradshaw, Pond's Seedling, Lombard Seedling, Yellow Egg, Bleecker's Gage, Damson, Fulton, Bingham, English Damson, Mediterranean, Reine Claude de Bavay, Roy's Seedling, No. 1.

Purple Magnum Bonum, Columbia, Marten's Seedling, Hustave Blue, Lombard, Scarlet Gage, Glass's Seedling, American Magnum Bonum, German Prune, Washington, Imperial Gage, Roy's Seedling Prune, Quackenboss, Prince's Yellow Gage, Roy's Seedling, No. 2.

These Plums were all sent by Mr. Simon Roy, of Berlin.

#### LONDON DISTRICT.

136. D. Burnham, Caradoc, apples.

137. G. Watson, London, apples, 3 varieties; pears

138. W. Elliott, Arva, apples.

139. W. Bodkin, Delaware, apples, 8 varieties.

- 140. W. Biddulph, Westminster, apples, 6 varieties.
- 141. R. J. Wilkins, Westminster, apples, 2 varieties.142. G. W. Calcott, Delaware, apples, 2 varieties; pears, 2 varieties.

143. J. Piper, Westminster, apples, 2 varieties; pears.

144. B. Paine, Delaware, apples.

- 145. J. Shore, Delaware, apples, 6 varieties. 146. H. Scott, Delaware, apples, 2 varieties.
- 147. Geo. Mahler, Delaware, apples. 148. J. Thrower, Delaware, apples.

149. J. McNey, Arva, apples.

- 150, G. J. Jones, Westminster, apples and pears. 151. J. Behuke, Delaware, apples, 2 varieties.
- 152. G. Peacock, Mount Salem, apples, 24 varieties and chesnuts.
- 153. F. McMillan, Caradoc, apples, 27 varieties; and pears, 2 varieties. 154. D. B. Burch, Westminster, apples, 6 varieties; and pears, 5 varieties. 155. Thos. Shore, Westminster, apples, 3 varieties.

156. M. Connor, London, apples, 7 varieties. 157. Dr. Francis, Delaware, apples, 3 varieties.

158. B. Gott, Arkona, apples, 11 varieties; and collection of crabs, pears, grapes and peaches, 4 varieties.

159. Walter Armstrong, Westminster, apples, 5 varieties.

- 160. Henry Rawlings, Delaware, apples, 4 varieties. 161. A. G. Deadman, Delaware, apples, 4 varieties. 162. H. Kennedy, Delaware, apples, 4 varieties.
- 163. W. Essery, Petersville, apples, 2 varieties.

164. Wm. Smith, Grosvenor, apples.

165. Wm. Saunders, London, apples, 18 varieties; pears, 20 varieties; plums, 7 varieties: grapes; cherries, 2 varieties; gooseberries, 2 varieties; raspberries, 6 varieties; currants, 6 varieties.

166. A. Cameron, London, apples, 9 varieties.

- 167. Mr. Williams, Westminster, apples, 3 varieties. 168. Wm. Parry, Westminster, apples, 2 varieties.
- 169. Robert Sugden, Thorndale, apples, 7 varieties.
- 170. Lafayette Carty, Delaware apples, 3 varieties. 171. George Butler, Strathroy, apples, 7 varieties. 172. Wm. Brown, Wyoming, apples, 2 varieties.
- 173. Geo. Kains, Elgin, apples, 6 varieties.
- 174. W. Azhurst, Talbotville, apples.
- 175. James McAdam, St. Thomas, apples.

176. J. Graham, Talbotville, apples.

177. G. W. Boggs, St. Thomas, apples, 6 varieties.

178. John Lawn, Union, apples, 3 varieties.

179. Adam Robins, St. Thomas, apples, 2 varieties.

180. M. Paine, Port Stanley, apples.

181. W. Lanagan, Westminster, apples, 12 varieties.

182. D. Shoff, McGillivray, apples, 3 varieties; pears 4 varieties, and plums 4 varieties

183. James McStay, London, apples, 10 varieties. 184. C. Kingsmill, London, apples, 10 varieties.

- 185. D. Deacon, Westminster, apples, 4 varieties. 186. J. D. Sharman, Westminster, apples, 2 varieties, and grapes.
- 187. W. Russell, London, apples, pears, wild plums, grapes, and currants.

188. John Pearce, London, apples.

- 189. Walter Armstrong, Westminster, apples, 2 varieties, and peaches 3 varieties of seedlings.
- 190. Robert Flaner, Westminster, apples.
- 191. Mrs. C. A. Taylor, London, apples.
- 192. Chas. Steed, London, apples,

- 193. R. Kettlewell, London, apples, 2 varieties; currants, 3 varieties; gooseberries, 4 varieties.
- 194. John Legge, St. Mary's, apples, 3 varieties. 195. Henry Edwards, Arkona, apples, 3 varieties.

- 196. W. Blinn, London, apples. 197. Hugh Scott, Delaware, apples, 2 varieties.
- 198. D. McKillop, Delaware, apples. 199. A. Riddle, London, apples.

200. Geo. Wilkins, Lambeth, apples.

201. J. Teeple, London, apples, 2 varieties; pears, 3 varieties, and plums, 2 varieties.

202. R. Stevens, Westmeath, apples; plums, 5 varieties.

- 203. Henry Kennedy, Delaware, apples. 204. W. Peacock, Mount Salem, apples. 205. A. K. Pettit, Mount Salem, apples. 206. J. Tedford, Grovesend, apples.
- 207. James Oxenham, Kertch, apples, 14 varieties; pears, 3 varieties; grapes 5 varieties. 208. W. Gregory, Yarmouth, pears.

209. W. Bissell, London, pears.

- 210. John M. Denton, London, pears, 4 varieties; plums, 3 varieties; grapes and cur rants, 5 varieties.
- 211. E. West, London, pears, 2 varieties. 212. B. Cornwall & Son, Delaware, apples.
- 213. Archibald Campbell, Strathroy, apples, 2 varieties.

214. Edward Kendrew, Pond Mills, apples.

215. J. Jeffery, London, pears, plums.

216. F. Holman, London, pears.

- 217. Mrs. Dowlin, Westminster, pears. 218. A. G. Deadman, Delaware, pears.
- 219. Peter Weston, London, plums. 220. E. W. Hyman, London, grapes.
- 221. Chas. Gustin, Forest, peaches, 4 varieties, seedling.

222. M. Smith, London, black walnuts.

- 223. W. Y. Brunton, London, gooseberries, 2 varieties.
- 224. J. Symmonds, London, currants. 225. F. Rowland, London, cherries. 226. Dr. Arnott, Arva, gooseberries.
- 227. Joseph Lamb, London, gooseberries, 2 varieties.
- 228. Henry Beltz, London, gooseberries, cherries and currants, 2 varieties.

229. M. Kelly, London, gooseberries and currants, 2 varieties.

# Varieties of Apple.

Northern Spy, Swaar, St. Lawrence, Twenty Ounce Pippin. Red Astracan, Ohio Nonpareil, Colvert, Snow Apple, Summer Pearmain, Jonathan, Norton's Melon, Blooming Orange, Fall Pippin, Col. Talbot's Canadian, Ribston Pippin, Baldwin,

Winesap, Rhode Island Greening, Honey Dew, Strawberry Pippin, Roxbury Russet, Cathead Russet, Pomme Grise, Borassau, Hawley, Nick-a-jack. Dominie, Ramsdall Sweet, Fall Janetting, Keswic Codlin, Kentish Fillbasket, Chenango Strawberry,

Ramsdall Sweet, Benoni, Early Strawberry, Russet Sheepnose, London Pippin, Scarlet Crofton, Pear Apple, Fallawater, Beauty of Kent, Lowell, Early Joe, Bohemian, Pardee Sweet, Transcendant Crab, Montreal Beauty Crab, Yellow Siberian Crab, King of Tompkins County, Cayuga Red Streak, Spitzenburgh, Sweet Bough, Bush Apple, Jersey Sweet, Haskett's Sweet, Garden Royal, Maiden's Blush, Alexander, Broadwell, Red Canada, French Pippin, Canadian Pippin, Queen of Summer, Winter Sweet. Nonsuch,

Golden Russet. Caradoc Favourite, Sweet Pear Apple, American Golden Russet, Gennessee Chief, Hawthornden, English Redstreak, Rambo. Talman Sweet, Duchess of Oldenburg, Swayzie Pomme Grise, Black Detroit, Grimes' Golden Pippin, Wagener, Warner, Yankee Stripe, Gravenstein, Sweet Bough, Cabashea, Pearmain, Spotted Pippin, Northern Greening, Rutledge Sweet, London Beauty Apple, Red Quarrenden, Porter, Summer Belleflower, Nelson, Boston Beauty Crab, Hyslop Crab, Red Siberian Crab, Small Red Siberian Crab.

And a number of Scedling Varieties of promise.

#### Varieties of Pears.

Bartlett,
Howell,
Flemish Beauty,
Oswego Beurre,
Napoleon,
Beurre Gris d'Hiver,
Duchesse d'Angouleme,
Leech's Kingsessing,
Beurre Goubault,
Beurre Superfin,
Seckel,
Beurre d'Anjou,
Winter Nelis,
Clapp's Favourite,

Louise Bonne de Jersey,
Bon Chretian,
Brandywine,
Beurre Clairgeau,
Sheldon,
Belle Lucrative,
Beurre Hardy,
Payency,
Glout Morceau,
Tyson,
White Doyenne,
Beurre Diel,
And some seedling varieties.

#### Varieties of Plums.

Lombard, English Gage, Yellow Egg, Smith's Orleans, Victoria, Green Gage, Reine Claude de Bavay, Coe's Golden Drop, A collection of wild plums, Pond's Seedling, Turner's Seedling, Columbia, Washington,
Imperial Gage,
Duane's Purple,
Red Egg,
General Hand,
Yellow Magnum Bonum.

### Varieties of Grape.

Clinton,
Concord,
Rogers, No. 4.
Iona,
Maxatawney,
And the Chasselas Musque, grown under glass.

Salem, Delaware, Isabella, Massasoit, Eumelan.

### Varieties of Peach.

Mountain Rose Peach, Crawford's Early, And Collections of Seedling Peaches.

### Varieties of Currants.

Black English, Cherry, Red Dutch, White Grape, Black Naples,
And three varieties of Seedling Currants.

# Varieties of Cherry.

Kentish, Plumbstone Morello English Morello.

# Varieties of Gooseherry.

Roaring Lion,
Whitesmith,
Plowboy,
Houghton Seedling,
Wild Prickly,
Hybrid between Warrington and Wild
Prickly,

Warrington, Early Red, American Seedling, Downing, Wild Smooth,

# Varieties of Raspberry.

Hybrid Raspberries, several varieties, Philadelphia,

Franconia.

#### Miscellaneous.

Black Walnuts, Hazel Nuts, Berberries,

Chestnuts, Butternuts, English Medlars.

#### TORONTO DISTRICT.

- 230. Geo. Leslie & Son, Leslie, apples, 35 var.; pears, 23 var.; plums, 15 var.; grapes, 10 var.; currants, gooseberries and raspberries.
- 231. Robert Hibbert, Eglington, apples.
- 232. Hon. D. L. Macpherson, Yorkville, apples and peaches, and exotic grapes. 233. E. Scadding, Toronto, grapes, 3 var. 234. A. Furniss, Toronto, nectarines.

### Varieties of Apple.

Macklem Crab, Leslie's Sweet Crab, Soulard Crab, Gravenstein, Hawley, Fall Pippin, Fameuse, Ribston Pippin, Porter, Alexander, Orne's Early, Sweet Bough, Sour Bough, Primate, Irish Peach, White Astracan, Summer Scarlet Pearmain, St. Lawrence,

Chicago Crab, Transcendant Crab, Canada Reinette, Black Detroit, King of Tompkins Co. Maiden's Blush, Drop d'Or, Kentish Fillbasket, Swaar, Belle et Bonne, Early Harvest, Chenango Strawberry, Red Astracan, Duchess of Oldenberg, Early Joe, Benoni. Swayzie Pomme Grise, Stibbard's Seedling.

# Varieties of Pear.

Blood-good, Pratt, Beurre d'Aremberg, Steven's Genessee, Belle Lucrative, Kirtland, Vicar of Winkfield, Duchesse d'Angouleme, Winter Nelis, Louise Bonne de Jersey, Clapp's Favorite, Flemish Beauty,

Beurre Giffard, Des Nonnes, Easter Beurre, Tyson, Hazel or Hessel, Buffam, Glout Morceau, Napoleon, Beurre Diel, Mount Vernon, Bartlett.

All of which were sent by Messrs. George Leslie & Son, Leslie.

#### Varieties of Plums.

Bingham, Coe's Golden Drop, Orange Plum, Columbia, Reine Claude de Bayay, Jefferson, Prince of Wales, McLaughlin,

Fellenberg, Smith's Orleans, Lombard, Yellow Egg. Am. Green Gage, Eng. Green Gage, Italian Prune.

All sent by Messrs. Geo. Leslie and Son, Leslie

### Exotic Varieties of Grape, grown under glass.

Golden Chasselas, Black Hamburg, Raisin de Calabre, Ingram's Prolific, White Chasselas, White Nice, Black Barbarossa, Wilmot's Hamburg, Grizzly Frontignac, Black St. Peters, White Syrian.

### Varieties of Currants.

Red Dutch, Cherry Current, Black Naples, White Grape, Black Bouquet, La Versailles.

### Varieties of Gooseberry.

A collection of English gooseberries.

### Varieties of Raspberry.

A collection of raspberries.

Also Lord Palmerston peach, from Hon. D. L. Macpherson; also nectarines, from A. Furness, Esq.

#### WINDSOR DISTRICT.

James Dougall, Windsor, 52 varieties apples. Of these, 30 varieties were new French sorts, grown on trees imported from France. Pears, 16 varieties. Plums, 19 varieties.

### Varieties of Apples.

Blenheim Orange, Dominie, Belmont, English Russet, Hawkin's Pippin, Jonathan, Melon, Northern Spy, Wagener, Early Strawberry, Hyslop Crab, Dutch Mignonne,
Boston Russet,
Baldwin,
Fameuse,
Jewett's Fine Red,
King of Pippins,
Mother,
Pomme Grise,
Garden Royal,
Sops of Wine,
Transcendant Crab.

And the following French sorts, grown on trees imported from France:-

Api Noir, Bidet, Colville Rose, Fenouillet Beausoriel, Fenouillet Annisec, Jacques La Belle, Madeline,
Pearmain de Caen.
Reinette d'Allemagne,
Reinette Frauche,
Reinette de Bretagne,
Reinette d'Anjou,
Reinette d'Oree d'Ete,
Reinette Lisse,
Reinette du Canada,
Grand Alexandre,
Alfristone,
Bellefleur,
Ecarlet Nonpariel,

Fenouillet de Chine, Hubbard Pearmain, Imperiale, Name lost, Pomme Figue, Reinette Pepin, Reinette de Dorè, Reinette Thouin, Reinette d'Oreé, Reinette Wortley, Reinette d'Espagne, Sanspariel.

### Varieties of Pears.

Pratt,
Julienne,
Beurre Clairgeau,
Beurre Kænig,
Beurre Millet,
Flemish Beauty,
Graslin,
Steven's Genessee,

Belle Lucrative,
Abbott,
Beurre d'Anjou,
Beurre Mollett's Guernsey,
Dumas,
Grey Doyenne,
Kingsessing,

### Varieties of Plums.

Pond's Seedling,
Victoria,
Autumn Compote,
Violet Gage Seedling,
Very late Purple Seedling,
General Hand,
Lawrence's Favourite,
Green Gage,
Yellow Seedling, late,
Yellow Seedling,

Prince Englebert,
Lombard,
Seedling from Diamond,
Blue Plum,
Jefferson,
Denniston's Superb,
Monroe Gage,
Guthrie's Late Green,
White Mag. Bonum.

#### OWEN SOUND DISTRICT.

236. F. J. Doyle, Owen Sound, apples, 17 varieties.

237. J. Fleming, Kilsyth, apples.238. Hiram Bond, Meaford, apples.

239. Wm. Roy, Owen Sound, apples. 240. W. Cruise, Owen Sound, apples.

240. W. Cruise, Owen Sound, apples. 241. John McLean, Owen Sound, apples.

241. John McLean, Owen Sound, apples. 242. Wm. Andrews, Owen Sound, apples.

243. R. Holmes, Owen Sound, apples. 244. James Greene, Owen Sound, apples.

245. D. Christie, Owen Sound, apples, 2 varieties.

246. James Newman, Derby, apples. 247. D. Dere, Owen Sound, apples.

- 248. Wm. Hartsen, Owen Sound, apples. 249. Wm. Jameson, Owen Sound, apples.
- 250. Wm. Landel, Sydenham, apples, 3 varieties. 251. D. McKay, Sydenham, apples.
- 252. Wm. Ormiston, Sarawack, apples.
- 253. James McDermid, Derby, apples, 3 varieties.
- 254. James Fleming, Derby, apples, 6 varieties.
- 255. Wm. Crooks, Derby, apples, 4 varieties. 256. Mrs. Moore, Derby, apples, 7 varieties. 257. A. Fairburn, Derby, apples, 7 varieties.
- 258. N. P. Horton, Owen Sound, apples, 10 varieties.
- 259. F. Leslie, Owen Sound, apples.
- 260. Robert Lain, Derby, apples.
- 261. W. Harrison, Owen Sound, apples, 2 varieties. 262. Robert Gunley, Derby, apples.
- 263. Mrs. Grant, Owen Sound, apples.
- 264. D. Durie, Owen Sound, apples, 2 varieties.
- 265. S. Hunter, Derby, apples, 2 varieties.
- 266. J. Sharp, Derby, apples, 11 varieties.267. M. P. Harston, Derby, apples.
- 268. H. Bond, St. Vincent, apples, 4 varieties; plums, 4 varieties.
- 269. R. Trotter, Owen Sound, apples, 50 varieties.
- 270. R. B. Miller, Derby, apples, 46 varieties.
- 271. James Cannon, Sydenham, apples, 33 varieties.
- 272. George Sturgeon, Kincardine, plums, 6 varieties.
- 273. Wm. Gray, Tiverton, plums.

### Varieties of Apples.

Gravenstein, Twenty Ounce Pippin, Roxbury Russet, Sweet Bough, Wild Crab Apples, Hawley, Baldwin, Moore's Greening, Pumpkin Sweet, Kentish Fillbasket, Green Mountain Pippin, Potawatamie, Red Detroit, Sweet Scedling, Mangam, Golden Russet, Rhode Island Greening, Ribston Pippin, Lowell, Hawthornden, Maiden's Blush, Fall Janetting, Snook's Russet, Colvert, Sweet Pippin, Talman Sweet, Red Russet, Catshead,

Irish Peach, Maxwell's Seedling, Pumpkin Russet, Dutch Codlin, White Spanish Reinette, Dutch Mignonne, Snow Apple, Strawberry Pippin, Sweet Spice, Pearmain, Celina, Canada Red. Early Joe, Benoni, St. Lawrence, Cayuga Red Streak, Hawley, Red Astracan, Duchess of Oldenburg, Buck Meadow, Keswick Codlin, Yellow Belleflower, Walker's Yellow, Brook Seedling, Rambo, Fleming's Seedling, Borassau, Swaar,

King of Tompkins Co., Esopus Spitzenburg, Hubbardston's Nonsuch, Pomme Grise, Fall Pippin, Frost's Sweet, Gloria Mundi, Alexander, Northern Spy, Pennock, Pound Sweet, Golden Sweet, Victoria Reinette,

Monmouth Pippin, Fall Orange, Porter, Chenango Strawberry, Sweet Fall Pippin, Lady's Blush, Owen Russet, Sherwood's Favourite, Beauty of Kent, Sweet Pearmain, Golden Drop, Wagener.

### Varieties of Plums.

General Hand, Yellow Egg. Duane's Purple, Sugar Plum, Coe's Golden Drop,

Washington, Pond's Seedling, Frost Gage, Smith's Orleans, Magnum Bonum.

#### BELLEVILLE DISTRICT.

274. R. R. Bird, Foxboro, apples, 10 varieties.

275. G. A. Wesse, Albury, apples, 5 varieties.

276. T. Peck, Albury, apples.

277. Wm. R. Dempsey, Albury, apples, 12 varieties.

278. W. Peck, Albury, apples.

279. W. F. Dempsey, Albury, apples.

280. P. C. Dempsey, Albury, apples, 23 varieties; pears, 8 varieties; grapes, 9 varieties; currants, 6 varieties.

281. B. Mallory, Frankford, apples.

282. Dudley & Co., Colborne, apples, 4 varieties.

283. Conger Bros., Belleville, apples.

284. Doctor Coleman, Belleville, apples, 4 varieties.

285. J. G. Peck, Albury, apples, 5 varieties.

286. John Graham, Wallbridge, apples, 17 varieties; grapes, 3 varieties. 287. John P. Williams, Bloomfield, apples, 64 varieties; pears, 4 varieties.

288. A. Christie, Belleville, apples.

289. Captain Vandervort, Belleville, apples. 290. Rev. Canon Bleasdel, Trenton, apples.

291. Isaiah Badgley, Belleville, apples.

- 292. John W. Way, Rednorsville, apples, 3 varieties.
- 293. Eliza Brickman, Rednorsville, apples. 294. Jacob Tice, Rednorsville, apples.

295. James B. Christie, Trenton, apples. 296. J. H. Vandevere, Wallbridge, apples, 2 varieties.

297. J. A. Johnson, Ameliasburg, apples.

- 298. W. A. Johnson, Ameliasburg, apples, 2 varieties.
- 299. Hon. Billa Flint, Belleville, grapes, exotic, 6 varieties. 300. W. C. Wells, Wallbridge, grapes, 3 varieties.
- 301. J. H. Morden, Rednorsville, apples and grapes.

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### Varieties of Apples

Canada Red, Snow apple, Bottle Greening, Golden Russet, Colvert, Swayzie Pomme Grise, Hawley, Seedling Yellow, Alexander, Ecklenville Seedling, Sturmer Pippin, Seedling Snow, Washington Strawberry, Roxbury Russet, Pomme Grise, Rednor's Seedling, Gravenstein, Strawberry Sweet, St. Lawrence, Duchess of Oldenburg, Wagener, Rambo, Gloria Mundi, Minister, Wine Sap, Fall Janetting, Leland Spice, Beauty of Kent, Morrison Sweet, Summer Strawberry, William's Favourite, Duroc Seedling, Queens. Reinette du Canada, Harvey, King of Tompkins County, White Winter Pearmain, Transcendant Crab,

Montreal Beauty Crab, Seek-no-further, Rhode Island Greening, Esopus Spitzenburg, Talman Sweet, Northern Spy, Esopus Spitzenburg, Seedling Red, Fall Pippin. Pound Sweet, Ribston Pippin, Bailey Sweet, Twenty-Ounce Apple, Holland Pippin, Prenzel Seedling, English Codlin, Golden Sweet, Albury, Baldwin, Bay of Quinté Favourite, Maiden's Blush, Gilliflower, Lowell, Green Sweet, Lyman Russet, Nonpareil, Market Russet, Fleiner. Tart Bough, Primate, Chenango Strawberry, Jeffreys, Smokehouse. Benoni, Baxter Seedling, Rome Beauty. Norton's Melon, Hyslop Crab.

# Varieties of Pear.

Belle Lucrative, Doyenne Boussock, Beurre d'Anjou, Bartlett, Tyson,

Varieties of Grape.

Isabella, Wild Native, Clinton, Walter, Dempsey's Hybrid, No. 25, Rogers, No. 4, Rogers, No. 34,

Agawam, Concord, Delaware, Burnet, Rogers, No. 43, Rogers, No. 19.

Kirtland,

Fulton.

White Doyenne,

Flemish Beauty,

Mauning's Elizabeth,

### Exotic Varieties, grown under glass.

Wilmot's Black Hamburg, Lady Downs, Victoria Hamburg.

### Varieties of Currants.

Black English, White Grape, La Versailles, White Gondoin, Cherry Currant, Red Dutch.

### OTTAWA DISTRICT.

302. D. McLaughlin, Ottawa, apples, 3 varieties, including a new seedling of much promise.

303. Dr. Bell, Ottawa, apples; a new seedling variety of great hardihood and fine quality, found growing on the Gatineau and named by him the Gatineau Belle. Also butternuts.

304. Major W. White, Ottawa, apples.

305. D. Mattheson, Ottawa, apples; currants, 3 varieties.

306. Hon. R. W. Scott, Ottawa, apples, 5 varieties.

307. R. Lees, Ottawa, apples.

308. P. E. Bucke, Ottawa, collection of wild plums, collection of wild grapes, and 8 varieties of cultivated grapes, currants and gooseberries.

309. J. McMullen, Ottawa, gooseberries, 3 varieties; currants.

310. W. Graham, Ottawa, currants, 3 varieties. 311. Geo. Laing, Ottawa, currants, 3 varieties.

## Varieties of Apple.

Transcendant Crab, Montreal Beauty Crab, Red Astracan, Gatineau Belle, Seedling (of much promise),

Hyslop Crab, Yellow Siberian Crab, Duchess of Oldenburg, Peach Apple.

# Varieties of Plum.

Collection of varieties of wild plum found growing in this district, many of them much better than the "Wild Goose" plum which has been peddled through the country at one and two dollars a-piece, price made to suit the "Goose" that bought.

### Varieties of Grape.

Collection of Native Wild Grapes, Delaware, Creveling, Oporto, Adirondae, Agawan, Hartford Prolific, Miller's Burgundy,

and Chasselas Fontainebleau, raised under glass.

### Varieties of Currant.

LaVersailles, Black Naples, Cherry Currant, Champaigne, White Grape.

### Varieties of Gooseberry.

Houghton, Whitesmith, Sulphur Yellow, Doedring, Warrington.

Nuts.

Butternuts

# OFFICIAL REPORT ON THE AWARDS MADE BY THE CENTENNIAL COMMISSIONERS TO THE ONTARIO EXHIBITORS OF FRUIT.

### I.—General Collection of Early Berries and Fruits.

Fruit-Growers' Association of Ontario.

A large and varied collection continued through several weeks, consisting of currants, gooseberries, cherries, raspberries and apples, deserving the highest commendation.

#### II.—Collection of Fruit.

### Fruit-Growers' Association of Ontario.

That during the week ending with September 21st, they made a very large exhibition of fruits, embracing one hundred and twenty varieties of apples, seven of plums, five of peaches, three of tomatoes, two of nuts, exemplifying the excellent capacity of the soil and climate of the Province to produce these fruits.

#### III.—Pears.

#### Fruit-Grovers' Association of Ontario.

For sixty-seven (67) varieties, many of which are well grown. The Flemish beauties generally are choice, some of them being really superb, showing this variety to be especially adapted to the climate of Ontario. Bartletts are also well grown, and large for their latitude.

#### IV.—GRAPES.

### Fruit-Growers' Association of the Province of Ontario, Canada.

That the extent of this collection, embracing sixty-five (65) plates of native grapes and nine (9) of foreign grapes, is worthy of praise, in consideration of the difficulty the fruit-growers are obliged to encounter in this northern latitude. The specimens are generally well grown and ripened. We especially commend Mr. Charles Arnold's hybrid grapes.

#### V.—ADDITIONAL EXHIBIT—APPLES.

Fruit-Growers' Association of the Province of Ontario.—D. W. Beadle, Secretary, St. Catharines, Ont.

For a very large and meritorious collection of apples, illustrating the capacities of the soil and climate for fruit-growing, and indicating the progress of the people in pomology; a large proportion of the whole, well grown and finely coloured.

#### VI.—COLLECTION OF APPLES.

Charles Arnold, Paris.

For a large collection of correctly named and well grown apples, and especially as a recognition of the value of his labours as a hybridizer, as illustrated by specimens exhibited of hybrid apples numbers 3, 4 and 5, in this collection.

#### VII.—COLLECTION OF APPLES.

James Dougall, Windsor.

For a large and fine collection of apples of well known and valuable varieties, and also for a display of thirty-one (31) varieties from trees recently imported by him from France, and possessing marked peculiarities, among which is "Api Noir" (black lady apple) an exceedingly rare variety in this country.

#### VIII.—APPLES.

Hugh Scott, Jr., London.

That one variety he exhibits called Thompson's Jelley Russet, is of such uperior excellence among russet apples as to merit special recognition.

#### IX.—LONDON PIPPIN APPLE.

J. McStay, London.

This apple, always beautiful, was, in addition to its unusual large size, of delicious flavour

#### X.—SEEDLING GRAPES.

Charles Arnold, Paris.

That among one of these seedlings, the Canada is so much like Clinton, but yet superior in size and general qualities, as to be a good competitor with that well known and popular grape.

#### XI.—SALEM GRAPES.

William Young, Hamilton.

That these for that section of country were of remarkable excellence in size of berry and bunch, and in flavour.

#### XII.—CLINTON GRAPES.

W. P. Taylor, Hamilton.

That these Clinton grapes, though grown so far north, were superior to the same variety as usually grown any where, in the size and beauty of the bunches and the flavour of the grape.

#### XIII .- GRAPES UNDER GLASS.

Thomas H. Parker, Woodstock.

That his collection of hot-house grapes is of superior excellence in colour and flavour, and the bunches of good average size. A bunch of Victoria Hamburg was of particularly beautiful form, and weighed 1 lb. 7 oz.

#### XIV -EXOTIC GRAPES.

H. Pafford, Niagara, Ont.

That he exhibits Black Hamburg grapes, grown in the open air, weighing  $16\frac{1}{2}$  oz. and of excellent flavour, little inferior to the best specimens generally raised under glass.

#### XV.—APPLES.

Donald Smith, Hamilton.

Two kinds of apples, Ribston Pippins and King of Tomkins County, were of unusual size, and excellence in other respects.

# APPENDIX (E).

### ANNUAL REPORT

OF THE

# ENTOMOLOGICAL SOCIETY

OF

# ONTARIO,

FOR THE YEAR 1876.

INCLUDING REPORTS ON SOME OF THE NOXIOUS, BENEFICIAL, AND OTHER INSECTS OF THE PROVINCE OF ONTARIO.

PREPARED FOR THE HONOURABLE THE COMMISSIONER OF AGRICULTURE, ON BEHALF OF THE SOCIETY,

BY

# WILLIAM SAUNDERS,

President of the Entomological Society of Ontario; Editor of the Canadian Entomologist;

# REV. C. J. S. BETHUNE, M. A.

Head Master of Trinity College School, Port Hope; Vice-President of the Entomological Society of Ontario;

AND

# JOSEPH WILLIAMS,

London, Ontario.

REPORT OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO, FOR THE YEAR 1876.

To the Honourable the Commissioner of Agriculture:

SIR,—I have the honour to submit, herewith, for your consideration, the Report of the Entomological Society of Ontario, for the year 1876, including a detailed statement of the receipts and expenditures during the year, all of which have been duly audited.

The Canadian Entomologist, the monthly organ of our Society, continues to be regularly issued about the 15th of each month, and has, during the past year, contained a

great many papers of much practical value. It has now nearly reached the close of its eighth volume, and throughout its issue it has been almost entirely filled with original matter: hence it has become such a depository of the results of entomological observation, that no student of American entomology can dispense with it. Yearly it is growing in favour in European and American scientific circles, and continues also to carry on a good work in our midst by the diffusion from month to month of much valuable information in reference to insect life about us.

The Annual Meeting of the Society was held this year in the City of Hamilton, during the time of the exhibition of the Agricultural and Arts Association, in accordance with the provisions of the Statute, when the various reports were read and approved, and

the officers for 1877 duly elected.

I have also the pleasure of submitting a Report on some of the noxious, beneficial, and other insects of the Province which have been prepared on behalf of the Society by

Mr. Wm. Saunders, Rev. C. J. S. Bethune, M.A., and Mr. J. Williams.

The pages of this Report will be found illustrated with many excellent cuts, a number of which are entirely new; we have also a plate of a very excellent character, illustrating some of the insects treated of: a new feature in our Reports, and one which we believe will add greatly to their interest.

I have the honour to remain, Sir,

Your obedient servant,

J. H. McMechan,

Secretary-Treasurer Entomological Society of Ontario.

### ANNUAL MEETING OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

The sixth annual meeting of the above Society was held in the Court House in the City of Hamilton, on the 20th day of September, when the various reports of the officers were read and adopted, followed by the delivery of the President's annual address, a copy of which was requested for publication.

The election of officers for the ensuing year then took place, with the following results:

President.—W. Saunders, London.

Vice-President.—Rev. C. J. S. Bethune, M.A., Port Hope.

Secretary-Treasurer.—J. H. McMechan, London.
Council.—Wm. Couper, Montreal; R. V. Rogers, Kingston; E. B. Reed, and J. M. Denton, London; J. Pettit, Grimsby.

Editor of Entomologist,—W. Saunders, London.

Editing Committee.—Rev. C. J. S. Bethune, M.A., Port Hope; E. B. Reed, London; and G. J. Bowles, Montreal.

Library Committee. - Messrs. Saunders, Reed, Denton, and McMechan, London.

Committee on Centennial Exhibition.—W. Saunders, Rev. C. J. S. Bethune, M.A., and J. H. McMechan.

Auditors.—J. Williams and Chas. Chapman, London.

#### FINANCIAL STATEMENT OF THE SECRETARY-TREASURER.

Receipts.		
To Balance from 1875	\$232	33
" Cash refunded from Centennial account	50	00
"Government Grant for Centennial exhibit		00
" Annual grant, 1876	750	00
"Members' Fees	237	70
"Sales of corks, pins, &c., to members		
		-
	\$1877	35

#### Disbursements.

By Canadian Entomologist, printing and paper	\$391	71
"Engravings	83	
" Expenses of Annual Report	84	00
" Library	42	47
" Editor's salary		00
" Secretary-Treasurer's salary	50	00
"Travelling expenses officers' attending meetings	86	25
" Expenses, sundry small	. 38	72
"Rent of hall	. 80	00
" Cork, Pins, &c		46
" Collection California Coleoptera	30	12
" Centennial Exhibition expenses	541	39
" Balance cash on hand	. 185	60
	\$1877	35

We certify that the above is a correct statement of accounts for the year ending. September, 1877, as shown by the Treasurer's Books, with vouchers for disbursements.

CHAS. CHAPMAN, J. WILLIAMS, Auditors.

#### REPORT OF THE COUNCIL.

It is our pleasing duty, at this the sixth anniversary of our Society, to draw attention to the increasing importance of its work, and the growing interest manifested by many in its welfare. The importance of the study of insects is yearly becoming more felt, so much so that it is being introduced in common with other departments of natural history in some of our best schools.

The preparation of the collection of Canadian insects by our Society for the Centennial Exhibition has been a great success. When we ventured the opinion in our last report that this collection would prove an interesting feature in the Canadian Department, and would be in every way worthy of our Society, we scarcely looked for the magnificent display which has since been brought together; a collection of our insects far surpassing anything ever before seen. This collection will, it is hoped, be preserved as far as possible in its present condition, as a collection of reference for the use of our members. In this way it will be of great service to many who have hitherto found great difficulties in the way of procuring the correct names of insects on which they had recorded observations, or which they had collected for their cabinets.

The meetings of the Entomological Club of the American Association for the Advancement of Science were held at Buffalo, beginning on the 22nd day of August. Our Society was represented by three of its prominent and active members: our President, W. Saunders; Vice-President, Rev. C. J. S. Bethune; and Mr. E. B. Reed, all of whom took part in the discussions which took place at the several meetings. Some important conclusions were reached in reference to entomological nomenclature, and a series of rules presented and partially adopted which we hope will greatly tend to the permanency of the names of our insects. Many interesting features of insect life were brought under the notice of the members, and several important papers read. A full report of these meetings will be found elsewhere.

The eighth volume of our monthly magazine is nearly completed, and fully sustains the reputation it has hitherto acquired as a valuable medium for the publication of original observations on insects. In such a journal as ours the great bulk of the matter must necessarily be scientific, and cannot be void of technicalities; yet we are pleased to record

the efforts which have been made to present our readers who are not deeply versed in the

science of Entomology with such matter as will interest and instruct them.

Our branches in London, Montreal, and Kingston, are still carrying on the good work in their respective spheres; we hope that the coming year will witness a large accession to the number of their members.

Submitted, on behalf of the Council, by •
J. H. McMechan,
Secretary-Treasurer.

### ANNUAL MEETING OF THE LONDON BRANCH.

The annual meeting of the London Branch of the Entomological Society of Ontario

was held on the 18th day of January, 1876, at the Society's rooms.

The minutes of the last meeting having been read and approved, and the usual routine business transacted, the following gentlemen were elected as officers for the year 1876:—President, G. Geddes; Vice-President, H. B. Bock; Secretary-Treasurer, J. M. Denton; Curator, Chas. Chapman; Auditors, J. H. McMechan and J. H. Griffiths.

The annual report of the Secretary-Treasurer, which had been duly audited, was then read, conveying the pleasing intelligence that there was a balance to the credit of

the Branch, after all the current expenses of the year had been defrayed.

### REPORT OF THE COUNCIL OF THE LONDON BRANCH.

The Council of the London Branch of the Entomological Society of Ontario feel gratified at the continued interest manifested in Entomological matters by our members. This interest and zeal was especially apparent during the earlier months in the year, when the collection of the Parent Society was being prepared for exhibition at Philadelphia. Then meetings were frequently held, and labours in connection with this undertaking assiduously followed day after day, and we believe that to the efforts of the members of the London branch may be attributed a large measure of the success which has attended the preparation of this collection; the pledge given last year that our members would do their utmost has certainly been fully redeemed. Following the completion and shipment of this collection, Centennial engagements and the approach of the collecting season interfered for a time with the regularity of our meetings.

Some interesting additions have been made to the collections of our members during the summer by captures at sugar, and otherwise, further establishing the favourable position of London and its surroundings as a collecting ground. We hope that with the increased facilities for naming insects which will be afforded by the return of the Society's collection from Philadelphia, that many will be attracted to our ranks, and thus the in-

terests of Entomology be still further subserved.

On behalf of the Council,

John M. Denton, Secretary-Treasurer.

### ANNUAL MEETING OF THE MONTREAL BRANCH.

The third annual meeting of the Montreal Branch of the Entomological Society of Ontario was held on the 2nd of May, 1876, when the following officers were elected for the ensuing year:—President, G. J. Bowles; Vice-President, F. B. Caulfield; Secretary-

Treasurer, Geo. B. Pearson; Curator, C. W. Pearson; Council—W. Couper, H. H. Lyman, and Robert Jack.

The reports of the Council and Secretary-Treasurer were read and adopted.

All business communications to be addressed to G. B. Pearson, 83 Cathcart Street. Montreal, P.Q.

#### ANNUAL REPORT OF THE COUNCIL OF THE MONTREAL BRANCH OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

Your Council, in presenting their third Annual Report, would congratulate the Society on the solid progress made during the year. Although the membership has not increased, much good work has been accomplished, and great interest taken by the members in the study of our science. The monthly meetings have been well kept up during the year, and many interesting insects, both native and foreign, brought before the members. Your Council would remark, that as the result of your labours, the Lepidoptera of the district have been well worked up, and some progress made with the Coleoptera and Orthoptera. The other orders, however, have been comparatively neglected.

Your Council would recommend the members to collect all the orders, so that the work of the Society may be better developed and material gathered for future study.

The following papers have been read during the year:-

"On the extraordinary flight of Danais Archippus," by Geo. B. Pearson.

"The excursion of the Montreal Branch on Dominion Day," by Geo. B. Pearson. "List of Nocturdae taken at sugar, at Chateauguay Basin, on 1st July, 1875," by F. B. Caulfield.

"Description of a new species of Dryocampa," by G. J. Bowles.

"Notes on Biston Ursaria—Walker," by G. J. Bowles.

"List of Lepidoptera, collected at the Godbout River," by W. Couper.

"Notes on sugaring for Noctuidee," by F. B Caulfield.

- "Notes on the remarkable variations of Colias Philodice," by Geo. B. Pearson.
- "Description of the larvæ and chrysalis of Grapta interrogationis," by H. H. Lyman. "Notes on some species of Orthoptera occuring on the Island of Montreal," by F. B. Caulfield.

"A proposal to compile the Montreal Catalogue," by G. J Bowles.

"On Scudder's historical sketch of the generic names proposed for Butterflies," by W. Couper.

"On Platysamia Columbia," by F. B. Caulfield.

"List of the Diurnal Lepidoptera of Portland," by H. H. Lyman. "List of the Bombycide, occurring at Montreal," by F. B. Caulfield.

"Our work," by C. W. Pearson.

"List of Noctuida occurring at Montreal," by F. B. Caulfield.

"On the Snow Fly found in April, at Rivière du Loup en bas," by W. Couper.

Your Council have great pleasure in thanking our worthy President for a valuable check-list which he has compiled, for cataloguing the insects of all the orders occurring on the Island of Montreal. This is a work that was very desirable. On the kind invitation of Robert Jack, Esq., the members proceeded to Chateauguay Basin on the 1st of July last year, and spent a very pleasant and profitable day in collecting in that neighbourhood, and in enjoying the generous hospitality of Mr. Jack and his family.

The following books have been donated to our library during the year:—

Vol. I. "Memoirs of the American Association for the Advancement of Science," donated by S. H. Scudder, Esq.

"Revision of the hitherto known species of Chionobas in North America," donated

by S. H. Scudder, Esq.

"Notes on some New England Orthoptera;" "The Two Principal Groups of Urbicolæ (Hesperidæ);" "Notes on the Species of Glaucopsyche from East North America;"

"An Historical Sketch of the Generic Names "Entomological Notes," Nos. 1, 3, and 4; "An Historical Sketch of the Generic Names Proposed for Butterflies;" "Recherches sur les Mœurs des Fourmis Indigenes," by P. Huber; "De partibus quibus insecta spiritus ducunt," by Christianus Loewe, all of which were generously donated by S. H. Scudder, Esq., of Cambridge, U. S. "Entomological Contributions," Nos. 1, 2, and 3, also kindly donated by J. A. Lintuer, Esq., of Albany, New York, and vols. 1, 2, and 3, "Bulletin of the Buffalo Society of Natural Sciences."

"Notes on the North American Lepidoptera contained in the British Museum;"
"List of the North American Platyptirices, Attaci, etc., etc., with Notes;" "List of the North American Noctuidæ," two numbers, all of which were generously given by Aug. R. Grote, Esq., Buffalo, New York.

All of which is respectfully submitted.

WILLIAM COUPER, Chairman. Geo. Jno. Bowles,

President.

G. B. Pearson,

Secretary-Treasurer.

## ANNUAL ADDRESS OF THE PRESIDENT OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO.

To the Members of the Entomological Society of Ontario:

Gentlemen,—In accordance with time-honoured usage, it devolves upon your retiring President at the close of another year of the existence of our Society to offer you a few remarks bearing upon the objects and interests of our body, or of Entomology in general.

And first, gentlemen, I desire to congratulate you on the continued prosperity of our Society and the increasing interest felt and manifested in the furtherance of the chief objects we as an organization have in view, viz., the diffusion of practical information in reference to the life history and habits of our insects, so that we may be able to distinguish our friends from our foes, and thus be placed in a position to apply intelligently such remedial measures for the check of insect ravages as experience may suggest to be

most practical and effective.

During the past year circumstances have arisen which have brought our Society more prominently before our people than ever before, notably the fact of the accumulation of that grand collection of Canadian insects which we have prepared and forwarded to the Centennial Exhibition in Philapelphia. My esteemed predecessor, in his annual address last year in Toronto, referred to this proposed work, and expressed himself as confidently anticipating the active co-operation of our members in all sections of our country. The result has more than realized our fondest hopes; our members entered most heartily into the work, bringing together a collection of Canadian insects far surpassing anything ever before seen. The carrying out of the details of this work was entrusted last year to a special committee, consisting of Messrs. Bethune, Saunders and McMechan, and upon consultation it was resolved to accumulate all the material for this collection at the Society's headquarters in London, and there make such selections from the insects sent as might seem desirable. All our members in London who had collections, freely placed them entirely at the disposal of the committee, while many of those resident in other localities throughout the country expressed their readiness to contribute anything or everything in their power to fill up blanks in the desired series of specimens.

As is usual in such cases, the bulk of the work of arranging, classifying and labelling specimens fell upon a few individuals. It affords me much pleasure to have the opportunity of naming especially one who has laboured most assiduously and has contributed more than any other person towards the success of this enterprise; I allude to my esteemed friend, Mr. Johnson Pettit, of Grimsby, who arranged the entire collection of Coleoptera and freely contributed from his own stores—the accumulation of years—a large proportion of the specimens. The extreme neatness and care manifested by him in the mounting and arrangement of the insects has been the admiration of all, and some idea of the

accuracy of his determinations may be arrived at when I say that such authorities as Dr. Horn and Dr. LeConte, of Philadelphia, after a critical scrutiny of the whole series of Coleoptera, filling some twenty-seven cases in all, could only detect two or three errors, and these among the smallest and least conspicuous specimens; such results reflect great credit on the labours of our esteemed coadjutor. In the arrangement of the other departments, your President was ably aided by several gentlemen, notably Messrs. E. B. Reed, J. M. Denton and G. Geddes, of London; indeed, all our London members were ever ready to render all the assistance in their power.

The expenses necessarily attendant on this work have been considerable. The making and lining of suitable cases in which to display the insects, the printing of labels, &c., and the numberless outlays entailed by the transmission of specimens to and fro from all parts of the country, as well as many other incidentals which it is needless to enumerate here, combined, have involved a large outlay. This has been chiefly met by a special grant of five hundred dollars from the Government of Ontario, the remainder being drawn from

the Society's resources.

To make the collection as perfect as possible, as far as accurate naming is concerned, the doubtful specimens in the orders most largely represented were submitted to the examination and correction of specialists. The entire collection of Lepidoptera was carefully gone over by Prof. A. R. Grote, of Buffalo, who generously placed his services at the disposal of the Society for this purpose, and twice visited London in order to complete the work. Dr. Horn also kindly rendered all possible aid in the determination of such Coleoptera as were sumbitted to him, and to Dr. A. S. Packard we are indebted for naming some of the Geometridæ.

The collection arrived safely and in good condition in Philadelphia, where it at once attracted much attention. The whole display consisted of eighty-six glass cases, forty-five of which were filled with Lepidoptera, twenty-seven with Coleoptera, and the remaining fourteen occupied by the other orders, the whole arranged in a double row on a suitable stand seventy-six feet in length, in the Canadian Department in Agricultural Hall.

There were no other collections on exhibition in Philadelphia which would compare favourably with that sent by our Society. There was a very good one in the United States Government Building, from the Department of Agriculture in Washington, arranged

by Prof. Townend Glover; this, however, consisted chiefly of Lepidoptera.

There was a small collection shown in the Canadian Department, adjoining that of our Society, consisting of four or five cases, containing Canadian insects, representing the various orders; they came, I believe, from Montreal, but I did not succeed in finding the name of the party to whom they belonged. Through the neglect or carelessness of our Canadian Commission, neither this collection nor that of our own Society are mentioned in the official catalogue, do not appear to have been entered as belonging to any department of the exhibition, and hence were not examined at all by the Centennial judges. Had it been otherwise, we should no doubt have been honoured with awards which, in the case of our Society, if we may judge from the laudatory comments of those best able to form an opinion, were well deserved.

In the Kansas State Building there was a collection from the State Board of Agriculture, arranged by Prof. Snow, consisting of thirty cases: sixteen of Lepidoptera (seven of butterflies and nine of moths), five of Coleoptera, two Neuroptera, two Orthoptera, three Hymenoptera, one Diptera, and one Hemiptera. These were very well set up, classified, and nearly all named, and were very creditable to Prof. Snow and the Board by whom they were sent. There was, nevertheless, one drawback to viewing them with any satisfaction: the dust was allowed to accumulate on the glasses to such an extent as to

obscure the objects contained.

There was a collection from Brazil, shown in the Brazilian Department in the Main Building. This, we were told, was the work and property of a private gentleman residing in Rio Janeiro; it was arranged in thirty-five cases, thirty-one of which were Coleoptera and four Lepidoptera. This collection was very much mixed; there was no attempt made to name the insects, except to the extent of partially indicating the family names. Neither was there much effort towards a correct classification; they seemed to be partly arranged with regard to their natural relationship and partly with the view of display. Among the butterflies and moths there were some superb specimens whose brilliance at-

tracted much attention. There were also some very beautiful and interesting things among the Coleoptera. The Curculionidæ were very brilliant and numerous in species, with forms greatly varied; the Cerambycidæ were also remarkable, handsome, and largely represented, some of them of great size. We noticed one enormous Prionus fully six inches long; the Cetonias were also very beautiful. Some of the Buprestidæ were wonderfully brilliant with metallic shadings, and the Chrysomelidæ very numerous, and some of them very charming, the Cassidæ being largely represented. Among the Scarabeidæ there were some enormous specimens, among others, species of Copris with remarkable horns, and some brilliant species of Onthophagus; there were also a number of very handsome Elaters. One of the rarities in this collection was a fine example of Hypocephalus armatus, an extremely rare insect about two inches in length, and of which it is said there are only two or three known specimens in collections. The more brilliant Brazillian insects, especially the Coleoptera, are largely employed by the inhabitants of that country in the ornamentation of jewellery and other fancy articles, often associated in the latter case with the feathers of their brilliant plumaged birds.

In the Department of Queensland there was a large case, filled chiefly with Lepidoptera in a fine state of preservation, embracing many very beautiful and strange-looking things; almost the only familiar objects among them were specimens of Danais archippus. In this instance, also, none of the specimens were named, which detracted greatly from the interest which would otherwise have attached to them. We learned that this collection had been sold for \$150 to Mrs. Brigham, of New York, a lady who, we believe, takes a deep interest in Entomology, and who has a very large and handsome collection of

Lepidoptera.

The Orange Free State of South Africa exhibited two cases of insects, among which there was a curious admixture of millipedes, scorpious and spiders, arranged in a semi-ornamental manner. One case contained chiefly Coleoptera, with a few Hymenoptera, Hemiptera and Orthoptera. Among the Coleoptera there were some curious and beautiful forms, especially among the Cetonidæ and Cerambycidæ; also some handsome Scarabeans, Chrysomelans and Curculios. The second case was filled mainly with butterflies, among which there were a few very handsome ones. That cosmopolitan species, "the painted lady," Cynthia cardui, was represented by several specimens; there was also a Sphinæ closely resembling the death's-head moth of Europe, and a Utesthesia very like our bella. Besides these there were a number of very curious and handsome moths, with a few Orthoptera and Neuroptera. No attempt was made in the way of naming anything in this collection, nor any effort at classification.

An American gentleman, whose name I did not learn, had a very curious exhibit of insects in Agricultural Hall, of a purely ornamental character, in three cases. One was a circular arrangement, and was built up chiefly with butterflies and moths; the other two represented public buildings and were constructed of beetles; the specimens were immensely numerous and well preserved; the whole arrangement indicating great ingenuity

and perseverance on the part of the collector.

India had a very fine exhibit of silks, raw and manufactured, with the insects and cocoons from which they were obtained. The Tusseh silk-worm moth, Antheræ pophia, is very handsome, not unlike our polyphemus; the cocoon is egg-shaped, and yields a very strong-looking silk. The Bombyx Huttonii, or wild silk-worm moth, is also very pretty; in form it resembles B. mori, but its wings are beautifully marked and tipped with brown.

It was very gratifying to observe the prominence given to the study of Natural History in the Educational Departments of many of the nations thus represented at the Centennial. Nearly all of them had small collections illustrating the course of teaching in this branch of study, and in nearly every instance Entomology occupied a prominent position. In the model schools of Sweden and Belgium this was very noticeable; also in the Russian exhibit, where there were cases of insects of all orders, including in many instances the blown larvæ very neatly set up. In the same department in the Japan exhibit there were similar cases fairly classified, illustrating the various orders. The Chinese make use of insects, too, but with them they are used as medicines; among their materia medica collections we observed dried caterpillars, the empty pupa cases of a species of Cicada, and other similar substances, all extolled as possessing rare medicinal virtues.

The bringing together of such an immense number of agricultural productions as are now on exhibition in Philadelphia, including almost every variety of grain, peas, beans and other useful productions on the face of the globe, affords a favourable opportunity for the introduction of any insect pests which may infest these articles in the country of their growth; these, if introduced and acclimatized, may attack similar or related products in this country, unless precautions are taken against their dissemination, and thus we may have new foes to fight which may be very difficult to contend with. The American Centennial Commission, who do not seem to have overlooked anything, have, with wise foresight, appointed a special Commission of eminent Entomologists to report on the insects introduced along with the products exhibited. This report will be looked forward to with much interest by agriculturists as well as Entomologists.

The Agricultural Building in which our insects were shown, was well supplied with skylights, which admitted a flood of light on everything below. Exposure to this brilliant light for so many months has had a damaging effect on the colours of some of our Lepidoptera, the moths being much more faded than the butterflies; this fading is especially noticeable in insects having any red colours on their wings, such as the Catocalas and

Arctians; many of these, however, can be replaced without much difficulty.

Suitable arrangements have been made for the careful packing and re-shipping of the insects at the close of the Exhibition, when they will be forwarded to the Society's rooms in London, Ont. Here it is proposed to keep the collection as far as possible undisturbed, where it will serve a good purpose as a collection of reference for collectors to name their specimens from. Mr. Pettit has kindly consented to allow all that he has contributed to remain in the Society's rooms, and all the London members will follow his example. Mr. Wm. Couper, of Montreal, has generously donated all he has sent to the Society, and I doubt not that most of our other friends in Montreal and elsewhere, who have contributed to the collection, will allow such of their insects as are not represented in our cabinets in London, to remain at least for a time, when no doubt most of them could be replaced. The advantages which will result to our Society from the possession of a collection so well worked up and so correctly named, can scarcely be overestimated, affording as it will, conveniences to collectors for naming specimens such as we have never had before. If for no other reason, we shall, in the possession of these advantages, always have cause to remember with pleasure the hundredth anniversary of American independence.

The continuance of the organ of our Society, the Canadian Entomologist, has also contributed greatly to the maintenance of the interest felt in our Society. During the past year important matters have been discussed in its pages, and a mass of new facts, throwing light on the habits and life history of many of our insects, placed before our readers. Much space has also been given to the important department of descriptive Entomology. Indeed, I scarcely think we should be deemed presumptuous in saying that our little journal is an important bond which does much to bind together the brotherhood

of Entomologists throughout America.

The recent action of American Entomologists on the subject of Entomological nomenclature claims more than a passing notice. At the meetings of the Entomological Club of the American Association for the Advancement of Science, held last month in Buffalo, N.Y., this important subject was discussed and conclusions reached in reference to it which, I hope, will greatly tend to the stability of our nomenclature, the great end and aim which all parties claim to have in view. Amidst the conflicting opinions held by leading Entomologists on this subject, it was scarcely to be expected that entire unanimity could be secured; but it was most gratifying to notice the conciliatory spirit manifested by all, and the desire apparently as far as possible to meet each other's views. A series of resolutions touching on important points was presented by the Committee named last year to report on this subject, and on some of these they were unanimous, while on others there was a divided opinion. Those rules which were unanimously adopted will, it is understood, be strictly carried out by all who were present, while those on which there was expressed a divided opinion will, in the meantime, be left to be acted on or not. as the individual choice may dictate. Although this does not leave the subject in as satisfactory a state as entire unanimity would have done, still it was felt that by the action taken very much had been done towards settling some of the disturbing elements

which interfere with the fixity of nomenclature. A report of these important meetings will be found in the *Entomologist*; we commend them to the careful perusal of our readers. Our own Society was well represented in this gathering by the presence of the Rev. C. J. S. Bethune, M.A., E. Baynes Reed, and your President.

I shall not attempt, gentlemen, to trespass longer on your time and patience. Thanking you for your kind partiality in electing me to fill so important an office among you,

I have the honour to be, very sincerely yours,

WM. SAUNDERS.

London, September, 1876.

#### REPORT OF THE COMMITTEE ON CENTENNIAL EXHIBITION.

Your committee take much pleasure in reporting the great success which has attended the enterprise of which they have had charge, a success indeed greater than the most sanguine had anticipated. On entering upon our labours the magnitude of the undertaking was such, that we felt some misgivings. To get together such a collection as would do credit to our Society and to the Province we have the honour to represent, in so short a time as that allotted to us was felt to be no mean task, but having resolved to

do our best, work was begun without delay.

On mature deliberation it was thought best to bring together in London, all the insects that could be procured from the collections of all our members in Canada, and there making the Society's rooms our head-quarters, to assort and arrange them as experience might suggest. Our first attention was given to the preparation of suitable cases in which to place our specimens, which should be as near as possible dust-proof and pest-proof. It was finally determined to adopt the form of case used in the Zoological Museum, at Cambridge, Mass., with some slight modifications; and having been furnished through the kindness of Professor Hagen, with a sample case as a pattern, we had but little further difficulty in this matter. To secure the specimens against injury during the transportation to so great a distance, we thought it necessary that the bottoms of the cases should be lined with cork of extra thickness, so that when the pins on which the specimens were mounted were thrust into it they should be held firmly in place. We accordingly ordered from a cork factory in Manchester, England, a sufficient supply for this purpose, of double the ordinary thickness, and when the drawers were lined with this cork, and the pins firmly inserted, it was almost impossible with any ordinary amount of jarring or shaking to displace them.

The work to be done on the Coleoptera was very laborious. This was kindly undertaken by Mr. Johnson Pettit, of Grimsby, and to his labours and kind contributions of material, we are indebted for much of the success of our enterprise. The writer undertook the work needed on the Lepidoptera; Mr. E. B. Reed devoted his attention to the Hemiptera and Diptera; Mr. Geddes, to the Hymenoptera; and Mr. J. M. Denton, to Orthoptera. By this division the labour was lightened, and the work progressed rapidly. The following collections in London were placed entirely at our disposal, viz:-Those of Messrs, W. Saunders, E. B. Reed, J. M. Denton, G. Geddes, H. B. Bock, W. E. Saunders, and J. Williams. Large stores of valuable specimens were forwarded by Mr. Pettit. Messrs. William Murray, and J. Moffatt, of Hamilton, sent some very handsome Lepidoptera, and Mr. H. Cowdry, of Toronto, contributed to the Coleoptera. Our members in Montreal were also very prompt and liberal in responding to our appeal. Mr. Wm. Couper donated a large number of specimens, while a great many additional were loaned by Messrs. F. B. Caulfield, C. W. and G. B. Pearson, H. H. Lyman, P. Keutzing, G. J. Bowles, W. Hibbins, J. T. Whiteaves, indeed without their help we should have been entirely without representatives of many species restricted to the eastern portions of our Dominion. Added to all these were the specimens already contained in our Society's cabinets in London.

In due time the collection was completed and ready for shipment. It consisted of eighty-six cases, twenty-seven of which were filled with Coleoptera, forty-five with Lepi-

doptera, three Hymenoptera, five Neuroptera, two Hemiptera, three Diptera, and one Orthoptera, and when spread out they presented a very fine appearance. To ensure correctness in naming, all doubtful specimens were as far as possible submitted to specialists. Our best thanks are due to Mr. A. R. Grote, of Buffalo, N. Y., who twice visited London for the purpose of examining and naming our Lepidoptera. To Dr. A. S. Packard, of Salem, Mass., we are indebted for naming some of our Geometers, and to Dr. Geo. H.

Horn, of Philadelphia, for his abundant labours in naming our Coleoptera.

The cases were packed with cotton in suitable Cabinets and these enclosed in strong outer cases with elastic packing between the two and with these precautions the collection reached its destination in safety. Arrangements were made for the careful unpacking of the specimens on arrival, and their proper classification when displayed. Similar provisions have also been made for their re-packing and return. Our insects are displayed in the Canadian department in Agricultural Hall, on a suitable stand built for the purpose, seventy-six feet in length. The many encomiums bestowed on our collection by those best able to judge of its merits will warrant us in stating that our Society may justly take to itself the credit of having brought together by far the finest collection of Canadian insects ever seen. We trust that this magnificent collection will, on its return, be preserved as far as possible in its present state as a collection of reference for the convenience of our members who may desire to name their specimens and as an enduring memento of the interest taken by our Society in the great Centennial Exhibition.

On behalf of the Committee,

WM. SAUNDERS, Chairman.

From among the many favourable notices of our collection which appeared in the American papers, we clip the following from *The Daily Graphic*, New York, Sept. 26, 1876:—

At the Centennial.—The Exhibit of the Entomological Society of Ontario, Canada.—Every lover of nature, every admirer of beauty in form or colour who visits the Centennial Exposition can scarcely avoid being charmed with the display of Canadian insects, exhibited by the enterprising Entomological Society of the Province of Ontario. The collection is in the Canadian department in Agricultural Hall. It is arranged in eighty-six glazed cases laid in a double row upon a table over seventy-five feet in length. Forty-five of these cases are filled with butterflies and moths (Lepidoptera); twenty-seven with beetles (Coleoptera); and the remaining fourteen with insects of all other orders—viz.: Bees, wasps, hornets, and other stinging and piercing insects, cicadas and bugs (properly so-called), dragon flies, lace-winged flies, &c., grasshoppers, locusts, crickets, &c., the small two-winged flies, and many others. Many of the specimens are so large and so gorgeously coloured that they have the appearance of natives of some of the tropics rather than of the more northern Canada—a country which many are apt to imagine is a land of ice and snow. This display, combined with that of the Canadian Fruit-Growers' Association near by, ought to do much to instruct the general public in regard to the vast resources and the excellent climate of the great Dominion.

The collection must not, however, be regarded merely as a display of curious or beautiful objects; it possesses a very high scientific value as well. The practised student of entomology will there find thousands of species of insects, all correctly named both as regards genus and species, and all scientifically arranged according to the best system of classification. Although the critic may find fault with the particular system of nomenclature that has been adopted in some special families, he must confess that there is given an excellent illustration of the progress of scientific zoology in Canada, and of the energy and skill of the members of the Canadian Entomological Society in particular. This society was first organized in 1863, and had few members and exceedingly limited resources. For five years it continued to make good progress in a quiet way, the labours of its members being chiefly confined to the collection and determination of species and the publication of lists of Canadian insects. A great deal of good work was thus done, and the way was paved for other work of a more practical though not a more useful and scientific character. In August, 1868, the society issued the first number of the Canadian Entomologist, a small monthly publication, containing original papers on the classification,

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description, habits, and general history of insects. This serial has been received with much favour by the leading entomologists of America, most of whom have from time to time contributed to its pages. It has now reached the middle of its eighth volume, and has increased to three times its original dimensions; it has also improved very much in style and typographical appearance, as well as in the excellence of its illustrations. The editor of the first five volumes was the Rev. C. J. S. Bethune, of Port Hope, who was succeeded by Mr. Wm. Saunders, of London, the present conductor of the journal. It is noteworthy, as an evidence of the persistent enterprise of the Canadians, that this is the only serial publication on insects in North America that has continued to exist for more than a few years; it has succeeded in outliving several contemporaries started about the same time. In 1870 the society first began to receive a small pecuniary grant from the public funds of the Province of Ontario, in return for which it annually presents to the Legislature an illustrated report on insects, useful to agriculture, horticulture, and aboriculture. Five of these reports have thus far been issued, and have been widely distributed amongst the farmers, gardeners, and others of the Province. The information and instruction thus afforded have done much to educate the people of the country and to save their crops and fruits from the pestilent ravages of destructive insects.

The present officers of the society are as follows: President, William Saunders, London; Vice-President, Rev. C. J. S. Bethune, Port Hope; Secretary and Treasurer, J. H. McMechan, London; Council—Wm. Couper, Montreal; R. V. Rogers, Kingston; J. Pettit, Grimsby; J. M. Denton and E. B. Reed, London. The headquarters of the society with its library and cabinets, are at London. It has also flourishing branches in Montreal

and Kingston.

# MEETINGS OF THE ENTOMOLOGICAL CLUB OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

In accordance with previous announcement, the members of the Entomological Club met on Tuesday, the 22nd of August, at 2.30 p.m., in the rooms of the Buffalo Society of Natural Sciences, Dr. LeConte in the chair. The following members were present:—Dr. John L. LeConte, Philadelphia, President; S. H. Scudder, Cambridge, Massachusetts, Vice-President; C. V. Riley, St. Louis, Mo., Secretary; J. A. Lintner, Albany, N.Y.; Dr. H. Hagen, Cambridge, Massachusetts; Dr. John G. Morris, Baltimore, Md.; B. P. Mann, Cambridge, Mass.; W. Saunders, London, Ont.; Rev. C. J. S. Bethune, Port Hope, Ont.; E. B. Reed, London, Ont.; A. R. Grote, M. M. Maycock, Dr. L. F. Harvey, Henry S. Sprague, O. Reinecke, W. W. Stewart, of Buffalo, and others.

#### PRESIDENT'S ADDRESS.

After calling the meeting to order, the President read the following address:—
In resuming the chair, which by your kind partiality I occupied at the last meeting of the club, permit me, after thanking you for the honour you have done me in thus calling me a second time to this position, to congratulate you on the evidence of increased

interest felt in the branch of Zoology to which we give our attention.

This increased interest is shown not only by the larger attendance at the present meeting of Entomologists from distant residences, but by the increase of correspondence between those who collect and study insects. I have received during the year several applications from new correspondents for advice and assistance in the study of Coleopetra; and my colleague, Dr. Horn, informs me that the same is the case with himself. Unfortunately I have been obliged to reply to some of the applicants with a temporary negative, as my time has been almost wholly taken up with efforts to complete my memoir on Rhynchophora, now in the course of publication by the American Philosophical Society. This memoir would have been finished some weeks ago, but the exceptional inclemency of the summer heat rendered all work with lenses difficult and uncertain. I think that I may promise that the MSS. will be complete in a few weeks. Meanwhile I am glad to

say that the arrangement of my cabinet specimens is so far perfected that Dr. Horn or I will be willing to name any sets of Rhyncophora of the Unitel States or Dominion of Canada, which are sent us, provided that the return of the specimens sent is not required. The subject has been such an extremely troublesome one, and there are still so many uniques in our cabinets, that they need filling up in order to give them that value for future reference which I hope they will possess, and it will also be desirable for the proper recognition of the new genera and species. many of which are very abundant, that specimens should be distributed to foreigners, who have studied this difficult group of objects.

The excellent volume of Dr. A. S. Packard, jr.. "Monograph of the Geometrid Moths of the United States," forming Vol. X of the United States Geological Survey of the Territories, requires special mention among the contributions to Entomology since our last meeting. We owe the existence of this volume to Dr. F. V. Hayden, Geologist-in-Chief of the Survey, and I hope that a continued appreciation by the National Legislature of the importance of the work done and published by the survey, will ensure us many future volumes of similar merit.

The ordinary routine work of the description of new genera and species, is going on in the various orders of insects with about the usual degree of rapidity. But from every one comes the same complaint: Too many new forms to be described!

The observations on economic applications of Entomology for the protection of agri-- culture are also advancing in a most commendable mannner, considering that the public and their servants in office still fail to recognise the magnitude of the interests

References to the memoirs contained in the volumes of reports, and to isolated papers in agricultural and other journals, will be found in Psyche, a periodical, which, though small, is indispensable to every one occupied in the study of the insects of North America.

I would gladly stop here, but a truthful instinct, a sense of duty to science, and my obligation to you alike forbid silence. I have to speak of a subject of a disagreeable

It is concerning the efforts made by you and other members of the Association at the last meeting at Detroit, to procure the appointment of a Commission for the protection of agriculture against noxious insects; this Commission to be composed of properly informed men of science, and chosen under such circumstances as would prevent the influence of political bias, or personal favouritism. If I do not fatigue your memory too much, you will recollect the memorials that were so extensively signed in relation to this subject, copies of which memorials are again before you. These memorials were extensively circulated at the West, and were signed by many of the most influential bodies for the promotion and protection of agriculture in that region. During the winter these memorials were sent to Congress, in the expectation that some proper legislation would follow. One of the Senators, in fact, introduced a bill which seems to have been very carefully considered, and indeed bears upon its face some evidence of scientific guidance. This bill provided for the appointment of three Commissioners for five years, the Commissioners to be nominated by the Council of the National Academy of Science to the Secretary of the Interior. This bill, having been referred to the Committee on Agriculture, was returned, completely orchidized, in such form as to provide for one Commissioner, to be appointed by the Department of Agriculture, the very enemy and incubus from which the western agriculturists specially desired to be relieved.

The bill in this form passed the Senate, several of the members taking occasion in the discussion which preceded the passage to talk to the demonstration of their own ignorance of the subject. However, this discussion has been already so severely commented upon in several of the newspapers of the Mississippi Valley that it is quite unnecessary for me to add anything farther, except the hope that the Legislature which choose the successors of those Senators will have men of better education and higher intelligence

offered to them as candidates for the position.

I regret to have been obliged to introduce this unpleasant subject, about which I feel a warmth and severity, unsuited to the position in which you have placed me. I must therefore close by begging you, in your respective localities, to continue aiding me in my endeavour to cause the Government authorities to give proper attention to this most important subject.

The minutes of the last meeting held in Detroit were read by the Secretary, C. V. Riley, and approved.

The consideration of reports of committees was postponed, owing to the non-arrival of

some of the members.

Mr. Riley made some remarks upon the variation in the venation of the wings of *Anisopteryx pometaria* (or *A. autumnata*), and exhibited mounted preparations of wings of this insect differing greatly from the figures in Dr. Packard's new work.

Mr. Grote considered the variation of neuration in the Geometrids as of no great

value as a specific distinction.

Mr. Riley said that he had scarcely ever raised a large number of forms from the egg without finding that in the imago state there appeared to be more than one so-called species. Whenever he used large quantities of material he found this result. He thought, therefore, that writers when describing species should always state the number of specimens they had before them.

Dr. Hagen then read a valuable paper "On Genera," at the conclusion of which he

was warmly applauded.

On motion of Mr. Grote, the Report of the Committee on Nomenclature was then

taken up, when Mr. Riley read a majority report of the committee.

Mr. Scudder did not approve of the course taken in reference to the rules on nomenclature which had been presented, and thought that members of the committee had exceeded their instructions, and desired that the resolution passed at the last meeting, appointing the committee and defining its duties, be read. He thought that the opinions of leading naturalists on this subject should have been gathered and compared.

The resolution giving instructions to the committee was read as follows: "That the Club appoint a committee of five to prepare and present to the Club at its next annual meeting a compendium of the views of the leading Entomologists of the country upon points which, in their judgment, require elucidation, and also to present a series of resolutions touching such points, in order that intelligent discussion may be had upon them and some general agreement, if possible, arrived at."

Mr. Riley urged as reasons why a majority report had been presented, the difficulty of getting the members of the committee together, and the urgent necessity that some

action should be taken in the matter without further delay.

Mr. Saunders supported these views, and urged that the opinions of many of the leading Entomologists on the subject of nomenclature had been given in the pages of the Canadian Entomologist during the past year, while others had expressed their views by letter to members of the committee; and seeing that there had been no opportunity for the committee to meet together as a whole, he thought it desirable that these resolutions, which had been endorsed by a majority, should be presented as a guide to the discussions which might take place on the subject.

Mr. Scudder did not think this a proper time or place for the introduction of such rules; he fully agreed, however, that it was very desirable to establish stability in

nomenclature.

Mr. Mann regarded Mr. Scudder's remarks as a motion to set aside these rules, and

as such was prepared to support it.

Dr. Hagen, in a few words, gave a sketch of the history of nomenclature, showing how tidal waves of new names had been poured from time to time on the Entomological world with the greatest zeal on the part of those who had introduced them; that in many instances these changes were unnecessary, and produced confusion instead of establishing order. He thought it highly necessary that some understanding should be arrived at among Entomologists which would lead to greater stability in nomenclature.

Mr. E. B. Reed spoke for those who had comparatively little time to devote to Entomology, and thought that they were a class who should be considered, and that while it was, perhaps, no great task for those who devoted their whole time to Entomological studies to master the great number of new generic and specific names from time to time introduced, it was imposing a burden on their less fortunate brethren which was grievous

to be borne-which was, in fact, more than they could bear, and tended to discourage many and deter others from entering on the study of Entomology. He urged that it was from among the ranks of these beginners that some of the future leaders of Entomological science would be drawn, and it was well to consider what effect these discouraging circumstances would have on the present and future progress of the study.

After some further discussion, the resolutions were referred back to the Committee to report on to-morrow. Meanwhile, they were ordered to be printed for the members.

so that discussion could be had upon them.

#### EVENING SESSION.

At 7.30 the meeting was again called to order, the President in the chair.

Mr. Riley offered some remarks on a parasite, a mite which attacked the Colorado Potato Beetle. This insect (of which mounted specimens for microscopic examination were submitted) is furnished with a strange and extraordinary development of what he supposed were the maxillæ, by which it was able to attach itself to the Doryphora, and at the same time extract nourishment as well. He thought it was an organ somewhat similar in character to the extensile maxillæ of the larvæ of Dragon Flies.

Mr. Scudder thought that since they appeared to him to be jointed, they must be a

palpus of some sort.

Dr. LeConte, after further examination, was of opinion that they were not jointed.

Mr. Scudder then read an interesting paper on "Mimicry in Butterflies explained by Natural Selection," quoting largely from a recent contribution by Fritz Muller on this subject, in which he gives the results of observations made by him on butterflies in Southern Brazil. This paper will appear in Psyche, the organ of the Cambridge Entomo-

logical Club.

Mr. Riley gave the result of some observations on the eggs of Corydalis cornutus, from which it would appear that the mass of eggs hitherto regarded as belonging to this species are probably those of a Belostoma. He had found in one day thirty or forty patches of eggs, which he believed to be those of Corydalis cornutus, on the leaves of trees whose branches overhung the water. These flat patches were very strangely arranged, and contained an immense number of eggs, often numbering between three and four thousand in a patch. The eggs are at first translucent, but become darker as they approach maturity, when the young larvæ break through the eggs beneath.

Dr. Morris doubted whether these really were the eggs of the C. cornutus, and ques-

tioned whether the larva was aquatic at all.

Dr. Hagen thought that there was something strange in reference to these insects. Mr. Riley had kindly sent him a large number of eggs, but when hatched he had failed in every attempt to keep the young larvæ alive. Since they are furnished with both branchia and stigmata, he thought they must be regarded as water insects.

Mr. Lintner had found the larvæ under stones, but when they enter the chrysalis state they make their way into the water, and in this condition they are often captured

in large numbers and used as fish bait.

Mr. Riley said that the larvæ in Missouri are frequently found in water, and he had

no doubt but that the eggs he had referred to were those of Corydalis cornutus. Mr. Scudder stated that Mr. Sanborn had frequently taken large numbers of the

larvæ in the water in the neighbourhood of Cambridge. Mr. Saunders had never found them in the water, but had frequently captured them buried in moist sand or under stones along the banks of rivers.

Mr. Riley next exhibited to the Club some silken masses containing eggs of Hydro-

philus triangularis, which were very remarkable and interesting.

Mr. Saunders offered some remarks on a mass of pupe and escaping insects of Calopteron reticulatum, which he found one morning early in summer at the roots of some long grass. The mass was fully as large as a hen's egg, and must have contained some hundreds of individuals. A large number of the freshly escaped insects were captured, with a view to ascertain whether there was much variation in the markings, and whether the form terminalis, which is said to be a variety of reticulatum, could be found among them. He saw none approaching this latter form—all were well-marked specimens of reticulatum.

Dr. LeConte mentioned the curious fact that in some species of Calopteron the larval skin was not shed when it pupated, but that the larva skin and pupa skin both remained in situ until the perfect insect escaped.

Dr. Morris then made some interesting remarks on the mouth parts of the wood-

Mr. Riley exhibited specimens of blown larvæ very nicely set up; he thinks, however, that in this condition they are scarcely of value for scientific study, and for this purpose prefers the specimens preserved in alcohol.

Mr. Scudder differed from Mr. Riley, and thinks that the advantages are in favour of

the blown specimens, and much prefers to study larvæ in this way.

Dr. Hagen agreed with Mr. Scudder that blown larvæ were advantageous for study.

Dr. Morris asked if any of the gentlemen present who were in the habit of raising larvæ, had made any observations in reference to the length of time the development of the perfect insect may be retarded. He stated that three or four years since he had placed a number of cocoons of S. cynthia on a shelf in his house, and that after lying there all that time some of them had this year produced the perfect insect.

Dr. Hagen referred to an instance related by Kirby & Spence where a beetle, Buprestis splendida, was ascertained to have existed in the wood of a pine table more than twen-

ty years (7th edition, p. 121).

Mr. Saunders mentioned the fact that the perfect insect of *Ecanthus niveus* frequently came to sugar at night, when they were readily captured. He thought that where they were very numerous this method of trapping them might be employed with advantage.

Mr. Lintner observed that he had take 16 species of Catocala at sugar this season, and that a friend of his who has been sugaring industriously has found the Catocalus to be most abundant about midnight.

On the 24th another meeting of the Club was held at 2 p. m., the President in the Chair.

The Committee on Nomenclature, consisting of Dr. LeConte, S. H. Scudder, A. R. Grote, C. V. Riley and W. Saunders, reported a set of rules, on some of which they were unanimous, while on others there was a divided opinion. They had given all the attention to the subject possible within the limited time at their disposal, but had not found time to consider the explanations offered in the majority report presented, and suggested that these be referred back to the Committee, with power to print such explanations as may be agreed on with the rules.

The following are the rules submitted:

1. The binominal system, as originated by Linnæus, is the only one to be recognised. The use of a third word, however, connected with the second by a hyphen, as is common and desirable in the case of gall insects, e.g. Cynips quercus-palustris, is not to be considered as an infraction of this rule. (Unanimous.)

2. Where a specific name has been generally adopted during a period of twenty years,

such name shall not be changed for one of prior date. (Divided opinion.)

3. The name placed after a genus should be that of the author who established the genus in the sense in which it is actually used, but the name of the author who first proposed the term should be cited in brackets. (Unanimous.)

4. No generic or specific name should be acknowledged which has not been printed

in a published work. (Unanimous.)

5. A generic name, when once established, should never be cancelled in any subsequent subdivision of the group, but retained in a restricted sense for one of the constituent portions of the original genus. (Unanimous.)

6. In constructing family names they should end in ide. (Divided opinion.)

7. The tribe should occupy an intermediate place between the sub-family and genus. (Unanimous.)

8. The authority for the species and not for the generic combination should follow

the name of an insect. (Divided opinion.)

9. The proposition of a genus by simple designation of a type is to be greatly deprecated. All new names should be accompanied by ample definitions that will permit no doubt as to the species intended or as to the characters of the genus proposed. (Unanimous.)

10. No description should be made from a figure. (Unanimous.)

11. The number of individuals upon which either a specific or generic diagnosis is based should always be stated. (Unanimous.)

After a lengthy discussion, on motion of Mr. E. B. Reed, the following resolution was

unanimously passed:

That the report of the committee be adopted, and that any rules on which this committee have expressed a divided opinion have a marginal note attached thereto, reciting such fact.

It was also resolved that all the explanations, &c., offered in the majority report be referred back to the committee with power to print such explanations as may be agreed

on, with the rules.

Moved by Rev. C. J. S. Bethune, seconded by S. H. Scudder—That no alteration or addition to the rules now adopted be made, unless such alteration or addition be proposed at one annual meeting of the Club, and be adopted at a subsequent annual meeting. Carried unanimously.

The election of offcers for the ensuing year then took place, resulting as follows:—

President, Dr. LeConte; Vice-President, S. H. Scudder; Secretary, C. V. Riley.

Mr. Scudder brought to the notice of the members a pattern insect box, which he believed to be pest-proof. These boxes are exceedingly well made (manufacturers, Hancock & Greeley, Cambridgeport, Mass.), are about 19 x 15 in., and are sold at \$2.70 each, without cork.

Mr. Saunders suggested the desirability of the Club appointing a permanent committee to whom disputed points in reference to Entomological matters might be referred. On motion of Mr. Mann, seconded by Mr. Saunders, it was resolved that the Permanent Committee of the Club shall consist of the President, as chairman, and four other members to be named by him.

Mr. Linther presented to the meeting a very complete and extensive list of insects taken at sugar by him during the present season. These were arranged in a tabular form in a very neat and methodical manner, showing at a glance the insects taken each even-

ing, and whether they were abundant or scarce.

On motion of Mr. Riley, Dr. Larkin was requested to bring before the Club some facts in reference to a mite said to be parasitic on the human subject, when he read a very amusing letter from an afflicted patient in reference to this matter. The Club then adjourned.

#### ON GENERA.

#### By Dr. H. Hagen, Cambridge, Mass.

(Read before the Entomological Club of the A. A. A. S., at Buffalo, N. Y.)

There will hardly be a naturalist who has not spent considerable time to study the questions:—What is a genus, and what are generic characters? Indeed, work is nearly impossible without having taken a position with regard to these questions. A full record of the literature, even the most condensed one, would be here out of place, but I have been induced by a recent and most surprising discovery bearing upon this question to make this communication. I have been speaking here only about natural genera. The consideration of the genus as an artificial division differs fundamentally, and to avoid mistake we

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should not call artificial divisions by this name. The characters of artificial genera depend solely upon the taste of the worker and the convenience of separating into groups animals and plants. All species are considered to belong to the same natural genus which agree in structural characters, external and internal, or anatomical ones in the different stages, in transformation, in the manner of living. These definitions of a genus are accepted as well by naturalists who are strong Darwinians as those who oppose the development theory. In a prize essay of the Jena University, D. P. Mayer, a pupil of Prof. Haeckel, in a paper on the "Ontogeny and Phylogeny of Insects," enlarges this definition in so far as he asks for a conformity in the embryological characters. I believe no one will object that this definition is a good and exhaustive one; but if we attempt to use it in a special case we become bewildered by the astonishing amount of characters unknown to us, and the impossibility to make them out for our work. At present we know hardly well enough the external character of the imago. Of other characters our knowledge is merely fragmentary and often a tabula rasa. We may say that a century of hard work will not fill these gaps in our knowledge. It is obvious that we cannot wait till this enormous amount of work is done. And it is certain that naturalists will not and can not stop creating new genera.

Genera created with such a limited amount of knowledge will depend upon the experience and taste of the worker. Many of such genera will have to be modified or

dropped by a farther advancing knowledge,

The most important question (what are generic characters?) is still unanswered.

The large literature and the difference of opinion emitted by prominent authorities seem to prove that a sufficient affirmative answer is impossible till our knowledge is further advanced. But here, as in other abstract questions, we can proceed in a negative manner by exclusion.

Genera consist of a number of related species. If we knew the character of the species, the specific character, we can by exclusion come nearer the character of the genus. Species differ by structural character, and as the species form the lowest degree of the classification, we can be sure that species must differ at least by minutest points of structure.

I think there is no objection of consequence possible. I know very well that differences in minuter points of structure have been considered as generic characters. But naturalists beginning with the construction and definition of the higher degrees of class, order, family, &c., used up all characters at hand, till, coming to genera, nothing was left but minute differences of structure; the simple consequence of using specific characters

for generic ones was that nearly every species was considered to be a genus.

I said before that species must differ at least by minuter points of structure. The discovery which I mentioned before proves that structural characters of species are more important, and can by a different manner of living be changed in such a way as to represent forms which were formerly believed to belong to different genera. Branchipus and Artemia, belonging to the Phyllopod Crustacea, are represented by several species here and in Europe. The two genera are nearly related one to the other, and differ principally in the following points: Artemia has eight post-abdominal segments, the last one very long. Branchipus has nine post-abdominal segments, the last two of equal size. Artemia has three articulated claspers in the male; Branchipus two articulated claspers.

is often propagated by Parthenogenesis, Branchipus never.

Nobody will deny that those characters of structure go very far beyond minuter points of structure, and are marked well enough to justify the separation sixty years ago by Dr. Leach. Now it is proved that not only the species of Artemia known up to-day from Europe, Asia and Africa, but even some species of Branchipus belong to one and the same genus and species. In the American fauna five species of Artemia and three of Branchipus are described; of course they will have to be studied again in a similar manner as the European ones. The two European species of Artemia are remarkably different. Artemia salina has a strongly bifid tail surrounded by 15 to 20 bristles and narrow gills; Artemia mulhauseni has a rounded tail without bristles and very large gills. This latter species lives in pools of a very concentrated salt water of 25° Beaumé; the other species in common salt water of about 8°. In 1871, a dam which surrounded a salt pool containing Artemia mulhauseni, broke down by accident, and the sea water washed in at the same time; Ar-

temia salina, which abounds in the sea water, appeared in large numbers in the pool. The dam was immediately repaired, and in the space of three years the amount of the salt in

the pool arrived gradually at the same concentration as before.

A Russian naturalist, Mr. Schmaukevitch, living near the spot and studying carefully Artemia, was astonished to find the species somewhat changed in every following generation, till in three years the Artemia salina was changed entirely into mulhauseni. The fact was so extraordinary that he decided to confirm it by a more conclusive proof. He raised at home in open glass dishes Artemia salina, and by successive additions of salt to the water, he was able to transform the species into Artemia mulhauseni. To make the counter proof, he diluted the water gradually and the species returned to the form of Artemia salina. But by continued dilution of the water he was more surprised to find that in the third generation the long abdominal segment began to be separated into two segments, and finally to be changed as in a Branchipus. He found later in salt pools of only four to five degrees (living together) Artemia salina and Branchipus spinosa, and in water with a lower degree of salt two other related species, Branchipus ferox and media.

Mr. Schmaukevitch has made similar experiments with similar results on Daphnia, Cyclops, and Canthocamptus, which he has not yet published. There can be no doubt about the facts under such conclusive proof, and Prof. V. Siebold is now engaged in raising the American species from Salt Lake for similar experiments. These facts oblige us to consider all these different forms as belonging to one and the same species, since it is possible to change at will one form into another by altering the conditions of living. As long as this is possible they cannot be considered as differentiating or Darwinian species. We have now the proof that specific characters exist which do not depend on minuter points of structure. Therefore, we are taught that we must considerably enlarge the characters of species and those of the genus.

What has been thus proven in Crustacea will certainly be observed also with other Articulates. Since insects do not possess a post-abdomen, there cannot occur the same differences as in the case cited, but analogous ones will not be wanting. It is obvious that so-called "salt insects" are the first ones which will need new and careful study. Those known are Coleoptera, Diptera, Hemiptera and Orthoptera, and the species are often nearly related to other ones which do not live in salt regions. Further, it is evident that similar changes will be the result of different conditions of life. So-called "local varieties" are certainly nothing else, and a vast field of observation and study is opened by the remarkable discoveries of Mr. Schmaukevitch. I believe that we are now justified when

we exclude from generic characters all the following ones:

1. Every character based on the number of parts, when the number ceases to be a small one; the more so when it varies in related species. If a number is larger than about a dozen, we can never rely upon the constancy of the number in antennal joints and anal appendages. In spines, bristles, spurs, a much smaller number is constant; transversal

veins of the wings belong to the same category.

2. The external coating of the body, consisting in hairs, scales and other appendages, is not a generic character. The hairs, tufts, brushes, spines, spurs, are often only sexual and can not be considered generic characters; also, hairy eyes, since we find this character chauging in the most related species and probably in the same species in Diptera.

3. The presence or want of the ocelli or eyes is not a generic character.

4. The veins of the wings give only to a certain degree generic characters, viz: the principal branches, but certainly not after the bifurcation.

Having arriving so far by exclusion, it is important to state what is left for generic

characters.

So far as I am advanced in the study of generic characters, I think the following should be used:

1. The form and relation of the three principal parts of the body.

2. The organs providing nutrition (mouth parts).

3. The organs making possible the working of the mouth parts, i. e., the organs of locomotion.

The anatomical characters may be of prominent help. At present our knowledge as

to their details is too limited to admit our using them to a profitable extent. We begin to be better acquainted with the previous stages, and this acquaintance will bring these characters into more prominence. I doubt embryological characters to be of generic value. But very little is certainly known about them, and nothing known is ready for our use. The parts serving for propagation have probably a higher value than generic characters. Characters for genera should be of a co-ordinate value. I think it is obvious that a genus should never be accepted if its characters are not satisfactorily given, and that genera based on the mere specification of a type should never be accepted.

#### INSECTS INTRODUCED BY THE CENTENNIAL EXHIBITION.

During the progress of the Centennial Exhibition, it was observed that many of the cereals and seeds exhibited were infested with insects, some samples being almost destroyed by these pests. At the suggestion of the Centennial Commission, a committee of scientific gentlemen was appointed to investigate this matter and report as early as practicable on the character of the insects thus introduced. This committee was also charged with the further work of reporting on any new plants or weeds which might be similarly brought into the country. A report on the plants could not be prepared until next year, but as the subject of injurious insects was a highly important one, it was deemed wise to report on that as soon as possible, hence all the information obtainable on the subject up to the time of the close of the Exhibition was submitted in the following report, read by Dr. LeConte, chairman of the committee, at a meeting of the Academy of Natural Sciences in Philadelphia, held early in November:—

REPORT ON INSECTS INTRODUCED BY MEANS OF THE INTERNATIONAL EXHIBITION.

On behalf of the Committee appointed by the Academy of Natural Sciences of Philadelphia, at the meeting held October 10th, 1876, "to investigate and report upon the introduction of new species of insects and plants through the medium of foreign exhibits at the Centennial Exhibition," I have the honour to present the following report, with the desire that it may be forwarded to the proper authorities of the Centennial Commission, at whose instance the Committee was appointed.

The Committee is composed of the following members of the Academy:

Dr. Joseph Leidy, Dr. George H. Horn, Mr. Thomas Meehan, Dr. J. Gibbons Hunt, and Dr. John L. Le Conte, Chairman.

It was apparent that while the labours of the botanists of the Committee could not properly commence until next spring, when careful observation will recognise any new introductions of plants, the entomological investigations should be made as speedily as possible. Accordingly, Dr. Horn and myself, availing ourselves of the admission cards which had, with great liberality, been sent to the members of the Committee, went frequently to the exhibits in the Main Building and Agricultural Hall, and made collections in all the agricultural products from foreign countries, which were found to be infected.

Most of the species which we obtained have been already distributed over the globe by the ordinary channels of trade, and nothing is to be apprehended from the addition of a few hundred thousand specimens, to the incalculable millions of individuals of the same kind, that we have now domiciled amongst us.

I am happy to add that the species found, which have not been previously observed in the United States, will be innocuous; they are dependant for their support upon plants which do not grow here, and which would be of no commercial value to us if they were cultivated.

I may therefore announce, with moderate certainty, that no evil result will occur to our agricultural interests from any introduction of foreign insects by means of the Centennial exhibits.

Before concluding this report, by a list of the insects collected in the buildings, it is our duty to notice some remarkable differences between the exhibits from different countries, indicating the care with which the specimens had been prepared, and the means

taken to prevent depredations by insects.

All those exhibits which had been moist when packed, or had become moist or mouldy on the voyage or during the Exhibition, abounded in *Bruchus*, *Calandra*, and *Tineidæ*; while those which were protected against moisture were unattacked. It stands to reason, in fact, that insects dependent on a circulating fluid for their vitality, and having, during their early stages as larvæ, a very soft and moist body, cannot obtain in properly dried grains the requisite amount of moisture for their sustenance, and the egg, if previously deposited, will remain, like an ungerminating seed, for a favourable moment to develop, or if hatched, the larva will die at an early stage.

It was, therefore, with great pleasure that we recognised the appreciation of this almost self-evident proposition by the Department of Agriculture of Portugal. The exhibits in bottles were entirely free from all mould and infection, and in each bottle was a small quantity of caustic lime,\* wrapped in paper, which, by its hygrometric power, had

kept the specimens perfectly dry.

We do not intend to have it inferred, from what is above stated, that all the other exhibits were in a condition inferior to that of Portugal; on the contrary, many of them, as well as many from our own States, were in most admirable order; but, so far as we could learn, this good condition had been produced by great personal care, and the removal from time to time of the infected parts; not by the use of a preventive

agent.

While investigating the occurrence of a small species of *Tineidæ* in the Italian exhibit of Leghorn straw, I learned that some importations of straw goods, by Messrs. Albinola & Bailey, of New York, had been attacked by insects. I immediately wrote to those gentlemen, who, with great courtesy, sent me two collections of the insects, infesting a recent importation which had become mouldy from being packed in a moist condition. The names of the species contained in this set are appended; they are all either carnivorous or fungivorous, and can therefore do no harm; some of them have not been before observed in the United States, or their habits have not been noted. What is more important, however, is that none of the straw goods were attacked by moths either on this or previous occasions. It is therefore to be inferred that the moth in the Italian exhibit was the grain-moth of the seed of the grass which produced the straw used in the manufacture of the Italian goods. What confirms this inference is that the moths occurred in but one case, in which were exhibited several bunches of the straw with the heads of grain still remaining.

Prof. C. V. Riley, in the Proceedings of the Academy of Science of St. Louis. Oct. 2, 1876, has given a list of the species which he collected at the Centennial Exhibition, with very useful and suggestive remarks. We have obtained specimens of all the species mentioned by him except one, Crambide Lepidopteron, from the Egyptian exhibit, for which we sought without success. At an earlier period in the season, and with smaller attendance of visitors, the number of species in our list would perhaps have been larger, but no additional advantage would have been obtained therefrom. The species, with the

few exceptions noted, are either innocuous or previously introduced.

J. L. LECONTE, Chairman, GEO. H. HORN, JOSEPH LEIDY.

<sup>\*</sup> The nature of the powder was suspected by the Committee, but the determination was made through the analysis of Mr. Edward Goldsmith.

List of Species Collected in the Centennial Buildings in Foreign Exhibits.

#### COLEOPTERA.

SILVANUS SURINAMENSIS.

Argentine Confederation and Brazil, in various materials.

LÆMOPHLŒUS FERRUGINEUS.

In beans, Brazil. These two species lived upon the debris of *Bruchus*, and were ac companied by a species of *Psocus*.

BRUCHUS PICTURATUS, Fahreus.

Argentine Confederation; in seeds of two leguminous plants, one of which produces a screw bean, resembling *Strombocarpus* of Arizona.

Bruchus, sp.

Allied to B. prosopis, of Arizona and New Mexico. Argentine Confederation; also in the screw bean. These two Bruchi are depredated upon by three small species of Ichneumonidæ.

BRUCHUS, sp.

Of larger size and more uniform colour. Argentine Confederation, in the seeds of another leguminous plant, allied to *Prosopis*.

Bruchus, sp.

Of larger size and more mottled colour; in the seeds of three other leguminous plants of the Argentine Confederation.

BRUCHUS SCUTELLARIS.

Venezuela, in beans.

Bruchus obsoletus.

In beans from various countries of both continents.

BRUCHUS PISI.

In peas; Spain and Portugal.

BRUCHUS, sp.

A small broad species, with traverse prothorax; male rather uniformly clothed with grey-brown pubescence; antennæ as long as the body; female black, with a grayish-brown broad dorsal stripe on the prothorax, and a small transverse white band on each elytron, extending from the side margin nearly to the suture, a little in front of the middle; thighs

not toothed. Length 09 inch.

Brazil, in a bluish-gray variety of bean. I cannot identify this species among those described in Schönherr's work; it is of the same form, and belongs to the same division as B. pisi, but is much smaller, and quite different in other characters. It is the only one of the species here mentioned which is capable of being introduced; and I have, therefore, given such a description as will enable it to be recognised. The antennæ are only feebly serrate. This species is mentioned by Mr. Riley as B. granarius, but it does not agree with the figure of Olivier.

RHIZOPERTHA PUSILLA.

Victoria, Australia; in wheat. This insect has been previously introduced into the United States in Persian wheat, distributed by the Patent office. (Vide Lec. Class, Col. N. Am. p. 208.)

CALANDRA ORYZÆ.

This destructive insect abounded in exhibits of corn (maize), wheat, and rice from every part of the globe. I also observed it in arrow-root from Brazil.

ARÆOCERUS COFFEÆ.

Eating the thin shell of cacao-nuts from Brazil, but apparently not attacking the interior of the nut. Previously introduced both in the Atlantic and Pacific States.

#### LEPIDOPTERA.

The ordinary and well-known *Tineidæ*, which affect wheat and corn (maize) (*Butalis cereulella*, *Ephestia Zeæ*), abounded in exhibits from various countries. There was a smaller form which is mentioned above, as coming from the grass seeds of the Leghorn straw. Specimens have been identified by Professor C. V. Riley as the common grain moth, *B. cereulella*.

#### HYMENOPTERA.

Besides the three *Ichneumonidu* parasitic on the *Bruchi* in the Argentine Confederation exhibit, I observed a small species of *Pteromalus* parasitic on the *Tineu*, *Bruchus obsoletus*, or *Calandra oryzæ* which infested a small bag of Brazilian wheat.

List of the Species Found in Mouldy Specimens of Straw Goods from Italy.

These species were collected by Messrs. Albinola & Bailey, in New York. They are either carnivorous or fungivorous; those of the latter kind live upon the mould, which, as determined by Dr. J. G. Hunt, is a species of *Aspergillus*, previously known in this country.

LATHRIDIUS FILIFORMIS.

LATHRIDIUS STRIATUS.

CORTICARIA, sp.

(Not identified.)

HOLOPARAMECUS SINGULARIS.

Has not been previously observed in the United States.

SILVANUS SURINAMENSIS.

SILVANUS ADVENA.

Læmophlæus ferrugineus.

MURMIDIUS OVALIS.

Habits not previously observed in the United States, though its occurrence was known.

TRIBOLIUM FERRUGINEUM.

### ON BLISTERING BEETLES.

BY W. SAUNDERS, LONDON, ONTARIO.

Probably there are few of our readers who are not practically acquainted with the powerful blistering qualities of the imported Cantharides, or as the insect is more commonly, although incorrectly designated, the Spanish Fly. It belongs to the order of Coleoptera (Beetles), and hence should be known as the Spanish Beetle. The use of this insect, in the practice of medicine, dates from a very early period, and it is one of the few remedies, the usefulness of which, within certain limits, neither time nor fashion has been able to set aside. That species of Cantharides known as the Spanish Beetle is not the only one in use. In China and India, allied insects, very different in colour, but similar in properties, have long been used for like purposes; and these Asiatic insects are now found in our drug markets, and having proved equally efficient with the well-known European variety, are gradually growing in favour.

It is not so well or so generally known that we have in America, and even in Canada, several species of Cantharides, as well as some other closely allied blistering insects, which might at any time be used as substitutes for the Spanish Beetle (Cantharis vesicatoria).

One of our commonest species is that known as "the Striped Blister Beetle" (*Epicauta vittata*), see fig 7 in plate, which is very destructive in some seasons to the potato vines, and also attacks the leaves of beets, devouring them most voraciously. At times, these insects are found in such numbers, that they are very injurious to the crops they infest. In some of the Western States, this species has occasionally committed havoc on the potato vines as great and as terrible as that of the now well-known Colorado Potato Beetle. The circumstances attending their propagation and growth, as we shall hereafter show, are, however, of such an exceptional character, that a year of abundance is almost sure to be followed in the same locality by one of unusual scarcity.

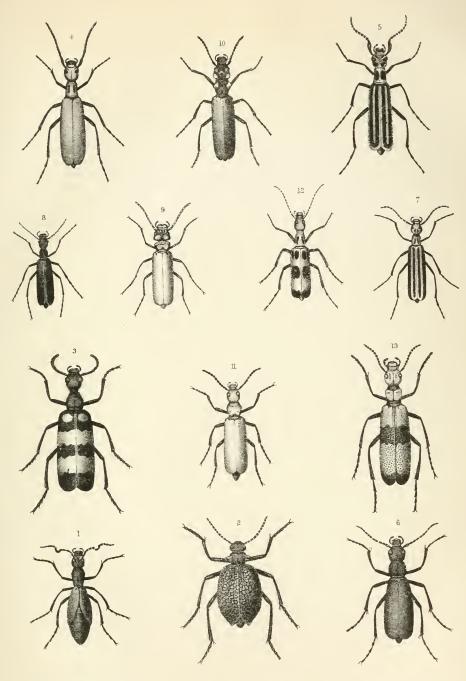
The Ash Grey Blister Beetle (*Epicauta cinerea*), is another species very common in many parts of Canada. We have been informed that in the Great Manitoulin Island, this species, as well as the preceding one, is usually found in considerable abundance. The body is of an ash grey colour, occasioned by its being thickly clothed with short ash-coloured hairs or down, which, when handled, comes off like the bloom of a plum, and leaves the insect black. This variety attacks not only the potato leaves, but also English or Windsor Beans, and according to Mr. Riley, the foliage of the apple tree sometimes

suffers from its depredations.

The Black Blister Beetle (*Epicauta atrata*) is also common with us; it is usually found during the month of August, on the leaves and blossoms of the common Golden Rod (*Solidago*). When approached or disturbed, they quickly quit their hold on the

plant and drop to the ground.

These northern species are smaller in size than the European insect, a feature which would add to the cost of collecting them. Another bar to their successful introduction has been found in their colour. By a strange misconception, the presence of the brilliant green particles in the wing-cases, in the powdered Cantharides, has been associated with their activity, and any sample of powder or of prepared blistering-plaster where these brilliant particles are wanting, would, by many, be at once condemned. The Chinese Beetle (Mylabris cichorii), recently introduced, has done much to remove the latter objection; yet, notwithstanding, it has been shown that the Chinese insect is fully as powerful in its action as that from Europe, the relative market value of the insects belonging to these two species indicates that popular prejudice still favours the use of the Spanish Beetle.



- 1. Meloe angusticollis Say.
- 2. Cysteodemus armatus Lec.
- 3. Mylabris cichorii Linn.
- 4. Macrobasis albida Say.
- 5. Macrobasis atrivittata Lec.6. " segmentata Say.

- 7. Epicauta vittata Fab.
  8. " " cinerea Forst.
  13. Tegrodera erosa Lec.
- 9. Cantharis vesicatoria Liun. 10. " " vulnerata Lec. 11. " " nuttalli Say.

- 12. Pyrota mylabrina Chev.



In the western and southern portions of our continent we have species which are large as well as abundant, and which, there is every reason to believe, possess all the activity needed, most of them probably would be found in every respect as valuable as the imported beetles. Some of the species about to be referred to have not yet been recorded as occurring within the limits of the Dominion of Canada, but when the insect fauna of the rich plains of the west shall have been carefully collected, doubtless some of these or others equally large and useful, will be found on our own side of the line; in the meantime, we give the localities where they are at present known to occur.

Through the kindness of Dr. George H. Horn, of Philadelphia, whose extensive contributions to our knowledge of American Coleoptera have made his name familiar both in Europe and America, we have been supplied with much information in reference to the species here treated of; an acknowledgment is also due to Prof. C. V. Riley, State Entomologist of Missouri, for some valuable notes on the habits of these insects. We have had a lithographic plate prepared by Messrs. Sinclair & Sous, of Philadelphia, under the kind supervision of Dr. Horn, in which each of the species referred to is figured of the natural size, excepting 7 and 8, which are somewhat enlarged. This plate is remarkably well executed, and is probably one of the best plates of Coleoptera ever published; besides the American species, it contains figures of *M. cichorii* and *C. vesicatoria*.

We shall first enumerate the species, giving brief descriptions, as plain and void of

technicalities as possible.

1. Meloe angusticollis—Say.—This insect (see fig. 1 on plate) is of a dark bluish violaceous colour, with the head, thorax and wing-cases thickly punctured with minute dots or impressions. The thorax is slender, narrower than the head; feet slightly hairy, with the spines of the legs reddish. Found in the Eastern States and in many parts of Canada.

2. Cysteodemus armatus—Lec.—Entire body bluish black; thorax with a strong lateral spine on each side; wing-cases very convex, and much larger than the abdomen, which they cover, and with very coarse elevated reticulations on their surface. This insect varies greatly in size; the figure represents a medium sized specimen.

Extremely abundant in Arizona and the desert regions of California wherever the greasewood, *Larrea Mexicana*, grows. This insect is not as good a vesicant as some others; the proportion of hard tissue in its structure is large as compared with the softer

and more active portion, too large, perhaps, to admit of its being of much value.

3. Mylabris cichorii—Linn.—All parts of this insect are black, excepting the wing-covers, which are of an obscure yellow, with three transverse, black, irregular, undulating bands, the one at the apex broadest. The first band is sometimes interrupted, and occasionally reduced to three or four spots.

Found in abundance in the southern portions of China, and also throughout India, on the flowers of the wild chicory and other composite plants. It is also said to occur in

southern Europe, extending from Italy through Greece and Egypt to China.

4. Macrobasis albida—Say.—All parts of body black, densely covered with minute greenish or yellowish-white hairs. The thorax is slightly longer than wide, the wing-covers broader than the thorax, becoming wider behind, and are densely punctured.

Abundant in Texas, New Mexico and on the plains.

5. Macrobasis atrivittata—Lec.—Also black; form more elongated than albida; head thickly clothed with fine black hairs, with a small white space in front of the eyes; thorax with grayish hairs, with a large black space in the middle; the wing-covers have black hairs, and their apex and sides are margined with gray; there is also a moderately broad grayish stripe extending from the humerus to near the apex.

Found in Texas, and is probably quite abundant, but we have not been able to obtain

definite information on this point.

6. Macrobasis segmentatu—Say.—This insect is black also, with the segments of the body beneath margined with whitish. The thorax is nearly as broad as long, and its posterior edges are grayish. Wing-covers finely punctured and sparsely covered with short black hairs.

Occurs with M. albida, and is also abundant.

7. Epicauta vittata—Fab.—The head of this species is of a light reddish colour, with darker spots; antennæ black; thorax black, with three yellow lines; wing-covers black,

margined with yellow, and with a yellow stripe down the middle. Abdomen and legs

black, covered with grayish hairs.

Is found throughout the United States and Canada, but more abundant northward and westward of the Carolinas, extending to near the base of the Rocky Mountains. In the south it is replaced by *lemniscata*, a species closely resembling *vitata*, but differs in having another white stripe. This species has been tested, and has been found fully equal to *vesicatoria* as a vesicant.

8. Epicauta cinerea—Forster.—Black, closely punctured, and clothed with grayish hairs; beneath clothing dense, upper surface variable. Head sparingly hairy. Thorax densely punctured, sometimes entirely covered with gray hairs, often with a large triangular central space black, divided by a grayish line along the middle. Wing-cases finely punctured, and either entirely grayish or margined with grayish all around.

Occurs all over the United States east of the Rocky Mountains, and in many parts of Canada. In the Southern States it becomes larger, with the wing cases entirely gray;

fully equal in strength to vesicatoria.

9. Canthuris vesicatoria—Linn.—Colour, above and below, a beautiful shining golden

green; head, thorax and wing-covers closely punctured; antennæ black.

Found most abundant in Spain, Italy and the south of France; also found in all the temperate parts of Europe, and in the west of Asia.

10. Cantharis vulneratu—Lec.—Body black; head orange yellow, sometimes with a

broad black stripe down the middle; wing-cases black.

Extremely abundant throughout the entire Pacific region west of the Sierra Nevadas. Dr. Horn has seen bushels of this insect in some localities literally strewing the ground; also very common on a species of *Baccharis*; he has experimented with them and found them powerfully vesicant, and producing strangury very readily when taken internally in the form of tincture.

- 11. Centharis Nuttalli—Say.—Head deep greenish or golden green; antennæ black; thorax golden green with a polished surface, and a few small scattered punctures. Wingcases golden purple, striped with green. Body beneath green, polished; thighs purplish, feet black. This large and beautiful insect is extremely abundant in Kansas and Colorado.
- 12. Pyrota mylabrina—Chev.—Entire body and legs dull ochre yellow. Thorax with two, sometimes four black spots; wing-covers with three transverse black bands, divided in the middle by the suture, the anterior one being sometimes further divided into four spots; knees and feet black.

Found from Kansas to Mexico, and is abundant throughout the whole region.

13. Tergrodera erosa—Lec.—Body and legs black; head and thorax reddish, the former with a deep groove; wing-covers bright yellow, their surface roughened with coarse reticulations, with a median and apical black band, which in some specimens are wanting. Abundant in Southern California and peninsula of Lower California, on a low herbaceous plant with a blue flower.

In all these species the female is more valuable than the male, especially when well distended with eggs, owing to the relatively larger proportion of the soft parts. Eggs have the same power as the other soft parts; the blood Dr. Horn believes to be more

active than any other portion.

Having referred in detail to the perfect insects, it is now proposed to sketch their

history, as far as known, through the earlier stages of their existence.

The life history of *Meloe*, which has been well worked up in Europe, may be taken as a type of all the species mentioned, since all the facts accumulated on this subject point to a similarity in the character of the transformations and habits, which in the vesicating insects are very remarkable.

In the 20th volume of the "Linnean Transactions," there is a memoir on the natural

history of Meloe, from which many of the following facts are derived.

The Meloe beetles, when fresh from their pupa cases in spring, are feeble, move slowly, and have their bodies small and contracted, but after feeding a few days these enlarge greatly, the abdomen of the female expanding to twice its original size, owing to the enormous quantity of ova within its body in process of development. The abdomen will then measure an inch or more in length, and appears to be dragged along with difficulty. They

Fig. 1.

are fond of basking in the hot sunshine, and are said to be most active during the early and middle parts of the day. When confined in boxes for the purpose of observing their habits, it is necessary to expose them much to the sun, and supply them with an abundance of food; they are then quite at home, and their proceedings may be easily watched. They drink freely of water, and require their food to be well wetted. In a few days after

leaving their winter quarters they pair.

The eggs are deposited in the earth. A small excavation is made by the female, sometimes as much as two inches in depth, into which, when finished, she projects her body, with the head just perceptible at the entrance. After remaining in this position ovipositing for about two hours, the body is withdrawn, and the earth raked with her feet into the hole until it is entirely closed. These burrows are commonly made among the roots of grass in a dry soil and a sunny spot; often on the margins of a dry footpath. The female always deposits two, and sometimes three or four separate layings of eggs, at intervals of from two to three weeks. The first is always the most abundant, amounting usually to three or four thousand. After each deposit the abdomen seems to be almost entirely emptied; the insect then feeds voraciously, and fresh ova are soon developed.

The eggs when first deposited are about one-twentieth of an inch in length, slightly conical, obtuse at both ends, and of a bright orange colour. They are placed in such a way that they may be parallel to each other, and adhere together at their sides, with one end directed to the entrance of the burrow. The duration of the egg stage is greatly in-

fluenced by temperature, averaging from four to five weeks.

From the egg there escapes a little active, agile creature, somewhat resembling a pediculus in habits; in fact, the larva of one of the European species was described by so eminent an Entomologist as Kirby, in 1802, as Pediculus melittee, This young larva, a magnified illustration of which is given in Fig. 1,\* is of a bright yellow colour, and of an elongated form, with fourteen segments. The three segments which constitute the trunk are strong and powerful, for the attachment of the legs, which are furnished with sharp-pointed claws, especially adapted for clinging securely to any object. The anal segment on its under surface is developed into a pair of short prolegs. It moves with great celerity with its six true legs; it can also make use of its anal prolegs, and thus climb a nearly smooth and vertical surface.

The young larvæ of most insects, if food is not supplied to them within a day or so of the time of their escaping from the egg, will die of starvation; but these young creatures will live from two to three weeks without food and

maintain their activity, a wonderful adaptation to the circumstances in which they are placed. When hatched, they crawl to the surface and run up the stems of various plants, and often lodge themselves in the flowers and there await the visits of bees and other insects who alight to collect pollen or honey. They watch their opportunity, and attach themselves with great readiness to any of these insects who may come within their reach. It is astonishing with what celerity they fasten themselves to their victim the instant any part of its body is accessible, and with what tenacity they adhere to it, seizing it by the leg, wing, or hairs of the body, and crawling up and adhering aroung the insertion of its legs between the head and thorax or the thorax and abdomen, exciting the greatest possible uneasiness in the winged insect, who vainly endeavours to detach them from its body.

Some observers are of opinion that the parasite draws nourishment from the bee on which it fastens, but the main object of this instinctive attachment seems to be to get access to the cells in which the young and food are stored. Once here, the young larva of *Meloe* is said to attack the larva of the bee or other hymenopterous insect whose nest is thus invaded, and being furnished with strong mandibles, they thrust them into the soft parts of their victims, and prey on their substance through the wounded integuments, while the young bee is nourished with the stored pollen and honey. In this state, having no longer any use for their active limbs, they are gradually reduced to mere tubercles, and after a change of skin, the once active and sprightly creature assumes the form of a

<sup>\*</sup> The small outline alongside shows this larva of the natural size.

thick, fleshy maggot. In this form it continues to feed on the young bees or the bee bread and honey stored for their use, and after passing through some remarkable changes while in the larval condition, first changing to a semi-pupa, then to another form of larva, it subsequently assumes the true pupa state, in which condition it remains in its snug retreat until the following spring, when it bursts its bonds and appears as a beetle.

The young Meloe larvæ often attach themselves to the hairs of insects which construct no cells and do not store up food for their young; and in such cases, which must be very numerous, they necessarily perish. In the light of this fact we can appreciate the import-

ance of the great fecundity of the females.

The larva of Cantharis vesicutoria is almost identical in form with that of Meloe, but soon after escaping from the egg it changes from a yellow to a darker hue, and finally to

a deep black.

The history of our American species is as yet very fragmentary. Dr. Packard has observed the larva of Meloe angusticollis, and found it to differ but little from its European congeners. In a recent number of the Canadian Entomologist, Mr. W. Brodie, of Toronto, gives some highly interesting observations on this species, extending over a series of years. He says :-

"According to my experience, Meloes make their appearance in the perfect state about the end of August or beginning of September, when they feed greedily on Ranunculus acris. Later in the season, when the abdomens of the females are much enlarged, they pair, and later still—sometimes after the first frost—they deposit their eggs and in-

variably die that season.

"The larvæ emerge from the eggs early the following spring, and I think attach themselves to bees generally on the blossoms of the willow. I presume this because I often find females about to oviposit near to willow bushes, but I have detected the young larvæ in the flowers of Caltha palustris, and suppose they will take to any early flowering

"In confirmation of these statements I submit the following from my notes on Meloe

in the vicinity of Toronto, dating from 1870.

- "Although Meloe is common here, I have never found them much further to the north, and as I am pretty well acquainted with all parts of the county, I would say they are not found in the central nor in the northern portions of the County of York. This is curious, as in the better wooded sections the storing Hymenoptera are more numerous than about Toronto.
- "1870—Aug. 30th. In early morning saw several Meloes descending a white oak tree, in St. James' Cemetery, which tree was afterwards blown down and proved to be a bee tree. This would indicate that Meloe pupates in the hive, and when perfect, deserts it during the night.

"1871. Meloes first seen Aug. 10th.

"1872—Aug. 20th. Meloes feeding on R. acris.
"1873—Aug.-Oct. Meloes very numerous, feeding on R. acris; found many females

ovipositing in a cold, wet situation, after first fall frost.

"1874—Aug. 29th. Found about forty Meloes closely huddled in a ball; they were not fighting, and although both sexes were present, do not think they were pairing. None of the females had large abdomens, and when disturbed they all quickly ran away.

"Sept. 1st—10th. Found about sixty Meloes, of both sexes, many of them pairing; feeding on R. acris, on a small miry patch, about one-fourth acre, bounded on the right by a small stream which they could not cross; on the left, about 150 yards up a bank, were six hives of neglected bees. This is the same situation where, in 1873, I found females ovipositing after frost.

"1875—Aug. Found Meloes in same localities as last season. Captured several females; fed them on R. acris; they began ovipositing Sept. 20th. Oct. 20th, all dead. The eggs were of an orange colour, and placed in a hole about \(\frac{3}{4}\) inch deep, and large

enough to receive the abdomen.

"1876—Aug. 15th. Meloes first seen. Sept. 1st, found about fifty in a ball as I had found them in 1874. Do not think they were either fighting or pairing; could not make out what they were doing; when disturbed they soon ran away. This season they were about as numerous as in 1875, in same localities at same dates.

"From these notes, from my own recollections and from the recollections of my children, I infer that Meloes make their appearance about the middle of August, that they pair and oviposit before the winter sets in, and that they never survive the winter; and that they are very seldom, if ever, found under stones in the neighbourhood of Toronto.'

Prof. Riley has made some observations on Epicauta vittata. He describes the eggs of vittata as follows: Length, 0.08 inch, five times as long as wide, elliptical and so uniform in diameter that it is difficult to say which is the anterior end, though there is a slight difference. Egg sometimes very slightly curved. Colour, very pale whitish vel-

low, smooth and shining.

The young larva is yellowish-brown, borders of head and thorax and of joints somewhat more dusky than general surface; tip of jaws and eyes dark brown. Legs and venter paler; venter not corneus except at sides and across segments eleven and twelve. About ten stiff hairs visible superiorly on the posterior border on the middle segments, with a cone-like prominence at the base of each, and six minor bristles in front of them. There are also rows of fainter ventral bristles.

The curious history of these insects throws some light on the fact that while in some localities they are enormously abundant one season, they will be very scarce another. It is to be expected that there would be an alternation between the abundance of certain species of hymenopterous insects and cantharides. When the insects they prey on are abundant the blistering beetles multiply amazingly, and during this immense multiplication exhaust the stock of material on which they feed to such an extent that a year of great abundance in any given locality can scarcely fail to be followed by a season of corresponding scarcity. In other, and sometimes adjacent localities, where the same causes have not operated to a like extent, the insects may be common enough. The great abundance of the sociable and solitary bees in the great plains of the West will probably always afford food sufficient to admit of the maturing of large broods of cantharides.

#### THE DESTRUCTIVE LOCUST OF THE WEST.

By Rev. C. J. S. Bethune, M. A.

Fig. 2.

Caloptenus femur-rubrum.

In our last two Reports—those for 1874 and 1875—we devoted a considerable portion of our space to the consideration of the history, ravages, etc., of the destructive Locust of the West. As a supplement to the accounts that we then laid before the reader, we now beg to draw his attention to the following excellent summary of the migrations of this most noxious insect, and the suggestions that are

made for the alleviation of the plague. The article is taken from the current number of the American Naturalist, and is from the pen of Prof. A. S. Packard, Jr.—one of the ablest

American Entomologists of the day.

"The following remarks concerning the probable causes of the migrations of the western locust are extracted from a forthcoming report on this and other injurious insects in Prof. F. V. Hayden's Annual Report of the United States Geological and Geographical Survey of the Territories for 1875. The facts and theories were in part suggested by observations made by myself in Colorado, Utah, and Wyoming, in 1875, while attached for a few weeks to the Survey, and in part by the reports of Prof. C. V. Riley, State Entomologist of Missouri, and by the statements of Prof. Cyrus Thomas, State Entomologist of Illinois, and Hon. W. N. Byers of Denver, and others.

"In dealing with this fearfully destructive insect, which has attracted so much notice from the public, and in seeking for remedies against its devastations, it is of prime importance to have a thorough knowledge of its breeding places, the frequency and extent of its migrations, and to seek for the connection between the direction of the winds and

other meteorological phenomena, and the flights of the locust.

"The locust is quite or nearly as destructive in Africa, Asia, and Southern Europe, as in this country, but the laws of their migrations and their connection with meteorological phenomena have never been studied in those regions, and it remains for the United States, with its Weather Signal Bureau, to institute in connection with the scientific surveys of the West investigations regarding the nature of the evil, and the best means to overcome it.

"In endeavouring to trace the connection between the migrations of the locusts and the course of the winds at different months, the writer has been led into some theoretical considerations which seem to be supported by the facts presented in the unpublished re-

port, and which may be confirmed or disproved by future investigations.

"History of the Migrations of the Locust.—The following table, compiled from the reports of A. S. Taylor, the late Mr. B. D. Walsh, Prof. C. V. Riley, Prof. C. Thomas, Mr. G. M. Dawson, and the observations of Mr. W. N. Byers, will show the years when the locust was excessively abundant and destructive in the different territories and states, and also serve to roughly indicate the frequency and extent of the migrations of the destructive locust of the West. The dates which are starred are years when the progeny of the locusts of the preceding year abounded, and when in most cases there were no fresh incursions from the westward. The species referred to under the head of California, Washington and Oregon may be some other than Caloptenus spretus.

Manitoba.	Minne- sota and Western Iowa.		Wyom- ing and Idaho.	Utah.	Colo- rado.	Nebraska, Kansas, and Western Missouri.	Indian Terri- tory and Texas.	Califor- nia.	Washington and Oregon.
1818 1819	1818 1819 1820	:	1047			1820 or 1821	7045	1838	1827 or 1828 1834 or 1835
1857	1855 1856*	1855?	1845 1852 1855?	1852 1855 1856* 1857	1855?	1846? 1855	1845 1849 1855 1856*	1855 1856*	1852 1855
1864	1864	1864		1867	1864 1865* 1867	1866 1867	1866 1867		
1868* 1869 1872		1070	1070	1868*	1868	1868* 1869*	1001	4050	
1874	1873 1874 1875 1876	1873 1874 1875 1876	1873 1874 1875 1876	1873?	1873 1874 1875* 1876	1874 1875* 1876	1874 1875 1876	South Cal.	

"This table and the data on which it is based are necessarily very imperfect, owing to the vast extent of the territory over which the locusts swarmed, and the fact that the greater portion is uninhabited, while the inhabited portions have been settled only within

comparatively few years.

<sup>&</sup>quot;The Theory of Migrations.—(1) The immediate cause of the migration of the locust from its original breeding places is the unusual abundance of the species during certain years. It has been found in some cases that the exceptional years when the locust migrates are periods of unusual heat and dryness, conditions unusually favourable to the excessive increase of insect life. As may be seen in the accounts of the eastern locust, the grass army worm, the grain aphis, the chinch bug, and other less destructive insects, when the early part of the season, the spring and early weeks of the summer, are warm and dry, without sudden changes of temperature, insects abound and enormously exceed their ordinary numbers. When two such seasons occur, one after the other, the conditions become still more favourable for the undue development of insect life. Now it is well known that in the Eastern States the summers of 1860 and 1874, preceding the appear-

ance of the army worm and grain aphis, were unusually warm and dry, and favourable not only for the hatching of the eggs laid the year previous, but for the growth and development of the larve or young. Look now at the conditions for the development of locust life on the hot and dry plains, chiefly of Dakota, Montana, Wyoming, and Idaho. We have no meteorological records from these regions at hand, but it is more than probable that the years preceding the migrations of the locusts were exceptionally warm and dry, when the soil was parched with long-sustained droughts, as we know that the corresponding species east of the Mississippi River abounds during dry summers following dry and warm springs.

"Given, then, the exceptional years of drought and heat and the great extent of territory, and we have as the result vast numbers of young hatched out. The year previous having, perhaps, been warm and dry, the locusts would abound, and more eggs than usual would be laid. These would, with remarkably few exceptions, hatch, and the young soon consume the buffalo grass and other herbage, and move about from one region to another, following often a determinate course in search of food. In this way large broods may migrate a long distance, from perhaps twenty to fifty miles. In about six or seven weeks they acquire wings. Experience shows that the western locust, as soon as it is fledged, rises up high in the air, sometimes a thousand feet or much higher. They have been seen to settle at night on the ground, eat during this time, and towards noon the next day fill the air again with their glistening wings. As more and more become fledged, the vast swarm exhausts the supply of food, and when the hosts are finally marshalled, new swarms joining perhaps the original one, the whole swarm, possibly hundred of miles in extent, begins to fly off, borne by the prevailing westerly and north-westerly winds, in a general easterly and south easterly course.

"(2.) The secondary cause of the migration is the desire for food, and possibly the reproductive instinct. The fact that in their migrations the locusts often seem to select cultivated tracts, rapidly cross the treeless, barren plains, and linger and die on the prairies and western edge of the fertile valleys of the Missouri and Mississippi, indicate that the impelling force is due primarily to the want of food, and that the guiding force is the direction of the prevailing winds, for they have no leaders, and we do not believe in the existence of a "migratory instinct" in the locust any more than in the grass army worm, or the cotton army worm, which it is sufficiently evident migrate from field to field, simply in search of more abundant food. Meanwhile the reproductive system of the locusts is maturing, the eggs ripening, and the uneasiness of the locusts during the course of their travels may be unconsciously stimulated by the sexual instincts and the desire to discover

suitable places for egg-laying—a long and tedious operation.

"It has been sufficiently shown that a swarm of locusts observed by Professor Robinson near the entrance to Boulder Cañon, Colorado, travelled a distance of about six hundred miles to Eastern Kansas and Missouri. Though the swarm was first observed at some distance north of Denver, Colorado, it was then on its way from the north, and may have come from some part of Wyoming two or three hundred miles north-westward or Though the winds may vary, and counter-currents exist, and storm gusts from due north, such as often sweep over the plains, and local southerly breezes may retard their flight, the course is either eastward or south-easterly. We know enough of the winds in the Western States and Territories to lay down the law that the general direction of the winds in July and August, along the eastern slope of the Rocky Mountains and on the plains, is from the west and north-west, and accords with the eastward course of the locust swarms. The relations between the average direction of the winds and the migrations of the locust have, however, never been sufficiently studied, either, so far as we are aware, in Europe or in this country. And yet, if we would intelligently study the causes of the excessive increase and migrations of the locust, we must examine the meteorological features of the country, ascertain the periods of drought and undue rainfall, the average direction of the wind for the different months, in order to learn That there are meteorolohow far they correspond with the phenomena of insect life. gical cycles, dry and hot seasons recurring at irregular intervals, while the general average may remain nearly the same century after century, is supported, though it may be vaguely, by observed meteorological facts.

"The question then arises: Can meteorologists predict the coming of seasons of undue heat and drought? and consequently can we predict insect years? that is, the migrations of locusts and the undue increase of the chinch bug and the army and cotton worm? I believe that we shall, after the lapse of years, be able to foretell with a good degree of cer-

tainty locust invasions, and be able to provide against the losses thus incurred.

"On the frontier of the Western States, in Colorado, or in the Territories of Wyoming, Montana, and Utah, where the losses from the ravages of the locust cannot easily be made up by importations from contiguous territories, it seems the most practicable mode to provide in years of plenty against years of want. We should imitate on a grand scale the usage of the ancient Egyptians under Pharaoh, who laid up in time of unusual harvests stores of grain for times of famine. It is said that this has been done diately preceding insect years, which had been predicted by entomologists in conjunction with the meteorologists, we should be saved the distress, destitution, and even loss of life from starvation, which have resulted from ignorance of the laws regulating the appear-

ance of destructive insects, especially the western locust.

"The Return Migration.—By simultaneous observations for a number of years over the region liable to be visited by migratory hordes of locusts, added to the knowledge we already possess, it will not only be possible to predict the course of certain swarms from their breeding-places, and their probable destination, so that when a swarm starts from Montana or Wyoming, its arrival in Colorado a week or a fortnight later may with some certainty be predicted, and again, its arrival in Kansas and adjoining States be announced with a certain amount of precision, as has already been done by Dr. Riley, but we shall be able to foretell the course taken in the return flight of their progeny in the succeeding year. I will confess that, previous to my visit to Kansas and Colorado, in 1875, I was sceptical as to Dr. Riley's opinion that there was a general movement in a north-west course of the young of the previous year, broods from Missouri and adjoining regions north-westward. The facts and resulting theory have already been stated in full by Dr. Riley and others. It remains to determine the causes of this return migration, this completion of the 'migration-cycle,' as Professor Dawson terms it. It is evident that in this case the desire for food is not the cause, for food is many times more abundant in the Mississippi Valley than on the plains whither they return. The solution of the problem, I think, must be sought in the direction of the prevailing winds during the middle of June, the time they become winged. It may be found after a series of careful meteorological observations, that the prevailing winds at this early season are southerly and south-easterly. It has been shown by meteorologists, as I learn from Prof. C. Abbe, that during May and June the winds blow inwards towards the heart of the continent from the Atlantic Ocean and Gulf of Mexico. On application to Gen. A. J. Myer, Chief of the Signal Service of the United States Army, for the meteorological data necessary to confirm this hypothesis, I promptly received a full summary of data observed by the officers of the Weather Signal Bureau for periods of from two to five (usually the latter) years between 1871 to 1876, which show that the prevailing winds in June, in Davenport, Dodge City and Keokuk, Iowa; St. Paul and Breckenridge, Minnesota; Yankton and Fort Sully, Dakota; Omaha, Leavenworth, and Fort Gibson, Indian Territory—all within the locust area—are from the south-east and south. This fact may be sufficient to account for the prevailing course of the return migrations of the locust from the eastern limits of the locust area.

"Let us therefore grant this setting-in of southerly and easterly winds, which may last until the locusts are winged. When they rise on the wing into the air they are known to move in a general north-west direction. It is highly probable that they are borne along by these generally south-easterly winds, and pass over on to the plains. The cause is seen, then, to be entirely independent of subsistence; possibly the reproductive instinct causes them to become uneasy, restless, to assemble high in the air, and seek the dry, hot, elevated plateau of the north-west. Should this be so the cause of the migrations is probably purely mechanical. Abundant testimony is at hand to show that they are wholly at the mercy of the prevailing winds, and that, as a rule, the course of their migrations is quite dependent on the direction of the winds, while the course of the winds depend more or less on the season of the year. We may expect that future

research over sufficient territory will show that the June migrations, from the eastern limits of the locust area, will be towards the north-west, and the July, August, and early Septembar migrations, from the Rocky Mountain plateau, will be in a general east-

erly and south-easterly direction.

measures should be used.

"It is not only of great scientific interest, but of high practical importance, to collect all facts bearing on the return migrations, in order to know where the locusts go in their return migrations the second year, as we only know that they do fly a certain distance northwestward. We want to ascertain the extreme western limits of this return migration. We also want to learn whether they return to their original breeding-places on the eastern slopes of the Rocky Mountains, or whether the westerly winds, if they are westerly,

drive them back and scatter them, so that they do not breed extensively.

"It will be seen by the reader that all grounds for a reliable working theory of locust migrations are based on the work of our Signal Bureau and local observers, and that the observations of the meteorologists and entomologists must go hand in hand. The government has provided a well-organized corps of meteorological observers, and we submit that a number of competent entomologists should take the field, under government auspices. Not only should the border States, especially Texas, Kansas, Nebraska, Minnesota, and Iowa, employ competent entomologists, following the liberal policy of Missouri, which for eight years has had a state entomologist, whose reports have proved of incalculable practical value, as well as of great scientific interest, but the habits of the locust need first of all to be thoroughly studied in the Territories, particularly those of Wyoming, Montana, Idaho, Dakota, Utah, New Mexico, Arizona, and in the State of Colorado. A commission of entomologists should be appointed to make a thorough detailed study for several successive seasons of the habits of the locusts in the Territories mentioned. It would seem that the recommendations made at the recent meeting of Western Governors at Omaha, that an appropriation be made by Congress, and a commission be attached to the existing United States Geological and Geographical Survey of the Territories, is the most feasible and economical method of securing the speediest and best results.

Let us for a moment look at the losses sustained in the United States from the attacks of insects. The annual agricultural products of this country by the last census amounted in value to \$2,500,000,000. Of this amount we in all probability annually lose over \$200,000,000 from the attacks of injurious insects alone. Dr. Riley avers that the losses during 1874 in Missouri from locusts—and it will be remembered that only the western third was invaded—exceeded \$15,000,000. This would make the losses in other parts of the West at least twice as much more, or \$45,000,000 in all. The estimated money loss occasioned by the chinch bug in Illinois in 1864 was over \$73,000,000, in Missouri, in 1874, it is estimated by Dr. Riley to have been \$19,000,000. The annual losses from the chinch bug are greater, Mr. Riley says, than from any other insect. The average annual loss to the cotton crop from the attacks of the cotton army worm alone is estimated at \$50,000,000. Adding to these the losses sustained by the attacks of about a thousand other species of insects which affect our cereals, forage and field crops, fruit trees and shrubs, garden vegetables, shade and ornamental trees, as well as our hard and pine forests, and stored fruits, and it will not be thought an exaggeration to put our annual losses at \$200,000,000. If the people of this country would only look at this annual depletion, this absolute waste, which drags her backward in the race with the countries of the Old World, they might see the necessity of taking effectual preventive measures in restraining the ravages of insects. With care and forethought based on the observance of facts by scientific men, we believe that from \$50,000,000 to \$100,000,000, or from one quarter to one half of this annual waste, could be saved to the country. And the practical, most efficient way is for the States to co-operate with the general Government in the appointment of salaried entomologists, and of a United States commission of entomologists, who should combine the results of the State officials, and issue weekly, or, if necessary, daily bulletins, perhaps in combination with the Weather Signal Bureau, as to the conditions of the insect world, forewarning farmers and gardeners from week to week as to what enemies should be guarded against and what preventive and remedial

"The Weather Signal Bureau, first suggested and urged by the late I. A. Lapham,

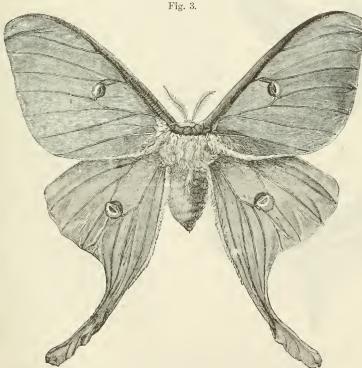
was not instituted without ridicule and opposition, but it has saved millions to our commerce and agriculture. The maintenance of an entomological commission and the appointment of State entomologists would involve comparatively little expense. Already, owing to the full information regarding the invasion of Missouri by the locust in 1874, contained in the reports of Prof. C. V. Riley, the people of that State will be well prepared from the direful experience of the past, to deal more intelligently and efficiently with the locust for the future.

### ON SOME OF OUR COMMON INSECTS.

BY W. SAUNDERS, LONDON, ONTARIO.

THE LUNA MOTH (Actias luna, LINN).

In our Report last year, there was an interesting article on this beautiful insect, by Mr. R. V. Rogers, of Kingston, Ontario. At the time that appeared, we were unable to supply an illustration of the moth, but lately we have succeeded in obtaining a very beautiful one, drawn and engraved expressly for our pages.



This moth (Fig. 3) measures when its wings are spread from  $4\frac{3}{4}$  to  $5\frac{1}{7}$  inches. The wings are of a delicate green colour, thickly covered with pale hairs as they approach the body. There is a purplish brown stripe along the front margin of the fore wings, which stretches also across the thorax, while a small branch of the same is extended to the eye spot near the middle of the wing. The eye spots are transparent in the middle and margined with rings of white, yellow, blue and black. The hinder edges of the wings are bordered with purplish brown. The head is

white while the beautifully pectinated antennæ are of a brownish tinge. The thorax and abdomen are whitish or greenish white, thickly clothed with a woolly down, the former crossed by the purplish brown stripe already mentioned. The legs are purplish brown.

This lovely creature is not at all common in the neighbourhood of London; indeed it can scarcely be called common anywhere in Ontario, although it is very widely and generally distributed. Seldom a season passes without some being captured in our midst, and occasionally we have had them fly in at the windows at night, attracted apparently by the light.

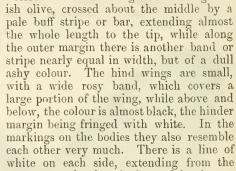
The larva, which is of a bluish green colour, feeds on Hickory, Walnut, Butternut, and sometimes on Beech and Oak, and closely resembles that of *polyphemus*, from which it may be distinguished by its having a pale yellow lateral stripe, bands of the same between the segments, and a brown V-shaped mark on the terminal segment.

For fuller details, we refer our readers to Mr. Rogers' excellent paper.

#### DEILEPHILA CHAMENERII AND LINEATA.

Both these members of the Sphinx family are found more or less plentifully in nearly all portions of the Provinces of Ontario and Quebec; lineata, as far as we have been able to learn, is more abundant in Ontario and chamenerii in Quebec. They are both very handsome moths, and so strong and active when on the wing that it is difficult to capture them without injury. About twilight or a little later their period of activity begins, when they may be seen flitting about with spectre-like rapidity, hovering like the humming bird over flowers, into which their long and slender tongues are inserted in search of the nectar there stored.

They are much alike. In both the ground colour of the fore wings is of a rich green-



head to the base of the thorax, and other less prominent longitudinal lines of white on the thorax. The abdomen is of a greenish olive, having a reddish hue on the sides and spotted with white and black.

There are differences, however, which would enable the most casual observer to separate them without difficulty. There is a difference in size, lineata (Fig. 5) being the largest, measuring when its wings are spread about three and a half inches, while chamaenerii (Fig.

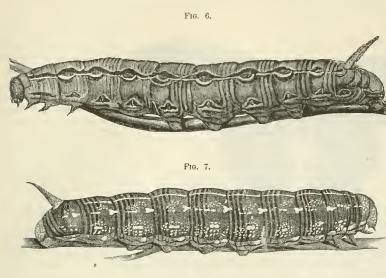


Fig 4.

4) rarely exceeds two and three-quarter inches. The central band on the fore wings in chameenerii is wider and more irregular, but the most striking point of difference between the species is that the veins of the fore wings in lineatu are distinctly margined with white, a character entirely wanting in chameenerii. These differences will be readily appreciated by reference to the figures.

In our Report for 1874, we gave a short description of *D. lineata*, known also as "the white lined morning sphinx;" but since some of our readers may not have access to that eport, we have reproduced some of the figures then used. The beautiful figure of *D.* 

rhamænerii has been drawn and engraved expressly for this report.



The caterpillars of lineata vary much in appearance. In Fig. 6 we have a representation of the most form. common while another form is shown in Fig. 7. They are said to feed upon purslane, turnip, buckwheat, watermelon, also on grape and apple leaves. Mr. Pile, of Dundas, Ont., has found them feeding on the common plantain.

They are found in the larval condition during the month of July, and when full grown they are said to descend into the ground, where they change into light brown chrysalids, and appear as moths in September.

The following description of the larva of D. chamanerii was made from three examples

found feeding on grape leaves on the 5th of July :-

Length, two and a half inches, tapering towards each end: head small, rather flat in front, slightly bilobed, and of a dull pinkish colour, with a black stripe across the front at the base; basal half of palpi yellow, upper half black; mandibles black, with a patch of

yellow between them and the black stripe.

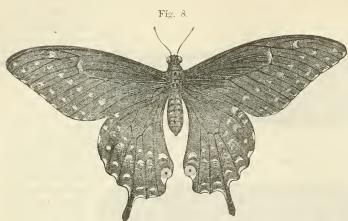
Body above deep olive green, with a brownish tinge and a polished surface. Second segment with a cervical shield similar in colour to head, its sides dull greenish, with two yellow dots. There is a pale yellowish dorsal line terminating at the base of the caudal horn; each segment from 3rd to 12th, inclusive, has a pale yellow spot on each side of the dorsal line, about half way towards the stigmata, those on 3rd segment small and almost crescent-shaped, on the 4th larger and nearly round, 5th still larger, nearly round, 6th, 7th, 8th, 9th, 10th and 11th about equal in size, nearly oval and larger than those on 5th. On 12th segment the spot is more elongated, and extending upwards, terminates at the base of the caudal horn. There is a wide but indistinct blackish band across the anterior part of each segment, in which the yellow spots are set; the sides of the body below the spots are thickly sprinkled with minute raised yellow dots. Candal horn long, curved backwards, red, slightly tipped with black, and with a roughened surface; terminal segment dull pinkish; stigmata oval, yellow, shaded around with dull black.

Under surface much paler, colour dull pale pinkish green, the pink colour predominating from 5th to terminal segments inclusive, and with a number of very minute raised yellowish dots placed chiefly along the sides. Feet black; pro-legs pink, with a patch of black on the outside of each. One specimen spun a light web, binding a portion of the leaf in the manner of pampinatrix, within which it changed to chrysalis on the 10th of July, and from this the image appeared on the 28th of the same month. The other two

larvæ died before completing their transformations.

### THE BLACK SWALLOWTAIL BUTTERFLY (Papilio asterias).

This is one of our commonest butterflies, and is found in nearly all parts of Canada and the United States. It is a very handsome species, with the wings of a black or deep blackish brown colour, with yellow and blue markings. Across the wings there are two bands of yellow spots; those composing the inner one in the male are large and distinct, while in the female they are smaller and sometimes almost obsolete. In Fig. 10, also



engraved expressly for this report, we have an excellent representation of the female. The spots forming the outer band are smaller and near the margin. Besides these, the fore wings have one or two spots towards the upper margin and the hind wings, which are tailed, have a series of seven blue spotsorpatches, and near their hinder angle an eye-like spot of an orange colour, with a black centre.

The under surface of both wings is paler, with the spots arranged nearly as above, excepting that those on the hind wings are tinted with orange. The body is black, with longitudinal rows of yellow spots. The wings, when spread, measure from three and ahalf to four inches across.

The caterpillars, when fresh from the egg, do not measure more than a tenth of an inch in length, are black with a broad white band across the middle, and another on the hinder segments, while the body is studded with small black projecting points. the first skin is cast the white band is restricted to the sixth and seventh segments, and around the base of the black projecting points are spots of an orange colour, while low down on the sides is a row of white spots; there are also two of the same colour on the top of the first segment, and a larger one on the hinder segment. With each moult these caterpillars alter in colour and appearance, and before they are half grown the projecting points, white band, and spots entirely disappear, the skin becomes smooth and of a delicate green colour, rather paler at the sides and whitish below, and each ring is crossed by a band composed of alternate black and yellow spots. When irritated they push forth, from a slit in the first segment of the body, a pair of soft, orange-coloured horns, united at their base, and shaped somewhat like the letter Y; from these, when extended, a disagreeable odour is given off, which serves to defend the caterpillars from the attack of their enemies. They feed on parsley, rue, carrot, parsnip, carraway, and several other plants, both wild and cultivated. When full grown the caterpillar measures an inch and a half in length, it then leaves off eating, and seeks a sheltered spot in which to pass the Here it first spins a little web of silk against the surface of the spot selected, to which its hind feet are firmly secured, it then spins a loop or girth of silken threads to furnish a support to the body, after which it casts its caterpillar skin and appears as a chrysalis. In this state it continues from ten to fifteen days in summer, the time varying with the temperature, when the butterfly escapes.

## NOTES OF THE YEAR.

BY WM. SAUNDERS, LONDON, ONT.

THE ARMY WORM (Heliophila unipuncta).

This troublesome insect has appeared in several sections of our Province during the past year, and although it has not occurred in such hordes as in times past, yet its numbers were sufficiently great during the latter part of the season to excite apprehension of the probability of a more severe invasion during the coming summer. Towards the end of the warm weather the moths were very abundant, and could be captured by hundreds by preparing a bait of molasses and beer, and painting it on fence boards or trees early in the evening.

The moth, when its wings are spread, measures nearly an inch and threequarters. It is of a yellowish drab colour, approaching russet, with a small white dot on the forewings near the middle, and a dusky oblique stripe near the tip, and a few blackish dots over their surface. The hind wings are darker, with a silky lustre, and almost semitransparent. The fore part of the body is similar in colour to the fore-wings, the hinder

part a little darker than the hind wings.

The worm when full grown, measures about an inch and a half in length, is of a dark grey colour, with yellowish and dusky longitudinal stripes. They sometimes appear in immense swarms, devouring whole fields of grain and other grasses during their progress.

#### The Gooseberry Fruit Worm (Pempelia grossularia).

This troublesome pest is increasing rapidly from year to year, and committing great havoc among the gooseberries. We have had many complaints from fruitgrowers during the past season of their destructiveness, with inquiries as to the best methods of counteracting their ravages- One of our correspondents, Mr. B. Gott, of Arkona, has so well explained the workings of this insect, that we think it best in this connection to quote his own words. He says "for some time past we have suffered from the depredations of a worm upon our gooseberries, and not having observed anything in type treating upon this particular insect, I thought it advisable to acquaint you with the facts of the case. While the gooseberry is yet young and tender, say about the size of a pea, a small worm appears and eats its way into the heart of the berry and becomes of a greenish colour. After living there for some time and scooping clean the contents of that berry, it will attack the next nearest berry and secure itself effectually against accident or danger by a sort of net or web-work thrown around and over those berries, at the same time growing in length and strength and prospering everyway as satisfactorily as insect could desire. About the time that gooseberries are nearly ripe, say during the latter part of July, it has attained its full dimensions as a devouring larva, and is about one inch or one and a quarter in length with six claw-like feet towards the head. By this time it has enclosed some ten or twelve berries in its capacious web to satisfy its voracious and increasing demands, scooping all out thoroughly.

"The worms work by thousands on our plantations of a few hundred bushes and destroy from one-half to two-thirds of the entire crop of berries. Now as this fruit is of considerable value and importance, this insect depredation is felt to be something more than a benefit. It amounts to more than thinning; it is an actual loss to the grower, and

the trouble is an ever increasing and rapidly growing one. What can be done to counteract the workings of this enemy to gooseberry culture?"

This worm is the progeny of a small grey moth (see Fig. 9), which lays its eggs upon



the gooseberries as soon as they begin to form. The moth, when its wings are expanded, measures nearly an inch across. Its fore wings are pale grey with dark streaks and bands. There is a transverse diffuse band a short distance from the base of the wing, enclosing an irregular whitish line which terminates before reaching the front edge of the wing. Near the outer edge is

another transverse band enclosing a whitish zig-zag line. There is also a row of blackish dots within the outer margin; the veins and their branches are white. The hind wings are paler and dusky. The head, antennæ, body and legs are all pale grey, more silvery underneath than above.

This insect passes the winter in the chrysalis state, enclosed in a brown papery-looking cocoon (see Fig. 9), hid amongst leaves or other rubbish on the surface of the ground, and escapes from the chrysalis, and appears as a moth during the latter part of April. Shortly after they seek their mates, and the females are ready to deposit their eggs as soon as the fruit is sufficiently advanced in growth, these are probably attached singly to the fruit, where in a few days they hatch, producing worms, which burrow in the fruit as our correspondent has described.

When full grown, the worms lower themselves to the ground by silken threads which they spin at will, and there construct their little silken cocoons amongst the dried leaves and rubbish, and remain in this inactive state until the following spring; hence there is only one brood during the year.

The infested fruit soon indicates the presence of this larva, by becoming discoloured and withered. We have found them attacking currants also, both white and red, and occasionally infesting the black current.

The most satisfactory remedy we know of, is hand-picking. The evidences of their presence are not difficult to detect. Any berries found colouring prematurely, should be examined, and as the larvæ slip out and fall to the ground very quickly care must be taken that they do not escape in this manner. We have tried dusting the bushes with fresh air-slacked lime late in April, with good results, the moths seeming to avoid almost entirely bushes so dusted. We would also suggest keeping the ground under the bushes clean, so as to afford them no hiding-places, also the use of some ashes or lime strewed under the bushes. It is said that, if chickens are allowed the run of the gooseberry patch after the fruit has been picked, they will greatly lessen their numbers by devouring the chrysalids. The mode of life adopted by this insect prevents the successful use of any poison applied to the bushes as may be readily done when the larva feed on the leaves of the bush they infest.

#### THE CABBAGE BUTTERFLY (Pieris rapæ).

While we regret to have to record the onward march of the Cabbage Butterfly which has now spread over the whole of western Ontario, destroying yearly tens of thousands of cabbages, we are at the same pleased to be able to state that its natural enemy the little ichneumon parasite, Pteromalus puparum, described in our previous reports, is closely following in its wake--out of a large number of chrysalids of the butterfly found about London, a considerable proportion have been found upon examination to be infested with these parasites.

This friendly insect is a tiny four-winged fly, about one-eighth of an inch long, with a golden coloured body and greenish head. The female spends her time in searching for the chrysalids of the butterfly, into which she drills little holes and therein deposits her eggs; these hatch into tiny maggots, which prey upon the substance of the chrysalis and finally devour it.

#### BENEFICIAL AND INJURIOUS INSECTS.

(Chiefly of the Order Hymenoptera.)

BY JOSEPH WILLIAMS, LONDON, ONT.

- 1. The Common Bee (Apis mellifica.)
- 2. The Bee-moth or Wax-worm (Gallerea cereana) Fabr.
- 3. The Bee-killer (Trupanea apivora) Fitch.
- 4. The Ring-legged Pimpla (*Pimpla annulipes*) Br. 5. The Pigeon Tremex (*Tremex columba*) Linn.
- 6. The Sigalphus Circulio Parasite (Sigalphus curculionis) Fitch.
- 7. The Porizon Curculio Parasite (Porizon conotracheli) Riley.

To the student of insect life, and even to the most ordinary observer, there is no class of insects more interesting and wonderful than the Hymenoptera (membranous winged insects), as our readers will no doubt admit when we say that to this order belong the Bees, Humble Bees, Wasps, Ants, Gall Flies, and many other less familiar forms. Naturalists, as well as poets and thinkers of all ages, have been led to admire them for their wonderful powers of architecture, their economic foresight, their marvellous instincts, and their admirable social organizations, all of which prove a very high order of intelligence. Two living entomologists—Dana and Packard—place them at the head of their lists in their systems of classification, considering them the most perfect insects. Dana says of them, "They exhibit the normal size of the insect type, which is between eight and twelve lines in length, and two and a half or three in breadth." Packard ascribes to them "instincts and a kind of reason differing, perhaps, only in degree from that of man.

The metamorphoses of the Hymenoptera are complete, that is, in their development they pass through the four stages of a typical insect, viz. : the egg, the larva, the pupa or chrysalis, and the image or perfect insect.

They have small but powerful membranous wings well adapted for long sustained

We propose to compile such information, from scattered authors, as may be at once interesting and instructive; and will commence with the common Honey Bee.

#### THE HONEY BEE (Apis mellifica).

This valuable little insect has been known from the times of the ancients, and at present it is cultivated over the entire civilized world, and in many uncivilized and thinly peopled countries is found wild; it was introduced into America during the seventeenth

In a complete hive of bees there are three very distinct kinds of individuals—the female, mother, or queen bee,—the neuters or working bees which are incompletely de-

veloped females—and the males or drones.

A still further subdivision may be made: "There have been observed amongst bees two sorts of females or queens, a large one and a small. Needham first observed the latter: and their existence, P. Huber tells us, has been confirmed by several observations of his father. They are bred in cells nearly as large as those of the common queens, from which they differ only in size. Though they have ovaries, they have never been observed to lay eggs. Reamur observes that some queens are much larger than others; but he attributes this difference of their size to the state of the eggs in their body. There are two descriptions of males—one not bigger than the workers, supposed to be produced from a male egg laid in a worker's cell. The common males are much larger and will counterpoise two workers. The workers are divided into the wax workers and the nurse bees; the latter are smaller than the former; their stomach is not capable of such distension; and their office is to build the combs and cells after the foundation has been laid by the wax workers, to collect honey, and to feed the larvæ. The nurse bees, however, do secrete wax, but in very small quantities." (Kirby and Spence's Entomology.)

The working bees are the crowd, the masses, the living force; they greatly outnumber other individuals. The worker is smaller than either the queen or drone; it has three pairs of legs as have the others, but the hindermost pair of the worker's legs is developed in a peculiar manner to enable it to perform the duties belonging to it; the leg is much enlarged near its farther end, and resembles a long triangle in outline; a set of sharp points or many strong spines, which are regularly distributed, form a kind of rake toward the extremity, and this implement enables the bee to seize the waxy plates that are between its abdominal segments. The first joint of the tarsus or foot succeeds the leg and attains a great size, when compared with that of the other members of the structure. Being articulated with or jointed to the leg by its internal angle, the free external portion forms, with the leg, a true pair of pincers; moreover two small spines render the arrangement all the more perfect. This joint is square in outline, and is perfectly smooth on the outside, whilst it is furnished on the inside with many transverse sets of stiff hairs of equal size. The limb acts capitally as a trowel and as a brush. The fertile female or queen, which never works, has the traces of this arrangement, and the males also; but neither of them has the pinching and brushing structures: these are restricted to the workers.

The worker or neuter possesses a pair of movable mandibles or jaws which close the mouth on the side; its trunk or proboscis consists of four horny like scales which enclose a tongue about the size of a hair, which when magnified appears to be formed of successive rings. One pair of these sheathing scales is provided with a fringe of hairs, intended, no doubt, to brush off and secure the honey which is found in the cups of flowers, and a more efficient and beautiful instrument we could not conceive of. This tongue is not used for sucking as in the case of butterflies, but for lapping; when not in use it is folded in a small compass. The antennæ are twelve jointed and terminate in a knob; they probably serve as a means of communication, and as delicate organs of touch. The abdomen consists of six joints or rings, and under the scaly coverings of the four middle ones are situated the receptacle for the wax. Neither the queens nor the drones have any provision for the collection of pollen or the secretion of wax, as their duties are of another kind. The abdomen of the worker is terminated by a straight sting; the drone has none; that of the queen is curved. The wings of the worker and those of the drone, cover the abdomen entirely, whilst those of the queen cover only onehalf. Other characteristics and the relations of these creatures to each other will be best shown by an examination of their social life, and their division of labour, which are among the strongest arguments for ascribing powers of reason to these insects.

A colony of bees consists, besides the young brood, of one queen, several hundreds of

males or drones, and many thousand workers or neuters.

In the summer time, a bee hive is truly a busy place: all is bustle without confusion: each insect has its appointed work to do, and all are diligent. At the door stand the watchful sentinels ready to challenge rash intruders, while passing in and out are hundreds of busy workers, some carrying their sweet burdens to the common store-house, whilst others are setting off in search of new supplies. Here we see a worker engaged in a contest with a venturesome stranger, and there are others performing the last sad offices for a dead companion. Their industry is remarkable and has become proverbial, as can testify many a lagging urchin who has been referred to the bee to find incitement to industry.

"How doth the little busy bee, Improve each shining hour," &c.

When a colony takes possession of a hive, be it an artificial one or a natural cavity, the first operation is to stop up all the openings, except one, which is to form the door. The substance used in this process is called *propolis*, and is an odorous gum resin taken from the buds of the poplar, pine, fir, and beech trees. It is said that bees sometimes use this propolis for embalming the dead bodies of enemies which cannot be removed fromt he hive, and which are in this way prevented from decomposing. If so, the Egyptians lose a trifle of their celebrity in this regard. After the hive is properly prepared, the next step is to lay the foundation for the cells which are to form the comb. The material necessary, is wax. Wax was formerly supposed to be derived from the pollen of flowers

alone, but it has been proved that bees fed solely on pollen do not secrete wax, but do when saccharine matter is supplied. A detachment of workers is sent to the fields to collect supplies and soon return loaded. One now attaches itself to the roof, allowing its body to hang down; another fastens its front legs to the hinder ones of the first; and this operation is repeated until a large cluster is formed, suspended from the top of the hive. The bees remain in this position about twenty-four hours, during which time the food they have collected is altered by some process into wax, and appears under the joints of the abdomen. One now separates itself from the mass, and forcing its way to the roof, clears a space of about an inch in diameter, in which it can move freely: it then suspends itself, and, seizing one of the laminæ of wax with a pincer formed by two joints of the hind leg, withdraws it from beneath the abdominal ring, and carries it to its mouth. Here it masticates it, mixing it with the frothy saliva; during the operation the tongue assumes many forms: now it is flattened like a spatula; then like a trowel; at other times it resembles a pencil terminating in a point. The saliva mixed with the wax gives it a whiteness and opacity which it had not before, and another object of the admixture is doubtless to give it that ductility and tenacity which it possesses in its perfect state The bee next applies the ribands of wax which result to the vault of the hive, disposing them with its mandibles in the direction which it wishes them to take: it continues these manœuvres until it has employed all the laminæ of wax it has elaborated. At length it leaves its work, and is lost in the crowd of its companions. Another succeeds and resumes the employment; then a third; all follow the same plan of placing their little masses, and if any by chance gives them a contrary direction, another coming removes them to their proper place. The wax-makers having thus laid the foundation of a comb, are succeeded by the nurse bees, which are alone competent to model and perfect the work. The former are the labourers who convey the stone and mortar; the latter the masons who work them up into the form which the intended structure requires. One of the nurse bees with its mandibles moulds in the wall a cavity which is to form the base of one of the cells. When it has worked some minutes it departs, and another takes its place, deepening the cavity, heightening its lateral margins by heaping up the wax to the right and left, by means of its teeth and fore feet. More than twenty bees successively employ themselves in this work. At a certain time other bees begin on the yet untouched and opposite side of the mass, and commencing the bottom of two cells, are in turn relieved by others. The wax-makers bring fresh supplies from time to time for the use of the nurse bees. After having worked the bottom of the cells of the first row into their proper forms, they polish them, while others begin the outline of a new series. The cells or prisons are next constructed, and engrafted on the borders of the cavities, and the length of the tubes is so perfectly proportioned, that there is no observable inequality among them. It is to be remarked that although the general form of the cells is hexagonal, the first begun are pentagonal. "When one has well examined," says Reamur, "the true shape of each cell, when one has studied their arrangement, geometry seems to have guided the design for the whole work. One finds that all the advantages which could have been desired are here combined. The bees seem to have had to solve a problem containing conditions which would have made the solution appear difficult to many geometricians. The problem may be thus enunciated: given a quantity of matter, say of wax, it is required to form cells which shall be equal and similar to each other, of a determined capacity, but as large as possible in proportion to the quantity of matter employed, and the cells to be so placed that they may occupy the least possible space in the hive. To satisfy this last condition, the cells should touch each other in such a way that no angular spaces remain between them."

That the bees have fully solved the above problem is evident, and the judgment they use renders it impossible for us to view them as mere organized machines, whose instinct is their spring of action: we are forced to concede to them intelligence—(Figuieur).

The two rows of cells placed back to back form the comb, and the combs are so arranged that the bees have just space to pass between them. The size of the cell varies, but the majority of them are small, some are slightly larger, and a few are of considerable size, and those usually at the ends of the combs. The smallest are for the larvæ of the workers, the next will be filled by those of the male, and the largest cells will contain queens or fertile females.

As soon as the cells are finished the queen or fertile female runs over the surface of the combs and lays an egg in each cavity, and she is attended by a host of workers who take care that only one egg is dropped into each cell. Should two fall in, one is pulled out and destroyed. When the laying is finished the work of the queen is at an end, and she does not concern herself in any way about the larvæ. The eggs are not long in being hatched. From the moment when the larva comes out of the egg until that of its metamorphosis into a pupa, it keeps in its cell, motionless as an Indian idol. The working bees visit it from time to time. In from three to five days the larvæ are developed; they have absorbed all their pap, and have no need from that time of any nourishment, for they are now about to change to pupæ. The nurses now pay them a last attention, they wall them up in their cells, closing the openings with a waxen covering. In thirtysix hours they have spun for themselves a silken cocoon in which they undergo their transformation. The perfect insect is ready in seven or eight days to appear in broad daylight; it breaks through the thin transparent covering in which it is swathed; then with its mandibles it pierces the door of its prison and issues forth. It soon becomes strong, and if it is a worker it is not long in getting to work and mixing with its companions in labour. Queens require sixteen days from the laying of the egg before they are ready to emerge from their cells; workers require twenty; and drones require twentyfour. The rearing and birth of the queen differs from that of others. In proportion as their larvæ increase in size do the workers enlarge the cells which contain them, and then again gradually diminish their size as the moment of their last change approaches. A special and peculiar food is given to the larvæ that are to form the queens, it is heavier and sweeter than that given to the other larvæ. The food and the situation appear to be the causes which decide the nature of the forthcoming insect, as when the hive becomes in any way queenless the workers choose a larva which, in ordinary circumstances, would become a worker, and by alterations in its dwelling and by supplying it with royal food ultimately produces a perfect female or queen. As soon as they have quited their cradles, the young queens are ready for flight; but the workers and males are less strongly organized, they require a rest of about a day before taking part in the sports and labours of the

When hatching has begun, each day adds some hundreds of young bees to the population of the hive, which soon becomes too small, and then occur those remarkable emigrations called swarms. When this remedy becomes necessary, the inhabitants become excited, drop their work, and the agitation becomes general; the queen runs from place to place, but does not receive her customary homage; the workers are no longer attentive to the young brood; the hum increases in intensity, and as if panic striken the bees rush from the hive, led or accompanied by a queen. The swarm flies about and soon settles on a suitable branch, forming a dense mass of living animals supporting each other by the claws of their feet. Sometimes it happens that two queens go out with the same swarm; and the result is that the swarm at first divides into two bodies, one under each leader but they usually unite again, and when the whole are housed the question of sovereignty is settled by the stronger queen destroying the weaker. Until this great question is decided, the bees do not settle to their usual labour. Two queens in the same hive is something that cannot be endured, and there are many accounts of the singular duels which decide such matters.

When the colony is thoroughly organized, and the members are beginning to accumulate provisions, a most singular tragedy takes place. The drones or males are no longer wanted, and they must be got rid of. The massacre is performed by the workers, who seize the drones, pull them by their legs, wings, or antennæ, and finally kill them with their stings. The pitiless executioners do not spare even the larvæ and pupæ of the males. The slaughter goes on for several days or until all the males are killed, they not being able to defend themselves as they have no stings. In two cases the drones are not destroyed—when the queen lays only male eggs, and when the hive is without a queen. But we have said little as yet about the most familiar product of the bee—we mean honey. Let us accompany them on their excursions into the fields. On these occasions the principal object of the bees is to furnish themselves with three different materials: the nectar of flowers from which they elaborate honey and wax; the pollen, or fertilizing dust from the anthers of the flowers, of which they make what is called the bee bread, serving as

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food both to old and young; and the resinous substance called propolis, which we have described in speaking of the preparation of the hive in the first place. The nectar is a fluid secreted by the flowers, and is extracted by the bees by means of their long tongues they do not take up this fluid by suction but by a lapping motion; the juice is then conveyed into the first stomach or honey bag, which is small when empty, but when filled becomes swelled to a considerable size. In the honey-bag the fluid is changed into honey, and from this bag the bee ejects it into one of the cells on her return to the hive. Honey is never found in the second stomach, which is reserved for the bee-bread. In collecting honey, bees do not confine themselves solely to flowers; they will sometimes very greedily absorb the sweet juices of fruits, they are also fond of sugar; though the great mass of the food of bees is collected from flowers, they do not wholly confine themselves to a vegetable diet; for, besides the honeyed secretion of the aphides, the possession of which they will sometimes dispute with the ants, upon particular occasions they will eat the eggs of the queen; they are also very fond of the fluid that oozes from the cells of the pupe, and will suck eagerly all that is fluid in their own abdomens after they are wounded by their rivals. Although bees in some instances appear to know and do avoid many flowers yielding poisonous honey, yet they have been known to collect poisonous honey in large quantities. In the autumn and winter of the year 1790, an extensive mortality was produced amongst those who had partaken of the honey collected in the neighbourhood of Philadelphia. The attention of the American Government was excited by the general distress, a minute inquiry into the cause of the mortality ensued, and it was satisfactorily ascertained that the honey had been chiefly extracted from the flowers of Kalmia latifolia—known by the common names of Mountain Laurel or Calico Bush—a plant possessing strong narcotic properties. History informs us that honey found at Trebizond, on the Black Sea, threatened fatal effects to such of the Greek army, as partook of it, in the celebrated retreat after the death of the younger Cyrus; those soldiers who ate it in small quantities appeared as if intoxicated, while such as partook of it freely appeared as if mad or about to die, numbers lying on the ground as if after a defeat. Pliny observes that this honey was collected from a species of Rhododendron.

When the stomach of the bee is filled with nectar, it next, by means of the feathered hairs with which its body is covered, pilfers from the flowers the fertilizing dust of the anthers—the pollen, which is equally necessary with the honey to the society, and may be named the ambrosia of the hive, since from it the bee-bread is made. Sometimes the bee is so discoloured with this powder as to look like a different insect, becoming white, yellow or orange, according to the flowers in which it has been busy. Reamur was urged to visit the hives of a gentleman who, on this account, thought his bees were different from the common kind. He suspected, and examination proved, that the circumstance just mentioned occasioned the mistaken idea. When the body of the bee is covered with farina, with the brushes of its legs, especially its hind ones, it wipes it off; not as we do with our dusty clothes; to dissipate and disperse it in the air, but to collect every particle of it, and then to knead it and form it into two little masses, which she places, one in

each, in the baskets formed by hairs on her hind legs.

Reamur seems to think that bees fly indiscrimately from one species of flower to another, but the testimony of many other naturalists is, that they collect only from the same species on each trip, as they have been observed to pass over numerous others in search of flowers similar to that with which they began. It seems not improbable that the reason why the bee visits the same species of plant during one excursion may be this: her instinct teaches her that the grains of pollen which enter into the same mass should be homogeneous, in order perhaps for their more effectual cohesion; and thus Providence also secures two important ends—the impregnation of those flowers that require such aid, by the bees passing from one to another; and the avoiding of the production of hybird plants, from the application of the pollen of one kind of plant to the stigma of another.

When a bee has completed her lading she returns to the hive to dispose of it. The honey is disgorged into the pots or cells destined to receive it, being discharged from the honey-bag by its alternate contraction and dilation. A cell will contain the contents of many honey-bags. Bees, when they bring home the honey do not always disgorge it; they sometimes give it to such of their companions as have been at work within the hive. Some of the cells are filled with honey for daily use, and some with what is intended as a re-

serve, and stored up against bad weather or a bad season; these are covered with waxen lids.

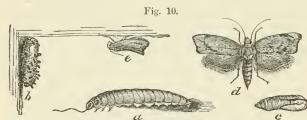
The pollen is employed as circumstances direct. When the bee laden with it arrives at the hive, she sometimes stops at the entrance, and very leisurely detaches it by piecemeal, devours one or both the pellets on her legs, chewing them with her jaws, and passing them then down the little orifice before noticed. Sometimes she enters the hive, and by a peculiar noise produced by beating her wings she attracts to her three or four of her

companions who relieve her of the supply and devour it.

Very much more might be said about bees, especially in regard to such points as their love, anger and hate, their foresight, and the numerous expressed theories as to their possession of more than mere sensation as their guide. Such topics, although very interesting, are of a nature too speculative for the present, but those desirous of pursuing the subject in that direction can obtain abundance of literature. We will conclude by describing, in the next two articles, two insect enemies of the bee, although they are not members of the Hymenopterous order. It is well known among cultivators that bees-hives are subject to the attacks of large hawkmoths, and even mice are known to enter a hive. Bees are also afflicted by parasites. But by far the worst enemy the bee-keeper has to contend with is—

THE BEE-MOTH OR WAX WORM. (Gallerea cereana) FABR. (Lepidoptera, Tineida).

The following is from Riley's First Annual Report for Missouri:-



"This insect is so well known to bee-men generally; that it scarcely needs a description. It is well illustrated above (Fig. 10) in all its shapes, a showing the full-grown worm, b the cocoon which it spins, c the chrysalis to which it changes, d the female with

wings expanded, and e the male moth viewed from the side with the wings closed. It suffices to say, that the colour of the moth is dusky gray, the fore wings which are scolloped at the end, being more or less sprinkled and dotted with purple brown. The female is generally a good deal larger than the male, though there is not so much difference between the sexes as some writers have supposed. The worms which produce these moths are of an ash-gray colour above, and yellowish white beneath.

"The Rev. L. L. Longstroth, in his excellent work on the Honey Bee, which every bee-keeper should possess, has given such a complete account of the Bee-moth, that it is only necessary for me to mention a few of the most important facts with regard to it, my object being principally to show that there can be no such thing as a moth proof hive; that wire gauze contrivances are of no avail, and that the man who pretends to sell a moth

proof hive, may usually be set down as a know-nothing or as a swindler.

"The Bee-moth was first introduced into this country from Europe about the commencement of the present century, and it was in all probability imported with the common bee-hive. There are two broods of the moth each year, the first brood appearing in May or June, and the second, which is the most numerous, in August. During the day-time these moths remain quietly ensconced in some angle of the hive, but as night approaches they become active, and the female uses her best endeavours to get into the hive, her object being to deposit her eggs in as favourable a place as possible. Wire gauze contrivances are of no account to keep her out, as she frequently commences flying before all the bees have ceased their work. But even if she were entirely prevented from entering the hive, she could yet deposit her eggs on the outside, or by means of her extensile ovipositor thrust them in between the slightest joint or crack, and the young worms hatching from them would readily make their way into the hive. The moment the worm is hatched, it commences spinning a silken tube for its protection, and this tube is enlarged as it increases in size. This worm cuts its channels right through the comb,

feeding on the wax, and destroying the young bees on its way. When full-grown it creeps into a corner of the hive or under some ledge at the bottom, and forms a tough white cocoon of silk intermingled with its own black excrement as in figure b. In due

time the moth emerges from this cocoon.

"A worm-infested hive may generally be known by the discouraged aspect which the bees present, and by the bottom board being covered with pieces of bee-bread mixed with the black gunpowder-like excrement of the worm. It must not be forgotten, however, that in the spring of the year, pieces of bee-bread at the bottom of the hive, when not mixed with the black excrement, is not necessarily a sign of the presence of the worm, but, on the contrary, may indicate industry and thrift. If a hive is very badly infested with the worm, it is better to drive out the bees and secure what honey and wax there may be left than to preserve it as a moth-breeder to infest the apiary. If put into a new hive, the bees may do something, and if they do not there is no loss, as they would have perished finally from the ravages of the worm.

"It should invariably be borne in mind that a strong stock of bees is ever capable of resisting, to a great extent, the attacks of the worm; while a starved or queenless swarm is quite indifferent to its attacks. In a common box-hive, a good way to entrap the worms after they are once in a hive is to raise the front upon two small wooden blocks, and to put a piece of woollen rag between the bottom board and the back of the hive. The worms find a cozy place under the rag, in which they form their cocoons, and may there be found and killed from time to time. Much can be done in the way of prevention, by killing every morning the moths which may be found on the outside of the hives. At this time of the day they allow themselves to be crushed, with very good grace, and if two or three are killed each morning, they would form an important item at the end of the year, especially when we recollect that each female is capable of furnishing a hive with at least 300 eggs. In conclusion, I give it as my conviction that immunity from the ravages of the bee-worm can only be guaranteed where a thorough control is had of both hive and bees: hence the great importance of the movable frame hive."

#### THE BEE KILLER (Trupanea apivora), FITCH (Diptera, Asilida).



The following is also from Riley's First Annual Report:—
"In the last chapter of his ninth Report, Dr. Fitch describes a fly by the name of of the 'Nebraska Bee-killer,' which he received from Mr. R. O. Thompson, of Nursery Hill, Otoe County, Nebraska, and which the latter named gentleman had found preying upon the bee in North Nebraska in the summer of 1864. Mr. Thompson has since removed from Nebraska to North Missouri, and in conversation with him he informed me that he had met with this beekiller each year since 1864, and that it seemed to be increasing. At a later day, in a communication to the Rural World, of Sept. 12th, 1868, he states that it made its appear-

ance in such numbers in North Missouri last summer that it, to a great extent, prevented the bees from swarming. I present above, at Fig. 11, a life-size portrait of this voracious insect, its general colour being yellowish-brown or yellowish-gray. This figure will enable its ready recognition, and those who wish a very full and detailed description of it will find it in the report of Dr. Fitch, above referred to. It belongs to the Asilus family of two-winged flies, which have been very aptly termed the hawks of the insect world. Last July I found these flies quite common in Mr. Shaw's beautiful gardens in St. Louis, and I watched them by the hour, and found, to my amazement, that though other insects were relying all around, as well as other species of bees, yet they never seized any other species but the common honey-bee. They capture the bee on the wing, pouncing on it with lightning-like rapidity, and grasping it securely with the fore legs, they alight upon some plant, or even upon the ground, and rapidly suck out the inside of the bee, with the stout and powerful proboscis which is shown in the figure, leaving the empty shell when they get through. Mr. Thompson says that beneath some favourable perch that is near the apiary, hundreds of these bee-shells may be found accumulated in a single day, while he

has watched and found that a single fly on one of those perches destroyed no less than

141 bees in that period of time.

"The habits of these flies are little known, and until they are better understood no feasible way of protecting the bees from their attacks can be given. Those which are known to haunt the apiary should be captured, and this can best be done by means of a net. It is almost impossible to catch them while on the wing, though as soon as they have settled with their prey they are caught with comparative ease. It will pay thus to catch them, for they are, doubtless, the cause of much of the non-swarming which we hear of."

In addition to the Bee-moth and the Bee-killer, there are several small insects which are parasitic on the Honey Bee, but which, although very numerous in Europe, are not very familiar in America, We give here a few notes from Packard's work entitled "Our

Common Insects."

In Europe, one of the most formidable foes of the hive bee is the Phora, a small fly about a line and a-half in length: it is found in the summer and autumn flying slowly about flowers and windows, and in the vicinity of bee hives. When impelled by instinct to provide for the continuance of its species, the Phora enters the bee-hive and gains admission to a cell, when it bores with its ovipositor through the skin of the bee larva, laying its long oval egg in a horizontal position just under the skin. The embryo of the Phora is already well developed, so that in three hours after the egg is inserted in the body of its unsuspecting and helpless host, the embryo is nearly ready to hatch. In about two hours more it actually breaks off the larger end of the egg-shell and at once begins to eat the fatty tissues of its victim, its posterior half still remaining in the shell. In an hour more it leaves the egg entirely, and buries itself completely in the fatty portion of the young bee. The maggot moults three times. In twelve hours after the last moult it turns around with its head towards the posterior end of the body of its host, and in another twelve hours, having become full-fed, it bores through the skin of the young, eats its way through the brood-covering of the cell, and falls to the bottom of the hive, where it changes to a pupa in the dust and dirt. Twelve days after the fly appears.

The young bee, emaciated and enfeebled by the attacks of its ravenous parasite, dies, and its decaying body fills the bottom of the cell with a slimy, foul-smelling mass, called "foul-brood." This gives rise to a miasma which poisons the neighbouring brood, until the contagion (for the disease is analogous to typhus, jail, or ship fever) spreads through the whole hive, unless promptly checked by removing the cause and thoroughly cleansing

the hive.

Foul-brood sometimes attacks an American hive, and, though the cause may not yet be known, yet from hints given above, we hope to have the history of our species of Phora cleared up, should our disease be found to be sometimes due to the attacks of

such a parasite fly.

Another foe is the Bee-louse of Europe, Braula cæca, a singular wingless spiker-like fly, allied to the wingless sheep-tick, the wingless bat-tick, and the winged horse-fly. The head is very large, without eyes or ocelli (simple eyes), while the ovate hind-body consists of five segments, and is covered with stiff hairs. It is one-half to two-thirds of a line long. This spider fly is "pupiparous," that is, the young, of which only a very few are produced, is not born until it has assumed the pupa state, or is just about to do so. larva is oval, eleven-jointed, and white in colour. The very day it is hatched, it sheds its skin, and changes into an oval puparium of a dark brown colour. Its habits resemble those of a flea. Indeed, should we compress its body strongly, it would bear a striking resemblance to that insect. It is evidently a connecting link between the flea and the two-winged flies. Like the former, it lives on the body of its host, and obtains its food by plunging its stout beak into the bee and sucking the blood. It has not been noticed in this country, but is liable to be imported on the bodies of Italian bees. Generally one or two of the Braulas may be detected on the body of the bee: sometimes the poor bees are loaded down by as many as a hundred of these hungry blood-suckers. Assmuss recommends rubbing them off with a feather, as the bee goes in and out of the door of its hive.

Among beetles, the *Trichodes apiarius* has long been known in Europe to attack the young bees. In its perfect or beetle state, it is found on flowers, like our *Trichodes Nuttallii*, which is commonly found on Spiræas in August, and which may yet prove

to enter our bee hives. The larva devours the broad, but with the modern hive its ravages may readily be detected.

The Oil-beetle, *Meloë angusticollis* is a large dark-blue insect found crawling in the grass in the vicinity of *Andrena*, *Halictus*, and other wild bees in May, and again in August and September. (Our readers will find this Meloë fully described in another part

of this Report, by Mr. Saunders.)

Fabre has also, in a lively and well-written account, given a history of the Sitaris, a European beetle, somewhat resembling Meloë. He says that Sitaris lays its eggs near the entrance of bees' nests, and at the very moment the bee lays her egg in the honey cell, the flattened, ovate Sitaris larva drops from the body of the bee upon which it has been living, and feasts upon the contents of the freshly laid egg. After eating this delicate morsel, it devours the honey in the cells of the bee, and changes into a white, cylindrical, nearly footless grub; and after it is full-fed, and has assumed a supposed "pupa" state, the skin, without bursting, incloses a kind of hard "pupa" skin, which is very similar in outline to the former larva, within whose skin is found a whitish larva which directly changes into the true pupa. In a succeeding state, this pupa in the ordinary way changes into a beetle which belongs to the same group of Coleoptera as Meloë.

The history of Stylops, a beetle allied to Meloë, is no less strange than that of Meloë, and is in some respects still more interesting. On June 18th, I captured an Andrena vicina which had been "Stylopized." On looking at my capture, I saw a pale reddish brown triangular mark on the bee's abdomen: this was the flattened head and thorax of a female Stylops. On carefully drawing out the whole body, which is very extensible, soft and baggy, and examining it under a high power of the microscope, we saw multitudes, at least several hundreds, of very minute larvæ, like particles of dust to the naked eye, issuing in every direction from the body of the parent now torn open in many places, though most of them made their exit through an opening on the under side of the head thorax. The Stylops, being hatched while still in the body of the parent, is therefore viviparous. She, probably, never lays eggs. It appears that the larvæ are hatched during the middle or last of June from eggs fertilized in April. The larvæ then crawl out on the body of the bee, on which they are transported to its nest, where they enter, according to Peck's observations, the body of the larva, on whose fatty parts they feed. Previous to changing to a pupa, the larva lies with its head turned towards that of its host, but before assuming the perfect state (which they do in the late summer or autumn), it must reverse its position. The female protrudes the front part of her body between the segments of the abdomen of her host. This change, Newport thinks, takes place after the bee host has undergone its metamorphoses, though the bee does not leave her earthen cell until the following spring. Though the male Stylops deserts his host, his wingless partner is imprisoned during her whole life within her host, and dies immediately after giving birth to her numerous (for Newport thinks she produces over two thousand) offspring.

As in the higher animals, bees are afflicted with parasitic worms which induce disease and sometimes death. The well known hair-worm, Gordius, is an insect parasite; the adult form is about the size of a slender knitting needle, and is seen in moist soil and in pools; it lays, according to Dr. Leidy, "millions of eggs connected together in long cords." The microscopical, tadpole-shaped young, penetrate into the bodies of insects frequenting damp localities; fairly ensconced within the body of their unsuspecting host, they luxuriate on its fatty tissues, and pass through their metamorphoses into the adult form, when they desert their living house and take to the water to lay their eggs. In Europe, Siebold has described Gordius subbifurcus, which infests the drones of the honey-bee, and also other insects. Professor Siebold has also described Mermis albicans, which is a similar kind of worm, from two to five inches long, and of a whitish colour; this worm is also found, strangely enough, only in the drones, though it is the

workers which frequent watery places to appease their thirst.

#### THE RING-LEGGED PIMPLA (Pimpla annulipes) BR.

In a previous Report (1874) occur descriptions and illustrations of two insects which are parasitic on the larvæ of the Codling-moth, which descriptions were from the fifth

Annual Report of Mr. Charles V. Riley; these two insects are the Ring-legged Pimpla. which will be described in this article, and the Delicate Long-sting will follow.

"The Ring-legged Pimpla is a black fly, varying considerably in size, the female

sometimes measuring but 4, others fully ½ inch, exclusive of ovipositor, the male some-



what smaller. The genus Pimpla was briefly characterized in my last report, p. 43, where it was shown that this same species attacks the Walnut Case-bearer (Acrobasis juglandis, Le B. I annex a lateral outline of a female Pimpla, Fig. 12). The male has a more slender abdomen, which is unarmed.

"Pimpla annulipes is black, the abdomen rough punctured above, with the borders of the joints polished and inclined to brown. The tegulæ are white, and the legs are reddish, with the exception of the middle and hind tibiæ which are dusky, especially the hind pair, and have a broad white annulus, sometimes indistinct on the middle pair, the posterior tarsi are dusky, especially the tip, the palpi are pale yellow. Cresson says it may be distinguished from

the other species of this genus, by the scutellum being black, the tegulæ white, and the

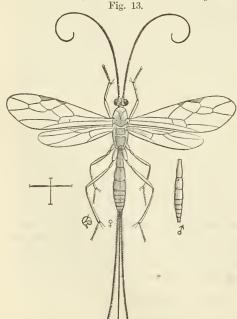
anterior coxæ vellowish red.

"This fly eats its way through the chrysalis and cocoon of the Codling-moth, without having previously made any cocoon of its own. It was quite abundant last summer, as from one lot of one hundred and sixty-two Carpocapsas, I obtained twenty-one parasites, all of them females but one. It is a widely distributed and common species."

The second parasite may be ealled the

#### Delicate Long-sting (Macrocentrus delicatus) Cress.

"It has recently been described by Mr. E. T. Cresson (Trans. Am. Ent. Soc. iv., p. 178), and is a somewhat variable species, occurring throughout the eastern, middle, and western States, and in Mexico. I subjoin a description drawn up from my bred-specimens,



Length 0.25; expanse 0.45, inch Male. slender, colour pale, polished, honey yellow; uniformly and sparsely pubescent; tinged with brown superiorly, the basal joint of the abdomen and a medio-dorsal line on the other joints being quite black. Head, with the eyes (except at disc), and a spot between ocelli, brown-black; palpi long and almost white; antennæ one fourth-longer than the whole body, about 48 joints, exclusive of bulbus, curled at tip, the ends of basal joints and the whole of joints dusky. with the sutures well defined, and two small triangular black spots behind front tegulæ, the metathorax strongly trilobed; legs very long, pale honey yellow, with tips of tibiæ and tarsi faintly dusky; wings yellowish, hyaline and iridescent, with the veins luteous and the stigma pale honey yellow.

"Female, rather larger and with abdomen somewhat paler, otherwise similarly marked. Ovipositor yellow,  $\frac{1}{5}$  longer than body, the sheaths quite pilose, and inclining to fuscous, described from two females and one male.

"It is a graceful fly with very long antennæ and legs, and the female with a long

ovipositor, (Fig. 13) the hair lines at the side of the figure show the natural size of the

fly. The colour is pale honey yellow inclining to brown above. The unfortunate apple worm is probably pierced while yet in the fruit, as it always succumbs soon after forming its cocoon, and before changing to chrysalis; while in the case of Pimpla, it is probably attacked either while leaving the fruit or after having spun its cocoon. The larva of the Delicate Long-sting forms for itself, within the cocoon of its victim, a sufficiently tough, thin, oblong-oval, shiny, brown cocoon, from which the perfect fly issues by cutting open a lid at one end.

"As both these parasites transform within the cocoon of the Carpocapsa, it is next to impossible and quite impracticable to separate friend and foe in removing and destroying the contents of the bandages; but where it is desired to disseminate the parasites they may be bred by enclosing large numbers of the Carpocupsa cocoons in some tight

vessel."

On the 13th of August, 1873, Mr. Saunders took a number of chrysalides of the Codling-moth under a bandage on an apple tree, and among them there was one which was infested by ichneumons. The chrysalis, when emptied, was found to contain six of the parasitic larvæ, of which the following description was taken:—length, a little over one-tenth of an inch; body, tapering almost to a point towards the head; colour, dull, yellowish white, with a tinge of yellow along the dorsal region, very transparent, the internal organs showing plainly through. On each segment is a transverse row of short, whitish spines; terminal segment encircled with stouter whitish spines; no proper feet or prolegs, but in moving the mouth parts attach first with a sucker like disc, and the hinder parts of the body are drawn gradually forward, different portions of the under surface being furnished with small fleshy prominences, which are attached, and in turn withdrawn from the surface on which the larva is moving: the principal points of attachment, however, seem to be the first and terminal segments; under the latter, when viewed sideways, there appears a fleshy projection much larger than any of those on the other segments, and this projection expands into a flattened disc, which holds the larva firmly to the place of attachment.

Mr. Saunders did not succeed in rearing these larvæ: after the chrysalis which contained them was broken open, they, one after another, died, in spite of all efforts for their preservation. Whether this would have proved distinct from the species last described by Mr. Riley, and thus make a third parasite on this pest (the Codling-moth), we are at

present unable to determine.

#### THE PIGEON TREMEX (Tremex columba), LINN.

This insect has been found injurious to the pear, button-wood, and elm-trees. The following is from Harris's "Injurious Insects":——

"The body of the female is cylindrical, about as thick as a common lead-pencil, and an inch and a half or more in length, exclusive of the borer, which is an inch long and projects three-eighths of an inch beyond the body. The latter rounds upwards like the stern of a boat, and is armed with a point or short horn. The head and thorax are rust-coloured, varied with black. The abdomen, or hinder and longest part of the body, is black, with seven ochre-yellow bands across the back, all of them but the first two interrupted in the middle. The horned tail, and a round spot before it, impressed as if with a seal, are ochre-yellow. The antennæ are rather short and blunt, rust coloured, with a broad black ring in the middle. The wings expand two inches and a quarter, or more; they are smoky-brown and semi-transparent. The legs are ochre-yellow, with blackish thighs. The borer, awl, or needle, is as thick as a bristle, spear-pointed at the end, and of a black colour; it is concealed, when not in use, between two narrow rust-coloured sidepieces, forming a kind of scabbard to it.

"This insect is figured and described in the second volume of the late Mr. Say's 'Entomology.' The male does not appear to have been described by any author; and, although agreeing in some respects with the two other species represented by Mr. Say, is evidently distinct from both of them. He is extremely unlike the female in colour, form and size, and is not furnished with the remarkable borer of the other sex. He is rustcoloured, variegated with black. His antennæ are rust-yellow or blackish. His wings

are smoky, but clearer than those of the female. His hind body is somewhat flattened, rather widest behind, and ends with a conical horn. His hind legs are flattened, much wider than those of the female, and of a blackish colour; the other legs are rust-coloured, and more or less shaded with black. The length of his body varies from three-quarters of an inch to one inch and a quarter, and his wings expand from one inch and a quarter to two inches or more.

"An old elm tree in this vicinity (Cambridge, Mass.) used to be a favourite place of resort for the *Tremex columba*, or Pigeon Tremex, and around it great numbers of the insects were often collected, during the months of July and August and the early part of September. Six or more females might frequently be seen at once upon it, employed in boring the trunk and laying their eggs, while swarms of males hovered around them. For fifteen years or more, some large buttonwood trees in Cambridge have been visited by them in the same way. The female, when about to lay her eggs, draws her borer out of its sheath, till it stands perpendicularly under the middle of the body, when she plunges it, by repeated wriggling motions through the bark into the wood. When the hole is made deep enough she then drops an egg therein, conducting it to the place by means of the the two furrowed pieces of the sheath. The borer often pieces the bark and wood to the depth of half an inch or more, and is sometimes driven in so tightly that the insect cannot draw it out again, but remains fastened to the tree until she dies. The eggs are oblong oval, pointed at each end, and rather less than one twentieth of an inch in length. The larva, or grub, is yellowish white, of a cylindrical shape, rounded behind, with a conical horny point on the upper part of the hinder extremity, and it grows to the length of about an inch and a half. It is often destroyed by the maggots of two kinds of Ichneumon flies (*Pimpla atrata* and *Pimpla lunator*, Fabr.) These flies may frequently be seen thrusting their slender borer, measuring from three to four inches in length, into the trunks of trees inhabited by the grubs of the tremex, and by other woodeating insects; and like the female tremex, they sometimes become fastened to the trees

and die without being able to withdraw their borers."

In the Canadian Entomologist, November 1868, Vincent Clementi reports the capture in North Douro, Ontario, of several specimens of the Pigeon Termex; they were taken from an oak tree, which had been cut for cordwood, and were all found to be females.

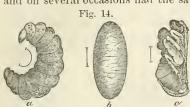
#### THE SIGALPHUS CURCULIO PARASITE (Sigalphus curculionis) FITCH.

To those whose plum trees have been repeatedly ravaged by the Plum curculio and whose efforts have only been slightly successful in preventing the wholesale destruction of fruit, it will not be uninteresting to know that there are two known parasites of the curculio of which the following descriptions and illustrations are taken from Riley's

Report, of 1870, for the State of Missouri.

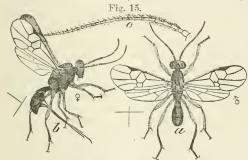
"In 1860, in his address on the curculio delivered at the annual meeting of the N. Y. State Agricultural Society, Dr. Fitch gave an account, accompanied with a figure, of a small Ichneumon-fly which he named Sigalphus curculionis, and which he believed was parasitic on the curculio. Before that time no parasite had been known to attack this pestilent little weevil, and even to the present time (1870), it is currently believed that no such parasite exists; for unfortunately the evidence given by Dr. Fitch was not sufficient to satisfy some of our most eminent entomologists. These parasites were in fact received by him from Mr. D. W. Beadle, of St. Catharlnes, C. W., who had bred them from blackknot, from which he bred at the same time a certain number of curculios; but as other worms besides those of the curculio are likewise found in black-knot, we had no absolute proof that this fly was parasitic on the insect in question; consequently we find that Mr. Walsh, in his report as acting State Entomologist of Illinois rather ridicules the idea of its being a curculio parasite and endeavours to show that it is parasitic instead on the larva of his plum-moth (Semasia prunivora). But I have this year not only proved that poor Walsh was himself wrong in this particular inference, but that he was equally wrong in supposing his little plum-moth, so called, to be confined to plums; for I have bred it from galls (Quercus frondosa, Bassett), from haws, from crab-apples and abundantly from apples.

"To be brief, Dr. Fitch's Sigalphus is a true parasite on the plum curculio and I have bred hundreds of the flies from curculio larvæ. The first bred specimens gave me much pleasure, for as soon as I saw they belonged to the same genus as Dr. Fitch's fly, I felt assured that another disputed question was settled, but to make assurance doubly sure, I repeatedly half filled large jars with pure earth, finely sifted so that no living animal remained in it. Into these jars I placed curculio larvæ from day to day as they issued from peaches that were thrown into another vessel, and in due time the parasitic flies began to issue from the ground along with the perfect curculios. Nay, more than this, I soon learned to distinguish such curculio larvæ as were parasitised, and after they had worried themselves under the ground—seldom more than half an inch—I would uncover them, and on several occasions had the satisfaction of watching the gnawing worm within reduce



its victim until finally nothing was left of him. As soon as the curculio larva is destroyed by the parasite, the latter (Fig. 14 a) encloses itself in a tough little yellowish cocoon of silk (Fig. 14 b.) then gradually assumes the pupa state (Fig. 14 c.) and at the end of about the same length of time that the curculio require to undergo its transformations and issue as a beetle, this, its deadly foe, gnaws a hole through

its cocoon and issues to the light of day as a black four winged fly (Fig. 15 a, male; b, female). In the vicinity of St. Louis, this fly was so common the past season that after



very careful estimates, I am satisfied three-fourths of all the more early developed curculio larvæ were destroyed by it. On the 17th and 18th of April, in that locality a severe frost killed the peach buds on all but a few of the young and most vigorous trees of Hale's Early and Crawford, so that instead of a large and abundant crop of peaches to depredate on, the little Turk had to concentrate his attacks on the few peaches that were left; and no one expected any fruit would be saved. Yet, the work of this little parasite was so effectual that, where-

ever fruit set, a fair crop was gathered even by those who made no effort at all to protect their trees.

"While visiting Dr. Fitch last Angust, at his house in Salem, N. Y., I compared my bred specimens with his species, and found them identically the same; but a full description will be found below, and it is not necessary at present to dwell upon its characters.

"As Mr. Walsh bred this same parasite from the larva of his little plum-moth, it doubtless attacks other soft-bodied insects, and does not confine itself to the plum curculio. This is the more likely as it would scarcely pass the winter in the fly state. The female, with that wonderful instinct which is exhibited in such a surpassing degree in the insect world, knows as well as we, great lords of creation, what the little crescent mark upon the peach or plum indicates; and can doubtless tell with more surety, though she has never received a lesson from her parents, whether or not a curculio larva is drilling its way through the fruit. When she has once ascertained the presence of such a larva by the aid of her antennæ, which she deftly applies to different parts of the fruit, and which doubtless possess some occult and delicate sense of perception, which, with our comparatively dull senses, we are unable to comprehend—then she pierces the fruit, and with unerring precision deposits a single egg in her victim by means of her ovipositor.

"Now there is, as I shall shew in the description, a variety (rufus) of this parasite, with the ovipositor nearly one-fifth of an inch in length; but in the normal form the ovipositor is only twelve-hundreths of an inch long, and the curculio larva must be reached soon after it hatches, or while yet very young. Consequently we find that the earliest curculio larvæ or those which hatch while the fruit is yet small, are the most subject to be parasitised, and while from larvæ obtained early in the season, I bred more parasites

than curculios, this order of things was reversed a little later in the year. Some persons will no doubt, wonder how such a large fly can be developed from a curculio larva which is stung while so young; but we do not know how long the parasite egg remains unhatched, and it must be remembered that it is a rule, wisely ordained and long known to exist in insect life, that the parasitic larva does not at first kill outright, but subsists without retarding growth, upon the fatty portions of its victim, until its own growth is attained. Thus the first worm derives its uourishment from the juicy fruit and grows on regardless of the parasite which is consuming its adipose substance until the latter is sufficiently developed, and the appointed time arrives for it to destroy its prey by attacking those parts more vital.

"This parasite, which I will now proceed to describe, belongs to the second subfamily (Braconides) of the Ichneumon flies (Ichneumonidæ), and the venation of its wings, and the three-jointed abdomen, place it in the genus Sigalphus. Westwood (Synopsis, p. 63), gives three cubital panes or areolets in the front wings as characteristic of the, genus; but Brulé (p. 510) and, as Mr. Cresson informs me, Westmael in his Braconides de

Belgique, give only two, which is the number in our insect.

"Sigalphus curculionis, Fitch-Imago (Fig. 15 a, male; b, female). Head, black, subpolished and sparsely covered on the face with short whitish hairs; ocelli touching each other; labrum and jaws brown; palpi pale yellow; antennæ (Fig. 15 c) twenty-sevenjointed, filiform, reaching when turned back, to middle joint of abdomen or beyond, the bulbous and small second joint rufus and glabrous, the rest black or dark brown, though 3-10 in many specimens are more or less tinged with rufous; 3-14 very gradually diminishing in size; 14-27 sub-equal. Thorax, black, polished, the metathorax distinctly and broadly punctate, and the rest more or less punctate or rugose, with the sides sparsely pubescent. Abdomen, pitchy-black, flattened, the dorsum convex, the venter concave, and the sides narrow-edged and slightly carinated; the three joints distinctly separated and of about equal length; the first joint having two dorsal longitudinal carinæ down the middle; all densely marked with very fine longitudinally impressed lines, and sparsely pubescent (Dr. Fitch in his description published in the Country Gentleman, under date of September, 1859, states that these lines leave 'a smooth stripe along the middle of its second segment, and a large smooth space on the base of the third; which is true of a few specimens, but not of the majority in which the impressed lines generally cover the whole abdomen). Ovipositor longer than abdomen, but when stretched in a line with it, projecting backwards about the same length beyond; rufous, with the sheaths black. Legs, pale rufous, with the upper part of hind tibiæ and tarsi, and sometimes the hind Wings, sub-hyaline and iridescent, the veins pale rufous, and the stigma black. Length, female .15-.16 inch, expanse, .30; male differs only in his somewhat smaller size, and in lacking the ovipositor. In many specimens the mesothorax and the eyes are more or less distinctly rufous.

"Described from 50 females, and 10 males, bred June 23rd—July 29th, 1870; from

larvæ of Conotrachelus nenuphar, and 2 females obtained from Dr. Fitch."

"Larva (Fig. 14 a), white, with translucent yellowish mottlings. Pupa (Fig. 14 c, female), .17th inch long, whitish, members all distinct, the antennæ touching hind tarsi, the ovipositor curved round behind, reaching and touching with its tip the third abdominal joint, which afterwards forms the apical joint of imago; five ventral joints which in the imago become much absorbed and hidden, being strongly developed. Cocoon (Fig.

14 b), composed of one layer of closely woven yellowish silk.

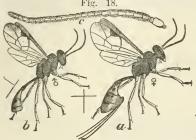
"Variety Rufus.—Head, thorax and most of the first abdominal joints entirely rufous, with the middle and hind tibiæ dusky, and the ovipositor three times as long as abdomen, and projecting more than twice the length of the same beyond its tip. Described from three females bred promiscuously with the others. This variety is slightly larger, and differs so remarkably from the normal form that, were it not for the absolute correspondence in all the sculpturing of the thorax and body, and in the venation of the wings, it might be considered distinct. The greater length of the ovipositor is very characteristic, and accompanies the other variation in all three of the specimens."

#### THE PORIZON CURCULIO PARASITE (Porizon conotracheli).

This parasite of the plum curculio is also described in Mr. Riley's Report for 1870,

from which the following account is taken :-

"The present insect, instead of issuing the same summer as a fly, remains in its somewhat tougher and more yellowish cocoon all through the fall and winter, and does not issue in the winged state until the following spring. This parasite was first discovered by Dr. Trimble, who sent me the cocoon, from which I subsequently bred the perfect fly. It belongs to the first sub-family (*Ichneumonides*) of the Ichneumon-flies, and apparently to the genus Porizon, of which it forms a new species. It is only necessary here to state that it differs from the previous species in its reddish-brown abdomen, as well as in form, which may be seen by referring to the figures (a, female; b, male; c, antenna).



Porizon conotracheli, N. Sp.—Head: pitchy black, opaque, the ocelli triangularly placed, and close together. Eyes: oval, polished and black. Face: covered with a silvery white pubescence; labrum rutous, with yellowish hairs; mandibles and palpi, pale yellowish brown; antennæ inserted in depressions between the eyes, reaching to metathorax when turned back, filiform, 24-jointed; black with basal joints 6-1 becoming more and more rufous, the bulbus always distinctly rufous; bulbus rather longer and twice as thick as joint 3; joint 2 about one-

third as long. Thorax: pitchy-black, opaque, the sides slightly pubescent with whitish hairs, the mesothorax rounded and bulging anteriorly, the scutellum slightly excavated and sharply defined by a carina each side; metathorax with the elevated lines well defined, and running parallel and close together from scutellum to about one-fourth of their length, then suddenly diverging, and each forking about the middle. Abdomen: glabrous, polished, very slender at base, gradually broader and much compressed from the sides at the apex, which is truncated; peduncle uniform in diameter, and as long as joints 2 and 3 together; joints 2–5 sub-equal in length; colour rufous, with the peduncle wholly, dorsum of joint 2, a lateral shade of joint 3, and more or less of the two apical joints superiorly, especially at their anterior edges, black; venter more yellowish; ovipositor about as long as abdomen, porrect when in use, curved upwards when at rest, rufous, with the sheaths longer, and black. Legs, including trochanters and coxæ, uniformly pale yellowish-brown, with the tips of tarsi dusky. Wings subhyaline and iridescent, with veins and stigma dark brown, the stigma quite large, and the two discoidal cells sub-equal, and, as usual in this genus, joining end to end, but with the upper veins, which separate them from the radial cell, slightly elbowed, instead of being straight, thus giving the radial cell a quadrangular rather than a triangular appearance. Male differs from female only in his somewhat smaller size and unarmed abdomen. Expanse female 0·32 inch, length of body, exclusive of ovipositor, 0·22; expanse male 0·28, length 0.18.

Described from 3, two females one male, bred May 26th-27th, 1870, from cocoons received from Dr. I. P. Trimble, of New Jersey, and 1 female subsequently received

from the same gentleman—all obtained from larvæ of Conotrachelus nenuphar.

## APPENDIX TO REPORT

OF THE

## Commissioner of Agriculture and Arts.

## APPENDIX (F.)

AMOUNTS EXPENDED FOR THE ENCOURAGEMENT OF AGRICUL-TURE AND ARTS IN ONTARIO IN 1876.

No. 1.—Amounts paid to Agricultural Societies in 1876.

NAME OF SOCIETY.	AMOUNT.	NAME OF SOCIETY.	AMOUN	T.
Addington	\$ cts. 700 00	Brought forward	\$ 18,900	00
Algoma Brant, North Brant, South	700 00 700 00 700 00	Hastings, East Hastings, West Huron, South	700 700 700	00
Brockville Bruce, North Bruce, South	700 00 700 00 700 00	Huron, West Huron, East Kent, East	700 700 700	00
Cardwell Sarleton Cornwall	700 00 700 00 350 00	Kent, West Kingston Lambton, East	700 350 700	00
Oufferin Oundas Ourham, East	700 00 700 00 700 00	Lambton, West Lanark, North Lanark, South	700 700 700	00
Durham, West  Elgin, East  Elgin, West	700 00 700 00 700 00	Leeds, North, and Grenville Leeds, South Lennox	700 700 700	00
Essex, North Essex, South Frontenac	700 00 700 00 700 00	Lincoln London Middlesex, North	700 350 700	00
lengarry renville, South rey, North	700 00 700 00 700 00	Middlesex, East Middlesex, West. Monck	700 700 700	0
rey, South rey, East Ialdimand	700 00 700 00 700 00	Muskoka Niagara Norfolk, North	700 350 700	0
Ialton Iamilton Iastings, North	700 00 350 00 700 00	Norfolk, South Northumberland, East Northumberland, West	700 700 700	0

No. 1.—Amounts paid to Agricultural Societies in 1876.—Continued.

Name of Society.	Amount.	NAME OF SOCIETY.	AMOUNT.
Brought forward Ontario, North Ontario, South Ottawa. Oxford, North Oxford, South Peel Perth, North Perth, South Pettrborough, East Peterborough, West. Prescott Prince Edward Renfrew, North Renfrew, South Russell Simcoe, East Simcoe, West.	\$ cts. 36,750 00 700 00 700 00 350 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 Simcoe, South Stormont Torouto Victoria, North Victoria, South Waterloo, North Waterloo, South Welland Wellington, West Wellington, Centre Wellington, South Wentworth, North Wentworth, North Vork, North York, North York, East York, West	\$ cts. 48,300 00 700 00 700 00 550 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
Carried forward	48,300 00	Total	59,350 00

No. 2.—Amounts paid to Mechanics' Institutes in 1876.

Name of Institute.	GRANT.	NAME OF INSTITUTE.	GRANT.
Aurora. Ayr Bracebridge Brantford Bradford Bradford Brussels Clinton Collingwood Dundas Durham Elora Fergus Galt Garden Island Grimsby Guelph Hamilton Hespeler Kincardine Listowell London Mitton Mitchell Niagara Norwood Ottawa, St. Patrick Paris	\$ cts. 70 00 100 00 200 00 400 00 120 00 400 00 120 00 400 00 200 64 400 00 400 00 400 00 142 90 400 00 200 68 00 400 00 236 00 68 00 400 00 236 00 68 00 400 00 247 00 100 00 200 00 200 00 227 00 100 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00	Brought forward Park Hill Paisley Port Elgin Port Hope Port Perry Preston Pembroke Peterborough Richmond Hill Sarnia Seaforth Simcoe Smith's Falls Stratford Strathroy St. Catharines St. Marys Thorold Toronto Uxbridge Waterloo Walkerton Welland Waterdown Whitby Woodstock Wroxeter	\$ ct. 7,992 54 160 00 334 00 50 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00 400 00
Carried forward	7,992 54	Total	16,424 72

No. 3.—Total Payments for Encouragement of Agriculture and Arts for 1876.

SERVICE.	Appropriation.	Expended in 1876.	Unexpended or Over-expended.
Electoral Division Societies Outlying Districts:—Dysart, \$131; Minden, \$169 Mechanics' Institutes Inspection of Mechanics' Institutes. Agriculture and Arts Association Fruit Growers' Association Entomological Society Dairymen's Association Ontario Poultry Association Ontario Society of Artists. Museum and Library of Veterinary College. Sundries, including additional grant to Poultry Association, \$400; Hamilton Horticultural Society, \$150; Arnprior Society, \$50; Six Nations Indian Society, \$50; A. Smith, V.S., investigating and reporting on Horse and Cattle diseases, \$87 75; Printing Agricultural, Fruit Growers', and Entomological Reports, \$1,021 95	10,000 00 1,000 00 750 00 2,000 00 400 00 500 00 2,000 00+	\$ cts. 59,350 00 300 00 16,424 00 539 00 10,000 00 1,000 00 2,000 00 400 00 500 00 2,000 00 1,759 70	*3,037 00
Total	98,300 00	95,022 70	3,277 30*

 $<sup>\</sup>sp{*}$  Unexpended. + Paid to Council of Agriculture and Arts, in course of being expended.

## REPORT

OF THE

# Commissioner of Public Works

FOR THE

## PROVINCE OF ONTARIO,

FOR THE YEAR

1876.

Brinted by Order of the Tegislative Assembly.



#### Toronto:



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## REPORT

OF THE

# Commissioner of Public Morks,

FOR THE PROVINCE OF ONTARIO,

FOR THE YEAR 1876.

To His Honour, the Honourable Donald Alexander Macdonald, Lieutenant-Governor of the Province of Ontario, &c., &c.

In compliance with the Act in that behalf, I beg to submit the following Report of the works under the control of this Department:

The details of the operations connected with the construction, improvements and repairs of Public Buildings, the maintenance of and improvements to Public Works, the drainage of lands, the extension of Railways, &c., are fully explained in the accompanying reports from the respective officers of the Department.

#### PUBLIC BUILDINGS.

Sundry improvements and repairs have been made to the Government House, and the Parliament and Departmental Buildings, which were much required, and for which the necessary appropriations had been made for the year.

The works connected with the completion of the Hamilton Asylum, for the Insane, and the Orillia Asylum, for Idiots, were finished with as little delay as possible, and both of these buildings are now occupied patients.

The works connected with the Normal School, Ottawa, have been fully completed, the lot fenced in, and the front portion of the grounds ornamented by planting and other improvements.

Several alterations have been made in the buildings for the several Public Institutions, and the grounds in some instances have been improved by planting trees, constructing sidewalks, and making roads, as detailed in the Report of the Architect, &c.

The usual appropriations for general repairs and improvements will be required for 1877.

The statements of expenditure, &c., are appended.

#### PUBLIC WORKS.

The improvements to the navigable inland waters, by the construction of locks, dams, &c., continue to aid in the development of the adjoining settlements, and additional works of minor but important character will be still required to extend the advantages of such improvements.

The expenditure under the recent Drainage Acts will soon be closed. The results, so far as have been ascertained, have been most satisfactory, and, as stated in the Engineer's Report, the advantages have been very great.

The works connected with the drainage and water supply of the London Asylum are now nearly completed, and will no doubt fully meet all present and future wants of that Institution.

It is to be specially noted, that, notwithstanding the financial depression, the extension of Railways has made satisfactory progress throughout Ontario. Several of the Railways now in course of construction, are of an important character, and, when completed, will add much to the general improvement of the Province.

Respectfully submitted,

C. F. FRASER,

Commissioner.

Department of Public Works, Ontario, Toronto, 30th December, 1876.

### REPORT

OF THE

## Architeck and Chiek Okkicer.

DEPARTMENT OF PUBLIC WORKS, ONTARIO, TORONTO, November 15th, 1876.

SIR,-I have the honour to submit the following Annual Report :-

#### GOVERNMENT HOUSE.

The interior portion of the building has been painted and papered, the ceilings white-

ened and repaired.

The grounds have been much improved, and further improvement will be required during the ensuing season, for which appropriations will have to be made, and also for painting the outside woodwork, and repairing the eaves of the building.

The boarded fence round the grounds is very much decayed, the posts being quite rotten, and on several occasions lately portions of the fence have been blown down, requiring

constant attention and repair.

The fence was originally constructed in 1840, and was repaired in 1850, and also in 1868, when the present Government House was built. A new iron or wooden fence is much required for the protection of the grounds.

#### PARLIAMENT AND DEPARTMENTAL BUILDINGS.

The frame building on the north side of the centre portion of the Parliament Buildings was repaired early in the season. The sills, on xamination, having been found to be quite rotten, were renewed, the frame raised, and the building put into good condition.

The ventilation of the Chamber will be found to be much improved by the construction of fresh air ducts in the outer walls, and foul air ducts on the north side, leading from the

floor level to the large ventilator over the centre of the Chamber.

In accordance with your instructions, the Reporters' galleries have also been lowered as much as the doorways underneath would admit of, and other improvements made, which it is expected will be found to be more convenient and suitable to the purpose than the former arrangement, so much complained of by the Press.

The furnaces have been taken down and carefully repaired. Several of the pipes were found to be injured by the heat and were removed, so that there will be no inconvenience from the escape of gas, which was perceptible during the latter portion of the last Session.

Further appropriations will be necessary for the general repairs of these buildings in ad-

tion to the ordinary expenditure under the head of contingencies.

The annual expenditure for keeping these buildings in even decent condition, is so large in proportion to their extent, that I considered it proper to call the attention of your predecessor, the Hon. Mr. McKellar, to the necessity of constructing new buildings, as stated in the Report for 1873, page 14, as follows:—

"Considering that these buildings were erected in 1830, the limited accommodation afforded, and the annual amount required to keep them in repair, it will be necessary in a short time, to provide more extensive and secure edifices for the Legislature, and the conve-

nience of the several Departments."

I may also mention that an appropriation of \$25,000 was made in 1873, in the supplementary estimates, for a "fire-proof building for the Crown Lands," but, as reported that year, beyond the preparation of the plans, and enquiries respecting the cost of rolled iron girders, &c., nothing further was done, and there was no expenditure on account of the appropriation. There is urgent necessity of making provision for the safe-keeping of the valuable and important documents, not only in the Crown Lands Department, but also in the other offices and buildings, the loss of which, to the Province, would be incalculable.

The construction of a fire-proof building for the Crown Lands alone, at a cost of \$25,000, which could only be considered as a temporary arrangement, and would be useless in case Departmental Buildings were erected at a future time, would not in my opinion, meet the

requirements of the public service, either as regards safety or convenience.

On sanitary considerations, these old buildings are very objectionable. The fact that the drains leading to the main sewers, and, in some instances, the main sewers themselves were constructed on the old principle under the buildings, precludes the possibility of ensuring health to the occupants of the offices, &c., though every care has been and will be taken to trap the drains in order to prevent the escape of dangerous gases. The water-closets, which for years were inside the halls, were removed, and are now constructed in such a manner and so well ventilated that they are free from unpleasant odours. With defective drainage and the want of proper ventilation, it is quite impossible to guarantee the health of the occupants of any of the offices, or the Members of the Legislature, for a single day, though, as before explained, every precaution has been and will be observed to prevent serious results. The woodwork of the roofs is also deteriorated, and considering the buildings will soon be erected fifty years, this is not at all surprising. The timber is occasionally examined and strengthened where found to be necessary to prevent accidents.

The construction of a Departmental fire-proof building for the Crown Lands is one of immediate and paramount necessity, and another building for the other Departments, could be constructed afterwards. The centre portion, which would contain the Chamber for the Legislature, the Library and the necessary Committee-rooms, Post-office, &c., could be erected when the Departmental Buildings were completed, so as not to interfere with the public business; and temporary arrangements could be made for the meetings of the Legislature.

#### CENTRAL PRISON, TORONTO.

An appropriation was made in the Supplementary Estimates for a "third rail to bring in stone," as a switch from the Toronto, Grey and Bruce Railway, on the southern side of the Prison grounds. An arrangement was made with the manager of the Railway Company to do the work for the amount of the appropriation (\$300), with the assistance of Prison labour, and the work was satisfactorily done in the early part of the year. The floods in the spring carried away the brick sewer from the Toronto Asylum, which crosses the small creek running through the Prison grounds near Strachan Avenue, owing to the culvert under the sewer having been stopped up with loose timber.

The repairs have been substantially made, and the City Corporation have also constructed a brick culvert across Strachan Avenue, of a sufficient capacity to carry off any flood that

may occur for the future.

#### ASYLUM FOR THE INSANE, TORONTO.

There has been no expenditure on account of the appropriation of \$1,000 for the water supply pipe at the engine house. The improvements formerly made having been found sufficient, and the high water in Lake Ontario having afforded an abundant supply of water, a further expenditure was not required. The box drain at the lake outlet of the main sewer alongside of the Toronto, Grey, and Bruce Railway, was repaired during the summer.

#### ASYLUM FOR THE INSANE, HAMILTON.

Tenders were received, after due advertisement, for the construction of the fences in front of the building, and round the airing grounds, and that of George Sharpe, Hamilton, being the lowest, was accepted, and the work was done in a satisfactory manner for the amount of the tender, viz., \$2,550. The barn, which had been constructed near the main road was removed to the rear of the building, and fitted up as a stable and carriage-house at a moderate expenditure. Wire guards were also placed on all the windows, and steam coils where required, and have been found to answer the intended purpose.

A road has been constructed from the main road to the building by the patients, under the direction of the Medical Superintendent, the materials for the foundation having been quarried on the premises and paid for out of the appropriation. The gravel was procured from a pit in the vicinity, and the work has been satisfactorily and economically done.

The works connected with this Asylum were completed in the early part of the year, the building was ready for occupation on the 11th of March last, and was occupied by the

patients shortly afterwards.

The contracts connected with the water and gas supply were satisfactorily completed, and some changes were made in the interior of the building, as required by the Superintendent.

Appropriations will be required for fences along the main road, enclosing the grounds, also for coal-sheds, farm buildings and side-walks, to be included in the Estimates for 1877.

#### DEAF AND DUMB INSTITUTE, BELLEVILLE.

The roof and eaves of this building were thoroughly repaired during the summer, and the water closets were placed in good condition. The cesspools on both sides were emptied, and were left in good order, but owing to the great increase in the number of pupils, it will be necessary to construct new brick water closets, similar to those recently erected for the Blind Institute at Brantford, which have been found satisfactory. In connection with this necessary improvement, a tile drain, eighteen inches in diameter, should be constructed, leading from the proposed water closets to the Bay, with branches to the present water closets in the building, and the present sewer will be sufficient to drain the cellars and for the other requirements of the main building.

An appropriation will be required for the renewal of the two steam boilers, which have been reported upon as unsafe, and for some proposed changes in the heating apparatus, to

meet the demand for additional accommodation.

#### BLIND INSTITUTE, BRANTFORD.

The tanks for the water supply of this building have been enlarged, and two brick water closets were constructed in the boys' and girls' yards on each side of the building, with tile

drains to the main sewer, and have been found to work satisfactorily.

The grounds in front of the building have been much improved by planting, and gravel has been placed on the roads, under the directions of the Principal. Plank-walks, six feet in width, have also been constructed, leading from the building to Dumfries Street and to the engine-house.

Appropriations will be required for a new boiler at the engine-house, improvement of

grounds, &c.

#### SCHOOL OF AGRICULTURE, GUELPH.

The addition to the building, comprising a mansard storey over the front portion and some changes in the interior, were completed in a satisfactory manner.

Further appropriations will be required for additions and other improvements.

#### SCHOOL OF PRACTICAL SCIENCE, TORONTO.

The new boiler, which has been placed in the basement, being of a larger capacity thau the former one, has been found to afford additional heating power for all requirements.

New tile-drains were constructed in the basement to carry off the water from the ash-pit of the boiler, and being about two feet lower than the old drains, the pipes from the waterclosets were connected with them. The usual appropriation for repairs will be required for 1877.

#### NORMAL SCHOOL AND EDUCATION OFFICE, TORONTO.

The play-sheds in the boys' and girls' yards have been repaired and shingled, and new planking laid down in the boys' yard. The fences and drains have also been repaired. The interior of the Normal and Model Schools has been painted and the ceilings whitewashed. The walls also have been coloured and sundry improvements made, as required by the Education Department. The alteration of the steam heating-pipes of the Education Office was made in sufficient time to have it thoroughly tested before it was required for the winter, and so far it has been found efficient, and it is expected that it will effect a saving in the consumption of fuel. Sundry other repairs, painting, papering, &c., were made as requested.

Notwithstanding the necessary repairs to the drains under the Normal School, the apartments occupied by the Engineer were found to be so damp as to be quite uninhabitable. I therefore recommended that a frame cottage should be erected on the east side of the grounds, which having been approved by you, the sum of \$800 should be included in the estimates. Further appropriations for painting the outside woodwork and for ordinary

repairs will also be required for 1877.

#### NORMAL SCHOOL, OTTAWA.

The removal of the fence between Cartier Square and the Normal School site to the new line and the construction of other fences, as reported last year, have been completed, and sundry improvements made in the roads and sidewalks.

The grounds in front of the building were laid out and planted under the direction of the Principal, according to a plan prepared by the Gardener of the Normal School, Toronto.

Trees were planted on Elgin and Biddy Streets to the extent of the Normal School

frontage, and guards were placed round each for protection.

A further appropriation will be required for improvements of grounds, and repairs for 1877.

#### OSGOODE HALL, TORONTO.

During the long vacation the apartments of the building, comprising six court-rooms and the offices in the centre building, were thoroughly cleaned, the ceilings whitened, and the walls painted, the whole of the work having been fully completed before the court-rooms were

required, on the 21st of August last.

A new tile-drain was constructed on University Street from Queen Street to the rear of the west wing and centre building, permission having been given by the City Corporation for the purpose. The water-closets in the rear of the Court of Chancery and the Courts of Queen's Bench and Common Pleas, are now connected with this drain, as the fall is much greater than to the drain on Chestnut Street, on the east side, and the great objection to having the soil from these closets passing through the drains under the building, which has

been so much complained of, will be avoided.

The plans for a new addition in the rear of the Courts of Queen's Bench and Common Pleas, for the Court of Appeal, were prepared in the early part of the year, and tenders for constructing the same were received after due advertisement; the tender of William Booth, being the lowest, was accepted, the amount being \$14,449, and the work is now nearly completed. This addition has been erected by funds provided under the special Act of last session, these funds being a special account; and the necessary heating apparatus and furniture for the court-room will also be provided, to be defrayed out of this special account. Additional appropriations will be required for 1877, to complete the repairs, and for furniture, matting, &c., for the courts and offices.

#### COURT HOUSE, &c., SAULT STE. MARIE.

There has been no expenditure on account of any work for this building during the year, but a re-vote of the appropriation (\$1,000), will be required for sundry repairs, recommended to be done during the next season.

#### GAOL AND REGISTRY OFFICE, THUNDER BAY.

The plans of a Gaol and Registry Office, with a Court-room on the second storey, were prepared in the early part of the year, and as tenders could not be procured from contractors for the construction of a building at such a distance, some of whom refused a few years ago to tender for the construction of the Lock-up at Prince Arthur's Landing and Silver Islet, I, for these reasons recommended that the work should be done, as before for buildings in that section of the Province, under the charge of a competent Superintendent, who was accordingly appointed.

The mason and carpenter work of the exterior of the building was completed before the winter set in, and it is expected that the gaol portion will soon be finished and occupied.

The carpenter work of the interior will be proceeded with during the winter, so that the plastering and painting can be completed early next year.

An additional appropriation will be required for the completion of the building and for

furniture, &c.

#### LOCK-UP, NIPISSING DISTRICT.

The Lock-up for this District was constructed at Matawan during the summer of 1875, and the only work done during the last year was the construction of a picket fence round the Lock-up on a portion of the lot, forming an enclosure, so that the prisoners could with safety be employed cutting wood and at other manual labour.

An appropriation will be required for 1877 for repairs, &c.

#### REGISTRY OFFICE, MUSKOKA DISTRICT.

The plans for a small Registry Office, to be erected on the Government reserve at Brace-bridge, were prepared in the early part of the season, and after due advertisement, the tender of Neil Livingston (\$2,275), being the lowest, was accepted.

The work has been progressing satisfactorily, and is now nearly completed.

The work was inspected during its progress by myself on one occasion, and by the Clerk of Works at the Orillia Asylum, when the latter work was nearly completed.

A re-vote of the unexpended balance (\$600), will be sufficient to complete all payments, and provide requisite furniture, &c.

#### REGISTRY OFFICE, PARRY SOUND.

The only expenditure during the year on account of this Registry Office has been for some small repairs and furniture.

The usual appropriation of \$100, will be required for 1877, for repairs, &c.

#### IDIOT ASYLUM, ORILLIA.

The work required for the repairs and improvement of the Orillia Asylum building, for the reception of Idiots, was commenced in March last, and completed at the end of September, and has been occupied since that time. The construction of new water-closets in projection, and the building of a new engine and boiler house, delayed the completion of the repairs beyond the anticipated time. On examining the condition of the drains and water supply, by making the necessary excavation, it was found that a larger amount of repairs was required than was calculated on in the first instance.

The floors and joists also were, in many instances, found to be decayed, and required to

be removed, and the plastering having fallen off in many places, had to be repaired.

Some delay was also experienced owing to the lateness of the spring. The foundation of

the water-closets and engine house was not commenced until the latter part of April, the

frost being still in the ground.

As the building was very much out of repair, it was impossible to specify items, and in case of omissions, a large account for additional work would have been the inevitable result. I recommended that the general repairs of carpenter work, building water closets, and repairs to the drains, should be done by day's work under the superintendence of a Clerk of Works, which, being approved by you, the Clerk of Works for the Hamilton Asylum (which was then completed), was transferred to Orillia, and the work has been carried out under his supervision.

All the work that could be tendered for, was submitted for tender and done by contract. For the steam heating and water supply, the tender of Messrs. Morrison & McGuire,

of Toronto, (\$6,450) being the lowest, was accepted.

The tenders of Messrs. Goring & Clare, and R. Mainer, of Orillia, for the plastering and tinsmiths' work by prices, being the lowest, were accepted; and the tenders of Messrs. Ross Brothers, of Hamilton, for the painting and glazing (\$1,329 90), and for whitening the

ceilings, &c., (\$145) being also the lowest, were accepted.

The building is now in as complete a state of repair as it has been possible to place it. Its being unoccupied for six years, had resulted in its becoming very much out of repair. When I had the building fitted up as an Asylum for Lunatics in 1860, having been originally erected some years previously for an hotel, but unfinished, I was in doubt whether it was possible to adapt it to such a purpose, the walls being in a dilapidated condition; and whether it would not be better to pull it down and erect a new building. The walls were, however partly taken down, and the other portions substantially repaired at the time.

During the progress of the repairs last summer it was recommended that the new system of manufacturing gas from crude petroleum should be tried at this building, as there were no gas works at Orillia, and after due advertisement, the tender of Messrs. Ridout, Aird & Co., of Toronto, for \$1,500, being the lowest for the gas apparatus, was accepted, the build-

ing to be erected by the Government.

The works are now completed, and the gas, having been tested, was found satisfactory, the cost of manufacture being, on a rough calculation, 40 cents per thousand cubic feet. The gas will be manufactured once a week, the holder being of sufficient capacity for a week's supply, and the engineer and his assistant can attend to this duty without additional aid.

The building for the gas works being removed and isolated from all other structures, there can be no danger in the manufacture of gas with ordinary care and attention. These works so far as tested have proved most satisfactory; and in an economical point of view, the annual saving will be considerable, as the ordinary coal gas could not be manufactured with profit in Orillia for less than \$5 per thousand cubic feet.

Additional repairs to outbuildings will be required during the ensuing season. A brick shed for storing wood near the engine house, with other improvements which have been recommended, will have to be provided, for which appropriations should be made in the esti-

mates for 1877.

I have the honour to remain.

Your obedient servant,

KIVAS TULLY,

Architect, &c.

HON. C. F. FRASER.

Commissioner of Public Works,

Ontario.

## REPORT

OF

#### ENGINEER THE

of

#### PUBLIC WORKS.

DEPARTMENT OF PUBLIC WORKS, ONTARIO, Toronto, 15th December, 1876.

HON. C. F. FRASER Commissioner of Public Works.

SIR,-I have the honour to submit the following Report in relation to the progress made during the year in the construction and conservation of the Public Works, and the extension of the Railway system throughout the Province:

#### OTONABEE RIVER WORKS.

The re-vote of \$2,000 for that service has not been expended. The appropriation was intended to cover the cost of constructing certain piers and booms below Young's look on the Otonabee River which were intended to protect the Steamboat Channel and obviate the difficulties occurring in navigating that part of the river during the season when the drives of logs are passing. There is reason to believe that the difficulties have nearly ceased, so that the booms may not now be required, and if so, the re-vote can be allowed to lapse.

#### MUSKOKA RIVER WORKS

These works are for the purpose of facilitating navigation and the transit of timber on the various rapids and falls of the Muskoka River and branches. The following have been completed:

The construction of a timber stop-log dam and piers at the Muskoka Falls, for regula-

tion of the water level in Lake Muskoka for navigable and milling uses.

The building of a pier and removal of obstructing rocks at Sandy Grey's and another

rapid.

Large damage is annually caused to logs and timber in transit on the river and tributaries, by breaking abrasion and chafing on the jagged rocks on the bottom and sides of some of the falls and rapids, and in order to obviate such loss of property, the following works may have to be undertaken:

THE MUSKOKA RIVER, NORTH BRANCH.

At Bracebridge Falls, the channel should be improved by the removal of some rocks by blasting.

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At Wilson's Falls, on lot 5, in the 4th concession of the Township of Macaulay, a side dam is required to confine the water to one channel.

At the High Falls, a boom is required to keep the runs of timber out of an eddy. This

fall is on lot 9, in the 6th concession of Macaulay.

At Duck Chute, in the 13th concession of the same township, there is a large rock requiring removal.

#### THE MUSKOKA RIVER, SOUTH BRANCH.

At Matthias' Falls, a side pier is wanted, 100 feet in length, and the removal of about 300 cubic yards of rock in the channel.

At Cathere's Falls, on lot 4, in the 9th concession of Draper, a small dam is required to

keep the timber in transit clear of the falls.

At the entrance to the Muskoka River, at the period of the runs of timber, much inconvenience and delay, as well as cost, is occasioned by the difficulties besetting the way of the steamboats in getting up or down, to or, from Bracebridge. These difficulties arise from the obstructions formed by the large number of logs in transit down the river, and the collecting of them in booms at the lake. It is desired to correct this by the enlargement of a cut already made, but not wide enough, so that steamers can have a separate entrance to the river, from that occupied by the booms of logs at the proper outlet. The work at the cut would have to be done by dredging with the steam dredge now laid up at Gravenhurst.

#### WYE RIVER DREDGING.

Before commencing the work at the Wye it was considered advisable to have a further examination made of the shoal forming the bar at the entrance to that river. Recent soundings have therefore been taken, and the result has shown the same depths as those taken in February, 1874, indicating no change or shifting of material [since that time. It has now been decided to deepen the channel through the bar, giving it a width of 60 feet at bottom, and a depth of 11 feet below low water. The length to be dredged will be about 1400 feet.

A considerable business is done at this river, chiefly in the shipment of lumber. The water is deep inside the entrance, but on account of the shoal forming the bar, vessels can only partially load inside and have the balance of their cargoes lightered out to them, causing

in many cases great waste of time and additional cost.

The Wye river flows through the township of Tay, in the County of Simcoe, and discharges into a part of the Georgian Bay near Midland, the proposed terminus of the Midland Railway.

Tenders have been received for the prosecution of the work in the spring of 1877.

#### MARY AND FAIRY LAKES' WORKS.

The works under this head which have been constructed in 1876 and previous years are as follows:

A lock, channel, and lock basin, on the north branch of the Muskoka river on lot 14 in the 13th concession of the township of Brunel. Dredging of the river below the lock, and the removal of two shoals in the river above the lock basin.

The construction of a stop log dam at the outlet of Mary's Lake at Port Sydney to

replace an old fixed dam, partly carried away by the freshet in 1875.

Raising the bridge at Huntsville, so as to enable a steamboat to pass under, and obviate the cost of a swing bridge.

The works yet required, in my opinion, to complete the systen of navigation on Mary's,

Fairy, and Vernon lakes are as follows:

A new stop log dam at the lock to replace Fetterly's old dam, the top of which has been carried off. The stop log openings being required in a new dam to regulate the level of water in Fairy and Vernon lakes.

A small draw, or lift bridge to cross the channel so as to give access to Fetterly's mill,

which has been cut off by the lock works.

A breastwork wall below the lock to prevent debris from filling the newly dredged channel during the period of freshets.

Some dredging of shoals in the channel near Huntsville.

And a new public road bridge on the river, about 400 feet up stream from the head of the lock basin. The bridge will have a span of 100 feet across the channel with a height of 25 feet over ordinary water level. Its whole length will be about 160 feet. The bridge is required in connection with a new line of road being opened by the Department of Crown Lands, from Huntsville through the township of Brunel.

The completion of the lock works opens a navigable highway from Port Sydney at the foot of Mary's Lake, and 13 miles from Bracebridge, through the lengths' of Mary's, Fairy, and Vernon Lakes, a total distance of about 25 miles, passing through the fine stretches of country in the township of Stephenson, Brunel, Stisted, and Chaffey. A steamboat is now

in construction at Port Sydney.

#### RYERSON ROAD WORKS.

A small balance of a former appropriation became a re-vote for 1876, and was expended in repairs of a part of the road through the settlements in that township.

#### Muskoka Lakes' Works.

These works embrace the construction of some additional pier works at the lock at Port Carling, for protecting the entrances in high water; the construction of a high bridge over the cut between Lakes Rosseau and Joseph, and the excavation of additional channels for discharge of water at the Muskoka Falls.

The pier-work at Port Carling is now in hand and nearly completed.

The bridge over the channel into Lake Joseph is finished. It has been designed of such a height that the steamboats navigating these lakes can pass underneath so as to avoid the cost of maintenance of a swing bridge over a channel 60 feet in width, as well as the annual cost of a bridge tender, thus effecting an annual saving of about \$300 on maintenance. The entire structure is 470 feet in length, about 25 feet longer that at first designed. The approaches are formed of trestle bridging, with openings having 24 feet between centres of upright bents. The centre span is a truss having a clear width of 70 feet, and a clear heighth of 44 feet above ordinary water surface.

A small expenditure in excess of the appropriation was caused by the additional length of 25 feet, and by the necessity of constructing additional foundations for two of the highest

bents, in consequence of the wearing away of the surface near the sides of the cut.

The excavation of additional channels for the outlet of the water of Lake Muskoka was decided on in consequence of the peculiar character of the two preceding seasons causing floods and high water in Lake Muskoka, and in the lakes supplying its tributaries, such as Trading Lake, Lake of Bays, Mary, Fairy and Vernon Lake, as well as all the other lakes in the northerly portions of the Province.

The works undertaken consist entirely of rock excavations, amounting in all to over 2600 cubic yards, creating three new channels of outlet, having a total of over 400 square feet in area. These have been protected by a dam and sluices referred to under the heading

of Muskoka River Works.

The new channels will be left entirely open from the termination of navigation of each year till after the height of the freshet of the next following spring has passed, when they will be closed and regulated as may be considered necessary for the conservation of the water for purposes of navigation, and lumbering operations.

#### LINDSAY LOCK WORKS.

In addition to the ordinary appropriation for maintenance of "locks, dams and swing-bridges," an appropriation was taken last session for service in 1876, of the sum of \$4,000 for the reconstruction of the Lindsay dam, and repairs to the foundations of the mitre sills of the lock. The dam had been originally constructed by the Government of Canada, and had not previously received any attention or repairs from the Government of Ontario. It is

a frame dam, and the entire framing under the outside sheeting was thoroughly decayed, and it leaked badly. It was no use merely repairing the outside without renewing the framing of the interior, and for that purpose it was necessary to construct a coffer-dam above the dam itself, so as to enable the framing to be removed, and the unsound timbers to be taken out and replaced with new material. This was accomplished, and the entire dam re-constructed, since which it is in admirable condition, does not leak a drop, and is one of the best dams in the Province. The foundations of the mitre sills of the lock were laid bare, the old concrete taken out, new timbers put in, new concrete made of Portland cement, and gravel laid in the place of that removed, and the whole put in such repair as the foundations themselves would admit. These were originally defective, the mitre sills being laid on and bolted to the rock itself without the intervention of the usual mitre sill platforms, and the rock is a porous and shelly limestone. The works were repaired about the 10th of May, and continued in good order until the 7th of July, when the lower mitre sill raised about 8 inches. The concrete was washed out underneath in large masses by the pressure of 8 feet head of water above, and the large traffic through the locks to Port Perry was in danger of suspension for an indefinite period, while the break was being repaired. The sum granted for putting the dam and lock in repair had been expended, and therefore it became necessary to make an extra or over expenditure in order to put the works again in condition, which became the more necessary as very large contracts for the passage of lumber and all classes of timber were depending on the passage of the lock. Divers with the necessary apparatus were at once procured, the mitre sill was forced into place by a truss and screw jacks, the remains of the old concrete removed, and a new concrete composed of fresh Portland cement, sand, and broken limestone, made and sent down in buckets to the diver, to replace that carried away or removed. The work was replanked, and additional bolts were put into the mitre sill, and the whole rebolted to the rock by long fox and wedge bolts, and the lock was reopened for traffic after a detention of only ten days. It has continued in excellent order to the close of navigation, at which period it was never in

The only new work required on the Scugog river in 1877 is for the repair and extension of a cribwork protection wall, which was originally built to prevent rafts of timber grounding on the side of the narrow channel leading to the lock, where the bed of the river is formed of shelving rock, on which timber used to lodge in transit, and cause obstructions to the navigable channel. The wall is now out of repair, having been shoved towards the

channel, and requires rebuilding and some extension.

The works at Lindsay consist of a lock, dam, and three swing bridges, and for any repairs required on these, the ordinary maintenance provision will be sufficient for the ensuing

vear.

The erection of the coffer-dam spoken of in connection with the rebuilding of the dam, raised the water somewhat higher than usual in the spring months of April and part of May, and claims for alleged damages sustained by flooding farm lands were made by several of the resident landholders of the Township of Ops, occupying low lands along the margin of the

Scugog river and the Cross creeks.

A careful examination in detail has been made with regard to each claim. Levels were taken from known data of high-water mark at the period when the coffer dam was in position, and measurements were made of the areas found to have been flooded. In each case where the result of the survey gave reasonable grounds of complaint, an award of damages was made by a gentleman selected for the purpose, who is a practical farmer, resident in the township. The result has been a large reduction in the whole amount of the claims, but, at the same time, I believe a fair and satisfactory settlement of the damages actually sustained. As the dam is now in good order throughout, another coffer dam for reconstruction will not be required for many years.

The Lockmaster reports the following transits through the lock during the season of navigation of 1876:—465 steamboats, 867 scows, 521 cribs of timber, and 4,055,200 feet B. M. of sawn lumber. These returns show a large increase in the number of transits of all classes over the preceding and all other years. The greater portion of the material in transit

passed over the Port Whitby and Port Perry Railway, to Lake Ontario.

40 Victoria.

#### GULL AND BURNT RIVER WORKS.

The rivers, streams, and lakes, composing the head waters of the Gull and Burnt Rivers, are largely used in lumber operations for the transit of the timber to the lower group of lakes forming the head waters of the Trent River system. For the purpose of facilitating and lessening the great cost of the transit of the timber on the upper streams, the dams and slides have been constructed, as well as for the purpose of affording reservoirs of water for he increase of the supply in the lower group of lakes referred to, which are largely used for the purposes of milling and navigation, in connection with the preparing and transit of the sawn lumber, and other products of the country.

The works constructed to the present time are as follows:

Horse Shoe Lake dam and slide, on the Gull River, in the township of Minden.

Minden dam and slide, in the same township, at the falls on Gull River, about 1½ miles

from the Village of Minden.

Elliott's falls dam and slide, on Gull River, about two miles up stream from Norland village. The river at the site of the works forms the boundary between the Townships of Laxton and Somerville.

Norland dam and slide now in construction is at Norland Village, on the Gull River,

which there forms the boundary between the Townships of Laxton and Somerville.

Fenelon Falls slide, reconstructed in 1875, and Burleigh slide in 1874, were both rebuilt out of the same appropriations, as necessary connections for the transit of the timber cut on the same watersheds.

Repairs were also effected in 1874 on Mud Lake dam, in the Township of Dysart, on the Burnt River, about two miles east of the Village of Haliburton.

An appropriation is required in 1877 for service on the following works;

The completion of Norland dam and slide on the Gull River, and a dam at Ken-es-es Lake.

The construction of a dam at Grace Lake on a branch of the Burnt River, on lot 34,

concession 15, township of Monmouth.

At the Big Falls on Burnt River, about two miles down stream from Kinmount, in the Township of Somerville, some rock blasting is required.

At the "Three Brothers" Falls, in the Township of Snowdon, on the Burnt River,

rock blasting is required in the channel.

At Thompson's Falls, Burnt River, at lot 6, in the 6th concession of Glamorgan, a side pier is required, as well as some blasting.

At "Devil's Gap," Burnt River, on lot 9 in the 6th concession of the same township, a

glance pier is also required, as well as the removal of rocks by blasting.

The dams on the several streams will convert the lakes they serve into important reservoirs for storage of water in the dry season, for the purposes of navigation, &c.

#### BALSAM RIVER WORKS.

The opening of navigation from Fenelon Falls, via Cameron and Balsam Lakes to Coboconk, forming a connection at these places between the Toronto and Nipissing and the Victoria Railways, is a result of the construction of the dam and lock at Balsam River.

In addition to that service the dam has been the means of overcoming a rapid on the Balsam River, which was formerly very obstructive to the transit of timber, and from the

low formation of the banks at the point, was one sometimes very tedious to overcome.

The conversion of Balsam Lake into a receiving reservoir for the Gull River, is a measure of great utility, in assisting to maintain a sufficient height of water in Sturgeon and the lower lakes, where the want of depth is often severely felt by those navigating the lakes, and therefore, for these several reasons, the Balsam River dam is an important one. Some additional piers and booms are necessary at the dam to protect the apron, and keep logs and brushwood from going over instead of through the slide, and some piers and booms are also required at the outlet of Burnt River.

#### WASHAGO AND GRAVENHURST ROAD.

That work was placed in good order in the spring, after which it was transferred to the municipalities through which it passes for future maintenance, the road having ceased to be used as the main highway to Muskoka after the opening of the Northern Extension Railway to Gravenhurst.

# MAINTENANCE OF LOCKS, DAMS AND SWING BRIDGES.

The works kept in repair by the appropriation under that head are as follows.

1. Lindsay lock, dam and three swing bridges, one of which is one mile south of the town, and requires separate attendance.

The men employed in charge are:—One lockmaster, employed during the whole year, with assistance allowed during navigation, for the two bridges; one bridge tender, during navi-

gation, for the bridge south of Lindsay.

2. Young's lock, dam and swing bridge. The dam at Young's Point is not the property of the Province, but it possesses the right to enter upon that work for such repairs as are necessary for navigation, but the Province is under no obligation to make any other repairs. One lockmaster employed during the year, attends to these works. 3. Balsam River, lock, dam and swing bridge, the latter being at Rosedale, one mile from the lock. One lockmaster, employed during the year to attend to the works. 4. Port Carling lock and swing bridge, between Lakes Muskoka and Rosseau. One lockmaster, employed during the year, attends to these works. 5. Mary and Fairy Lakes' lock canal and basin. This work has not yet come under maintenance charges of any kind, as it has not so far been used for the passage of steamboats, but one is now in construction at Port Sydney. A lockmaster will be required to attend to the works after the opening of navigation in 1877.

#### LONDON ASYLUM WORKS.

# Sewage Vault and Filters.

The main sewers for the drainage of the buildings of the Asylum for the Insane at London have their outfall at a common point, where they discharge into a creek outside the limits of the Asylum lands, and the sewage matter mixing with the water of the creek passes thence along its course, and finally is received into the south branch of the river Thames.

Difficulties have arisen with the owners of the land adjacent to the creek, on the grounds of alleged injuries sustained by reason of the pollution of the creek water by the sewage matter discharged therein; and, for the purpose of preventing or abating the evil, a sewage vault and filtering chambers have been constructed within the grounds of the Asylum.

The entire structure consists of an arched vault 104 feet in length, 19 feet 6 inches wide, and 17 feet in height, outside dimensions. This is subdivided in the interior into three chambers. The first for receiving the flow from the sewers is 78 feet 6 inches in length, 15 feet wide, and 14 feet 6 inches in height, with a receiving pit for the sewage 5 feet in depth, below the bottom of the entering sewers and the discharging openings, so that all the heavy matter in solution in the liquid deposits in the pit as it passes through the chambers. The second and third compartments are 15 feet in width, and 9 feet long each, these are the filtering cham-The second is separated from the sewage vault by a strong wall with grated openings to admit the flow of the liquid, which then passes downward through a course of gravel and sand 18 inches in thickness, thence through coarse gravel 5 feet in thickness, to the bottom of the chamber where it passes through openings in the dividing wall and enters the third Here the liquid rises through alternate layers of gravel and charcoal until it reaches the discharging outlets which are 25 inches below the level of the receiving openings from the sewage vault. And hence the pressure due to that head forces the water through the various layers of gravel and charcoal, until it runs away clear from the outlet at the rate of about 33,000 gallons in each 24 hours. When in use the upper layer of gravel and sand in the first of the filtering chambers becomes clogged with grease, soap suds, and dirt after about a fortnight's use, and should then be taken off and renewed with new material.

The operation of emptying the sewage which deposits in the vault, will be done by means of a moveable tank and portable pump. The tank is on wheels, and will be used for transporting the sewage and utilizing it by distribution over the lands of the Asylum. These machines, which are admirable for the purpose, are in constant use in Philadelphia, and other large cities in the United States

#### WATER SUPPLY.

In your last year's Report, at pages 12 and 13, are detailed the reasons on which I based the recommendation for boring of an Artesian Well at the site of the Asylum buildings. The boring was continued in the early part of the present year, until the depth of 2,215 feet was attained, the drilling having passed through the Medina shales, and entered the strata of the Hudson river formation. At that depth the difficulties of drilling became considerable, in consequence of loose picces of the shales packing the rods, and before continuing to a greater depth it would be necessary to rim out the hole and case it with wrought iron pipes. New and more powerful machinery would also become necessary for prosecuting the work, and the cost would necessarily be greatly increased. On testing at this stage of the boring, (the test being by pumping for several days consecutively,) it was found that a very large supply of water was obtained from the well. I accordingly recommended the stopping of the boring, and the sinking of a well chamber to the rock, which, when completed and bricked up, would have an internal diameter of eight feet.

The sinking of this well chamber 10 feet in diameter outside the curbing, was accordingly commenced in March, and completed with curbing and bricking in September of the present

year.

After sinking the first 30 feet in depth, great difficulties were encountered from water, and the steam pump had to be kept continually at work, night and day, until the completion of the chamber. At 80 feet from the surface, the water could not be lowered, and the well chamber was stopped at that depth; the remaining distance to the rock being attained by drilling a hole of 20 inches diameter to the gravel overlying the surface of the limestone.

The continuous pumping during construction of the well chamber gave an excellent and most thorough test of its capacity during the dryest portion of the summer and fall months, and I have no hesitation in estimating the supply as sufficient for a demand of 500,000 gallons in each twenty-four hours. A new double pump and horizontal engine are required for the service of the well, the steam-power for which will be supplied from the boilers at present in use in the pumping-house adjoining.

#### DRAINAGE WORKS.

In my Report for 1875, I stated that at the close of that year drainage works were com-

pleted in the following townships, viz.:-

Russell, in the County of Russell; Mosa, Ekfrid and Caradoc, Medcalf, West Nissouri and Delaware, in the County of Middlesex; Dunwich, in the County of Elgin; Grey, in the County of Huron; Brooke, in the County of Lambton, and Raleigh and East Tilbury, in the County of Kent.

Works were then in progress in the following townships:—Moore, Sombra. and Sarnia, in the County of Lambton; Aldborough, in the County of Elgin; East Williams, in the

County of Middlesex, and West Tilbury, in the County of Essex.

During the present year, the drainage works have been completed in the Townships of East Williams, Moore and Aldborough, and those in Sombra, Sarnia and West Tilbury, it is

hoped, will be finished early in January.

The drainage works throughout all the townships named, required a large amount of excavation and other details in their construction, and in some of the townships considerable lengths of road formation accompanied the ditching where the drains were located along the allowances for roads. The drains constructed, give the following quantities and result.

Total length of drains, 251 miles.

Total amount of excavation, 1,680,250 cubic yards. Total approximate acres unwatered, 201,000 acres.

The whole cost of the preliminary surveys, location and construction of the various

works will fall within the amount appropriated by the Acts 33 Vic. cap. 2, and 36 Vic., cap. 38. There can be no doubt that much benefit has been derived by the localities concerned from the construction of every portion of these works; but, of course, the increase in value as a result, will vary in different localities from several causes, such as the natural qualities of the soil, and the proximity of the particular system of drainage for which the lands are assessed. In some of the Western Townships I know of lands which were previously nearly unsaleable at \$5 per acre, having been readily sold at \$15 after the drains in the vicinity were completed, and in the high-level lands on the plains of Raleigh the increase in value was more than double that amount.

#### EXTENSION OF RAILWAYS IN 1876.

The works in progress on Railways in the Province of Ontario in 1876, extend over a total length of 507 miles, and cover operations on twelve different lines. Of these, eight are railways on which works have been reported as in construction in 1875, and four are lines on which I have not previously reported, although on one of them considerable work was done in 1875. They are as follows:

1. The Victoria Railway. 2. The Hamilton and North-Western Railway. 3. The Whitby and Port Perry Railway Extension. 4. The Lake Simcoe Junction Railway.

All the Railways in construction during the year are to have the 4 feet 8½ inch guage. With one exception, that of the Credit Valley Railway, the lines are all being constructed, and lead in northerly directions, and cross, or make connections with the east and west, or main trunk lines, to which they will contribute traffic either directly or indirectly, by means of connections through other northern lines of Railway.

# LONDON, HURON & BRUCE RAILWAY.

The construction of this Railway, 69 miles in length, was commenced in 1875, and the rails were laid throughout before the close of that year. The work done in 1876 has consisted chiefly in the completion of the ballasting and the extension and completion of traffic accommodation at the several stations.

## PORT DOVER AND LAKE HURON RAILWAY.

The line is now completed from Port Dover to Stratford, the whole length being 63 miles, 40 miles of which, between Port Dover and Woodstock, were opened for traffic in 1875, and the remaining 23 miles during the early part of the present year. It connects Stratford with Lake Erie, at Port Dover, and crosses, and connects with the following lines:—The Ayr Line Railway at Simcoe, the Canada Southern Railway, the Brantford and Port Burwell Railway, near Norwich; the Great Western Railway at Woodstock, and the Buffalo Branch, and the main line of the Grand Trunk Railway near Stratford.

#### Brantford and Port Burwell Railway.

The length of the Railway between Tilsonburgh and Brantford, is a little over 33 miles, of which about 32 miles are laid with iron and opened for traffic. The bridge across the Grand River, at Brantford, is now being finished, after which a connection will be made with the Brantford and Harrisburg branch of the Great Western Railway. At Tilsonburgh a connection is made with the Canada Southern Railway, and I believe the line is to be worked for traffic by that Company.

#### KINGSTON AND PEMBROKE RAILWAY.

In 1875 the iron was laid on 46½ miles of the railway, extending from the Grand Trunk Railway, Kingston Branch, to Sharbot Lake.

The line is now in construction for a further distance of 13.83 miles between Sharbot Lake and the Mississippi River, where I presume for the present, it will terminate, and at

which point it is expected to receive a large traffic in connection with the timber trade. About

9 miles of the distance will be graded by the close of the year.

The first thirty miles of the railway passes through a fair agricultural country underlaid by limestone formations. The remaining distance passes entirely through the gneissoid rocks, and the excavations are therefore heavy and expensive.

### CANADA CENTRAL RAILWAY.

The portion of the Canada Central Railway between Sand-Point and Pembroke is 47.56 miles in length. That part of it between Sand-Point and Renfrew, a distance of 13 mile, has been opened for some years, but was not completely ballasted. The line between Renfrew and Pembroke, 34.56 miles in length, was under construction in 1875 throughout. It has been completed with tracklaying, ballasting and station requirements, and opened for traffic in September of the present year.

The connection of Pembroke with the rail system of the Province is a matter of much importance to the Upper Ottawa country, and the lumbering interests of its tribu-

taries.

#### CREDIT VALLEY RAILWAY.

The proposed Credit Valley Railway system consists of a main line and branches, as follows:

The main line from Toronto to Ingersoll, 95 miles, on which about 64½ miles have been bridged and graded.

The branch line from Streetsville Junction to Alton,  $29\frac{1}{2}$  miles, on which  $24\frac{1}{4}$ 

miles have been graded.

And the branch from Cataract Junction to Elora,  $27\frac{1}{2}$  miles, on which 22 miles of

grading have been completed.

The bridging which I have seen across the valleys of the Humber, Etobicoke, Mimico, and Credit Rivers, is of a superior class, and I am informed is the same throughout the line wherever it is completed to subgrade.

A large portion of these works was executed in 1875, and a considerable expenditure

has been made in their prosecution during the present year.

The completion and opening of the line and branches would, in my opinion, be of much value to the trade of the sections of country traversed by portions of the railway.

### VICTORIA RAILWAY.

Construction work on the Victoria Railway was commenced in 1875 and prosecuted so vigorously during the present year that it has been completed for traffic for a length of thirty-two miles, between the Midland Railway at Lindsay and the Village of Kinmount, on the Bobcaygeon road. A length of one mile in the Town of Lindsay is yet to be built, so that a connection may be formed with the Whitby and Port Perry Extension Railway, and I believe a joint station will be built by both companies.

The Victoria Railway passes through a fair agricultural country for about the first twenty miles of its length, after which the surface becomes rough, increasing in wildness as

it nears Kinmount.

The last limestone cutting on the line, proceeding northerly, appears at twenty-two and a quarter miles from the commencement at the Midland Railway, and the first cutting in the gneissoid rocks is seen at a little more than twenty-five and a half miles from the same point, after which all the rock cuttings on the line will be through the same formation. The railway to Kinmount is well located and fairly constructed. The whole length of truss and trestle bridging is only 1,924 lineal feet, which gives the small average of fifty-eight feet per mile of bridging for the thirty-three miles.

Construction works are in progress for several miles along the line towards Haliburton, and the formation and cost of construction becomes much greater on account of the large

extent of rock excavation required.

When the railway is extended to Haliburton, the distance from Lindsay to that place will be about fifty-five miles by rail, and its further extension in the direction of the upper Ottawa region will make it a most valuable "colonization line."

#### HAMILTON AND NORTH-WESTERN RAILWAY.

The construction works on this railway were commenced in the early part of the summer of the present year, having been delayed somewhat by difficulties having arisen as to the route out of the City of Hamilton.

The railway takes an easterly course from the city to the Burlington Beach, where it crosses the canal by an iron swing bridge. It crosses the Great Western Railway main line by an under bridge at Hamilton, and on the level at the Wellington Square Station of the latter railway. The line crosses the Credit Valley Railway at 24.66 miles from Hamilton, and the Grand Trunk Railway at Georgetown, thirty-five and a quarter miles from the same place. The railway is graded ready for track laying, as far as Georgetown, and has 26.5 miles of iron laid. It is expected that the track will be laid throughout to Georgetown before the close of the year, after which the Company propose to commence construction between the latter place and Barrie.

## BELLEVILLE AND NORTH HASTINGS RAILWAY.

Construction works on this railway were commenced in 1875, but have made small progress. The length of the line will be twenty-two miles, extending from a point in the Township of Madoc, southerly to its connection with the Grand Junction Railway about seventeen miles from Belleville. It is designed to open up an extensive and valuable mineral region. About five miles of the line are graded, half a mile of which passes through a lake.

## WHITBY AND PORT PERRY EXTENSION RAILWAY.

The extension line of this railway will connect Port Perry with Lindsay, where it will form an important connection with the Victoria Railway. The length of line from Port Perry to Lindsay will be twenty-seven miles, of which twenty-four miles are graded, and there are nine and a half miles of iron laid. The works were commenced this year, and have made rapid progress. At Port Perry, the line connects with the Whitby and Port Perry Railway, of which it forms an extension. When the line is opened for traffic, and running trains connecting with those on the Victoria Railway, the distance from Whitby Station to Lindsay will be forty-six miles, and from Whitby harbour forty-seven miles. From Whitby Station of the Grand Trunk Railway, the distance by rail to Haliburton will be 101 miles when the Victoria Railway is completed to that point.

## LAKE SIMCOE JUNCTION RAILWAY.

The length of the Lake Simcoe Junction Railway is  $26\frac{1}{2}$  miles. Its northerly terminus is at Jackson's Point, on Lake Simcoe, and its southerly one at Stouffville, on the Toronto and Nipissing Railway, a station 29 miles from Toronto. The works on the line were commenced during the year, and have made good progress. The railway will probably be completed by the end of next summer.

#### NORTH SIMCOE RAILWAY.

The North Simcoe Railway was originally located from Barrie to Penetanguishene, having a length of 35 miles. Part of the work of construction was commenced in 1875, and prosecuted to a small extent this year. I am informed that in all about 7 miles are graded, on which the bridges are built, and the road-bed ready for track-laying, and 24 miles have been chopped out and cleared, ready for grading.

#### RAILWAY CROSSINGS.

As some difficulties have occurred during the year with regard to the right of one railway to cross another on the level, I think it desirable, for future reference, to add the following list of all the crossings in the Province, of one railway with another, whether over, under, or on the level.

# RAILWAYS CROSSING THE GRAND TRUNK RAILWAY AND ITS BRANCHES.

# Railways Crossing Under the Grand Trunk Lines.

- 1. Ottawa and St. Lawrence Railway, at Prescott. 2. Brockville and Ottawa Railway, at Brockville.
- 3. Midland Railway, at Port Hope.
- 4. London, Huron and Bruce Railway, west of Lucan.

# Railways crossing the Grand Trunk lines on the level.

- 1. Kingston and Pembroke Railway, at Kingston.
- Grand Junction Railway, at Belleville.
   Cobourg, Peterboro' and Marmora Railway, at Cobourg.
- 4. Whitby and Port Perry Railway, at Whitby.
- 5. Northern Railway, at Toronto.
- 6. Toronto, Grey and Bruce Railway, at Toronto.
- 7. Great Western Railway, at Toronto.
- do. at Guelph. 8.
- 9. Port Dover and Lake Huron Railway, at Stratford.
- 10. near Tavistock. do. do.
- 11. London, Hurou and Bruce Railway, at Clinton.
- 12. Great Western Railway, at Paris.
- 13. Hamilton and North-Western Railway, at Caledonia.
- 14. Air Line Railway, near Canfield.
- 15. Canada Southern Railway, do.
- 16. Welland Railway, at Port Colborne.
- 17. Great Western Railway, branch, at Brantford.
- do. near London. 18. do.

### RAILWAYS CROSSING THE GREAT WESTERN RAILWAY AND ITS BRANCHES.

# Railways Crossing Over or Under the Great Western Lines.

- 1. Hamilton and North-Western Railway, at Hamilton.
- 2. Welland Railway, near Thorold.
- 3. Erie and Niagara Railway, near Clifton.
- 4. Grand Trunk Railway, near Lucan.
- 5. Port Dover and Lake Huron Railway, near Simcoe.

# Railways Crossing the Great Western Lines on the Level.

- 1. Grand Trunk Railway, at Toronto.
- 2. Northern Railway, do.
- 3. Toronto, Grey and Bruce Railway, at Toronto.
- 4. Hamilton and North-Western Railway, at Wellington Square
- 5. Grand Trunk Railway, at Paris.
- 6. Port Dover and Lake Huron Railway, at Woodstock.
- 7. Grand Trunk Railway, east of London.
- at Brantford. do 8. do
- do do near Canfield. .9.
- do do at Clinton. 10.
- doat Guelph. do
- 12. Canada Southern Railway, east of St. Thomas.
- 13. do do west of do.
- near Longwoods. 14. do
- 15. London and Port Stanley Railway, at St. Thomas.

- 16. Toronto, Grey and Bruce Railway, at Harriston.
- 17. Erie and Niagara Railway, near Victoria.
- 19. Canada Southern Railway, at St. Thomas.

  The level crossings mentioned in connection with the Grand Trunk and Great Western Railways, include some of those of the Canada Southern, Toronto, Grey and Bruce, and other railways. I will therefore in continuation, mention those only on other railways not previously mentioned.

1. Hamilton and North Western, and Canada Southern level crossing at Hagarsville.

2. Port Dover and Lake Huron, and Canada Southern near Otterville.

and Brantford and Port Burwell level crossing near Norwich.

4. Northern and Midland Railways level crossing at Orillia.

5. Midland and Toronto and Nipissing crossing at Woodville Junction.

6. Midland, and Victoria Railways level crossing at Lindsay.

The Cobourg, Marmora, and Peterboro' crosses under the Midland Railway at Peterboro'. In mentioning the Railway crossings on the Grand Trunk and Great Western Railway systems. I have necessarily reported in each case those crossings where they intersect each other, as well as where they intersect other Railways, and therefore in those eases they are mentioned twice, that is once in connection with Grand Trunk, and once with regard to Great Western crossings. I have not mentioned any crossings of lines now in construction, where the mode of crossing has not yet been determined. It will therefore be seen that, deducting the repetitions mentioned, there are forty-five cases in the Province in which one Railway crosses another, and that of these, in nine cases they cross over or under each other, and in the remaining thirty-six cases they cross each other on the level.

I have the honour to remain, Your obedient servant, THOS. NEPEAN MOLESWORTH, Engineer of Public Works.

# **STATEMENTS**

OF

ACCOUNTANT AND LAW CLERK.

No. 1.—Statement of the Expenditure on Public Works, from

N	TAME OF WOR	K.	1868.	1869.	1870.
Government House					ts. \$ cts. 37,867 29
Parliament and Depar Asylum for the Insan Do	rtmental Building	s and Grounds	47,659 8	1 2,808 5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Do	Hamilton				
Do Deaf and Dumb Instit Blind Institute, Brand	tute, Belleville		450 0	0 40,993 2	5 36,497 53 15,533 94
Central Prison, Toron Reformatory, Penetan	to		1 000 0		7,590 95
Central Prison, Toron Reformatory, Penetan Registry Office and Gr Court House and Gaol Government Farm, M Agricultural College a	aol, Bracebridge l, Sault Ste. Mari	e	1,207 7	1	1,624 42
Agricultural College a School of Practical Sc	nd Farm, Guelph ience, Toronto				
School of Practical Sc Normal and Model Sc Registry Office and Lo Do Registry Office at Min	hools, Toronto ock-up House, Par	ry Sound			
Registry Office at Min	do The den t Lake Superior	under Bay			
Lock-up at Silver Islet Do Matawan, Brock's Monument	Nipissing District				981 10
Brock's Monument Normal School, Ottaw Osgoode Hall, Toronto	a	• • • • • • • • • • • • • • • • • • • •			11 700 07
Osgoode Hall, Toronto Lock on Rosseau River Lock at Young's Point Lock between Balsam Lock between Mary's a	r, Muskoka , Peterborough and Cameron Lak	es		10,788 45	11,792 27 18,804 95 3,837 32
Lock between Mary's a Cut between Lakes Jos	and Fairy Lakes seph and Rosseau				6,794 30
Cut between Lakes Jos Scugog River Works. Pigeon River Works.		• • • • • • • • • • • • • • • • • • • •			19,040 61
Sydenham River Work Nottawasaga do Kaministaquia do					
Muskoka do Otonabee do					
Balsam do Gull and Burnt do Trent River Bridge					
Bridges at Port Carling Bridge at Port Sandfiel	;				
Muskoss Falls Works Muskoka Lakes Works					
Washago and Gravenhu Wharf at Washago	arst Road	• • • • • • • • • • • • • • • • • • • •			17,203 43
Portage du Fort Bridge Clearings and Log-hou Homestead Fund					
Roads in Ryerson Surveys, Inspections, A	rbitrations, and A	wards, &c.			
Aldborough Drainage V Brooke Drainage Works Delaware do	S	• • • • • • • • • • • • • • • • • • • •			1,785 00
Roads in Ryerson	Iedcalf Drainage	Works ,			3,546 30 4,947 05
intoore do .		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		7,032 15
Mosa do . Nissouri, West, Drainas Raleigh do			• • • • • • • • • • • • • • • • • • • •		10,555 00
Russell do Sarnia do					4,346 32
Sombra do Filbury, East, do Filbury, West, do					204 00
Williams, East, do Surveys and Drainage of			678 90	2,925 05	12,539 97
Totals			125,346 93	248,620 72	407,734 29

DEPARTMENT OF PUBLIC WORKS, TORONTO, 1st January, 1877. the 1st July, 1867, to the 31st December, 1876.—Capital Account.

1871.	1872.	1873.	1874.	1875.	1876.	TOTAL.
\$ ets.	\$ cts.	\$ cts.	3 cts	\$ ets.	\$ cts.	\$ cts.
	1,500 00	4,017 57	2,796 22	1,022 76	10,070 46 2,084 00	124,744 78 78,193 99
1,862 38 30,431 60	2,886 82 3,338 5 <b>2</b>	11,204 68 17,679 95	9,687 71 2,443 58	1,014 07 8,213 64	4.342 29	201,833 12
78,280 12	33,256 65	48,092 67 31,113 13	2,443 58 28,499 40	8,213 64 45,627 50	22,850 72 44,510 51	451,915 90 145,138 81
		1	23,887 67	1.	1 29.996 78	29,996 78
12,274 33	17,79 <b>3</b> 12 33,085 82	13,790 49 14,815 19	5,033 96		3,370 13 5,738 38	133,835 01 133,612 72
53,784 81 10,925 96	80,657 95	235,232 76	8,071 40 102,059 24	13,837 40	16 676 04	459,389 35
4,489 79	1,416 54	2,423 70	1,594 40		5,014 93 2,429 00	23,981 33 3,636 74
845 10	178 68	1,735 28	958 29	165 77	2,429 00	5 507 54
47,350 00	178 68 3,711 42	584 92	1		14 625 99	51,646 34 131,892 02
38,509 34	13,398 12	78,878 64 3,412 08	25,8 <b>3</b> 1 16 2,208 11	1,248 33	14,235 33 324 28	59,100 26
13,613 50	13,398 12 10,745 73	4 346 63	25,831 16 2,208 11 12,002 73 102 82	1,248 33 1,255 23	324 28 3,975 54	45,939 36
1,715 20 1,994 25	619 39 3,483 07	98 56 1,933 06	102 82		79 31 5,561 08	2,615 28 12,972 06
		2,268 79	2,987 50			2,987 50
		2,268 79			407 20	2,987 50 2,268 79 2,547 20
						981 10
		1,231 40	60,957 63	27,630 10 2,290 96	5,317 65 19,376 75	95,136 78 24,104 03
15,771 94	2,403 49					36,946 03
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	857 65 5,319 50	2,924 32				30,892 72 23,959 02
	1	1 019 31	16,947 42	1,854 31	3,603 41	23,424,45
2,967 50 8,719 73	233 95 5,221 25 1,623 25	5,988 52 1,848 97 836 50 956 46	3,987 50		4 663 61	9,995 75 52,588 55
1,527 40	1,623 25	1,848 97	5,501 50	1,501 00	4,000 01	4,999 62
374 76	644 00	836 50	301 00			2.156 26 5,915 09
1,708 82 197 10	3,249 81 11 00	11,247 96	11,408 96			22,865 02
		6,034 64	11,408 96 4,625 62	2,188 44	3,125 49	15,974 19
		956 46 11,247 96 6,034 64 2,517 25	1.194 31	2,188 44 3 30 1,087 06 5,925 54 1,212 08		2,520 55 2,281 37 22,711 66
			11,762 21	5,925 54	5,023 91	22,711 66
			2,000 00 1 834 91	1.212 08		2,000 00 3,046 99
					2,338 43	2,338 43
					5,013 00	5,013 00 1,470 36
7,985 26	1,396 61	1,392 91	2,171 80	2,161 11	481 00	32,792 12
489 22	• • • • • • • • • • • • • • •	4,997 99		• • • • • • • • • • • • • • • •		489 22 4,997 99
						,
3,682 03   1,409 04	4,541 10 3,068 96	3,532 17 1, <b>3</b> 10 70	4,104 97	920 48 752 36	250.00	16,780 75 7,295 06
1,137 34	913 95	744 98	504 00 899 75	1,495 60	3,927 39	9,119 01
13,433 95	7,685 75	11,843 03	• • • • • • • • • • • • • • • •	3,759 50	250 00 3,927 39 3,439 52	7,199 02 34,747 73
			4,435 98	1,304 95		5,740 93
2,793 00 6,361 70	2,716 11 658 31	1,000 40	633 15			10,105 86 13,667 66
4,711 55	1,048 92	936 80 999 00	099 19	130 03		8,175 47
194 80	4,725 00	4 192 50	4,355 10	720 82	2,952 59	17,070 81 12,714 75
1,973 26	2,444 06	1,265 28 631 50	7,547 00			8,178 50
14,636 15	1,985 54	2,403 27	5,915 88	913 80		36,409 64
7,197 45			2,177 26	17,417 44	17,235 45	11,543 77 36,830 15
17 250 20			2,177 26 17,802 61	17,417 44 17,510 97	10,425 97	49,867 76
17,553 50	5,999 56	4,128 21 2,583 50	7,418 91	1,538 15 8,105 60	18,697 80	35,297 62 26,803 40
	3,864 94	1,444 88	2,842 42	8,105 60 2,206 75	15 00	2,221 75 36,238 26
0.247 00						
9,345 25	3,864 94	1,444 88	2,842 42	2,051 40	545 45	30,255 26

F. T. JONES, Accountant.

No. 2.—Expenditure for Repairs, &c., by the Department of Public Works, during 1875 and 1876. (Part of Maintenance Account.)

NAME OF WORK.	Expenditure for 1875.	Expenditure for 1876.
•	\$ cts.	\$ cts.
Government House	4,315 23	4,970 02
Executive Council's and Attorney-General's Offices	1,109 78	1,286 15
East Wing, Parliament Buildings	1,676 66	1,919 30
Department of Public Works	1,529 34	1,279 09
Crown Lands Department	1,497 06	1,322 01
Parliament Buildiugs, Centre	5,917 85	5,541 98
Osgoode Hall, Toronto	3,799 88	3,037 80
School of Practical Science	1,474 35	1,361 71
Maintenance of Locks and Dams	1,901 27	2,111 94
Total	23,221 42	22,830 00

F. T. JONES,

Accountant.

DEPARTMENT OF PUBLIC WORKS,
TORONTO, 1st January, 1877.

No. 3.—Stamement of Expenditure from 1st January 1870 to 31st December, 1876, under the Ontario Drainage Act, 33 Vic., c. 2; 34 Vic., c. 22; and 36 Vic., c. 38, on Drainage Works; chargeable to Municipalities. Also, Total Expenditure under said Act up to 31st December, 1876.

TOWNSHIP	Total expenditure from 1st January 1870, to 31st Dec. 1874.		Expenditure 1876.	Total to 31st December 1876.
Aldborough Brooke Delaware Dunwich Ekfrid, Caradoc, and Medcalfe Grey. Moore Mosa Nissouri, West Raleigh Russell Sarnia Sombra Tilbury, East Do West Williams East	34,747 73 4,435 98 10,105 86 13,537 01 8,175 47 13,397 40 12,714 75 8,178 50 35,495 84 11,543 77 2,177 26 21,930 82 33,759 47	\$ cts. 3,759 50 1,304 95 130 65 720 82 913 80 17,417 44 17,510 97 1,538 15 8,105 60 2,206 75	3,439 52	\$ cts. 7,199 02 34,747 73 5,740 93 10,105 86 13,667 66 8,175 47 17,070 81 12,714 75 8,178 50 36,409 64 11,543 77 36,830 15 49,867 76 35,297 62 26,803 40 2,221 75
Total chargeable to Municipalities	210,199 86 30,037 46	53,608 63 2,051 40	52,766 33 545 45	316,574 82 32,634 31
Total	240,237 32	55,660 03	53,311 78	349,209 13

F. T. JONES,

Accountant.

DEPARTMENT OF PUBLIC WORKS, 1st January, 1877.

# No. 2.—Contracts and Bonds entered

DATE.	Work.	SUBJECT OF CONTRACT.
		Apron, &c., to dam at Young's Point
" 19	Timber slide, Fenelon Falls	Materials for work
May 21	Sarnia Drains	
Feb. 22	do	Pulse Creek Drain
" 25	Moore Drains	Drain No. 5, extension
" 23	Sombra Drains	Clay Creek Drain
	East Williams Drains	
	London Asylum	Artesian well
April 17	Muskoss Falls and Port Carling Bridges	Timber for works
" 21	Normal School, Ottawa	Plumbing, gas-fitting, and steam-heating
" 26	Lock-up at Matawan, Nipissing District	Whole work except fences
May 7	Bridges at Port Carling and Muskoss Falls	Iron work
June 22 28	Normal School, Ottawa Scugog River Works	Fences Dredging and removing obstructions
" 25	Normal School, Ottawa	Desks and seats
Aug. —	Public Buildings	Fuel
" 14	Aldboro Drains	No. 1, North Branch
" 12	do	No. 1, South Branch
	Agricultural College, Guelph	Mansard roof on the front portion of the stone building Big Creek and Little Creek (No. 6)
*		
" 9	do	Trembly Creek
Oet. 9	do	Drains 1, 2, 3, 4
" 1	do	Big Creek outlet and East Branch
" " " 13 Aug. 24		Plumber's and gas-fitter's work
Sep. 20	do	Carpenter and joiners' work
" 18	Sombra Drains	Extension No. 1, North

into with Her Majesty in 1875.

Contractors.	Sureties,	AMOUNT.
William Graham	Walter Walsh, R. N. Roddy and Christo	\$ cts. 1,162 56
John Boyd, Town of Peterborough, contractor	pher Leary John McWilliams, Peterborough, wood- ranger; Robert Wainwright, Peter-	984 59
John Carroll, Toronto, contractor	borough, butcher Thomas McCrosson, Toronto, hatter, and Patrick Boyle, Toronto	82 00
Wm. C. Brown, Point Edward, contracted	Jas. B. Brown, Point Edward, school	∃₩ cubic vd.
Hugh McLaren, Tp. of Moore, contractor	teacher Duncan Livingstone, Sarnia, farmer ; Jas. Boyle, Sarnia, farmer	# cubic yd. 18c. = 396 00
	Boyle, Sarnia, farmer	18c - 1170.00
contractor	John McMichael and David Wilson	150 - 1 015 00
Carling, District of Muskoka, mil		white nine 19 m \$10
owner David S. Keith and James B. Fitzsim mons, Toronto, plumbers	Carling George Gooderham, Toronto, and Jacob P. Wagner, Toronto, builder	179 98 6,498 00
Benjamin Little, Town of Pembroke, Co Renfrew, builder	. William Moffat, Pembroke, mill owner;	2,100 00
Stephen A. Russell, Town of Newmarket Co. York, mill owner; Wm. Douglas City of Toronto, Co. York, mill owner	, Alexander Manning, Toronto, contractor	wt. iron, ₱ lb., 4½c. cast iron, ₱ lb., 3¾c. = 293 25
James O'Connor, Ottawa, contractor Thomas Walters, Lindsay, Co. Victoria contractor	John Murray and John O'Reilly Geo. Brownlee, Peterborough, lumber mer- chant; John Makins, Peterborough, iron founder	3,562 00 at special rates
Charles Potter, Toronto, optician	NoueLarge desk, \$6 50 Small do 4 50	1,038 00
	Stephen A. Oliver, Toronto, merchant; Wm. H. Knowlton, Toronto, produce merchant	7,039 75
John McIntosh, Chatham, contractor	Alex. McDonald, Tp. Howard, Co. Kent, farmer; Donald Clunas, Tp. Howard,	P cubic yd. 14
Donald McKay, Chatham, contractor	John Gilbert, Town of Chatham, Kent, cooper; John Dunoon, Chatham,	
John Hall, jun., Guelph, builder	G. W. Jessop, Guelph; David Kennedy, Guelph	3,000 00 subject to deductions
Richard Mason Brayne, Chatham, con- tractor, and George C. Irwin, Chatham, contractor	Alexander Young, Chatham; LittleCreek	cubic vd. 14
John Richardson, Valetta, Kent, con- tractor; James S. Richardson, Valetta,	Henry Richardson, Village of Trudell, Es-	cubic yd. 15
Kent, contractor George Blain, Brampton, Peel, contractor	Village of Comber, Essex, postmaster Hugh Miller, Toronto, merchant; Isaac l Blain, Tp. of Bosanquet, Co. Lamb-	Drains 1, 2, ₱ c. yd. 15 3, 4, 16
Bernard Corbett, Toronto, contractor	ton, farmer Patrick Boyle, Toronto, printer and publisher; Thomas McCrosson, merchant	eubic yd. 16
James Farrell, Toronto, contractor Wm. Stanley, Toronto, painter and glazier W. B. Malcolm, Toronto, plumber Daniel Livingstone and George Wright,		432 00 650 00 183 00
Toronto, builders Richard Dennis, Toronto, carpenter and	merchant	294 00 650 00
joiner	Walsh, Toronto, builder Gilbert Dolsen, Tp. Raleigh, yeoman; Chas. Williams, Chatham, grain mer- chant	

# No. 4.—Contracts and Bonds entered

D	ATE.	Work.	SUBJECT OF CONTRACT.
Oct.	9	Sombra Drains.	Drains Nos. 3, 4, E. and W. outlets; No. 5, E. and W. outlets
66	19	Inebriate Asylum, Hamilton	Steam pump and boiler
66	28		Iron water piping
		,	75 tons Scranton egg 25 " Nova Scotia soft 10 cords pine
Dec.		Moore Drains Inebriate Asylum, Hamilton do Sarnia Drains	No. 5, Extension  Furniture  Engine house and coal shed  Perche Creek and Waddell Creek

DEPARTMENT OF PUBLIC WORKS, TORONTO, 1st January, 1877.

# into with Her Majesty in 1875.—Continued.

Contractors,	Sureties.	Amou	NT.
			\$ cts. 17\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Wm. M. Beattie, Ottawa, coal merchant Alexander McIntosh, do do  Frederick Lee, Village of Corunna, Co. Lambton The Oshawa Cabinet Co	William Gray, Tp. Moore, farmer; Robert Fleck, Tp. Moore, reeve W. Dayfoot, Hamilton John Donovan and Patrick O'Mara	do # cubic yd.	tes $15\frac{1}{2}$ $4,031$ $25$ $620$ $00$ $17\frac{1}{2}$

F. T. JONES, Law Clerk.

# No. 5.—Contracts and Bonds entered

Date.	Work.	SUBJECT OF CONTRACT.
1876. Jan. 21	Hamilton Asylum	Wire guards for windows
" 21 " 21	do Bridge at Port Sandfield	Fences to grounds Iron work
Feb. 29	Lindsay Lock	Timber for coffer dam
March 3	do	Puddling clay and stone for coffer dam
Feb. 29	do	Timber for coffer dam
	Gull River Works	Timber for dam and slide at Norland
Mar. 27 " 13	London Asylum Bridge at Port Sandfield	Well chamber
" 13	Gull and Burnt River Works	Timber for bridge at Huntsville
	Normal School, Toronto	Carpenter's and painter's work for play sheds
May 2	Orillia Asylum	and grounds Plumbing work
" 2	Normal School, Ottawa Mimico Farm Blind Institute	Fences Bond to secure payment of occupation money. Sidewalk and wicket
" 20	Orillia Asylum	Tinsmithing
" 20	do	Plastering
June 12	Blind Institute	Waterclosets on grounds
" 19 Aug. "	Toronto Lunatic Asylum	Box-drain to Lake Whole work
" "	Osgoode Hall, Addition to	Whole work
" 5	Orillia Asylum	Gas works
July 5	do	Painting

DEPARTMENT OF PUBLIC WORKS, TORONTO, 1st January, 1877. into with Her Majesty in 1876.

Thomas McCabe of Lindsay, contractor  George Henry, Lindsay, contractor  James McGinlay, Lindsay  Owen Connor, Lindsay, and Alex.  Robert Staples  J. S. Garner, Petrolea, contractor  Benjamin B. C. Perkins, Gravenhurst, Muskoka District, lumber merchant; Wm. W. McColwell, Toronto; and Henry Colwell, Toronto  Trastus Hanes, Village of Utterson, Muskoka District, contractor  Michael McCabe, Township of Ops, and James Maguire, Lindsay  Joseph Thornhill and James Henry  Clay.  Stone,  3 00 per contractor  8 per foot, 9c., or  180 00  At special rates.  About  Jacob P. Wagner, Toronto, builder, and Wm. Munn, Toronto, joiner  White pine, 10 50 per m. About  About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White oak, 15 00 per m. About  Too Oper M. White Oper M. A			
Wm. H. Rice, Toronto, contractor Latham B. Swift, Toronto, and Seymour Porter, Toronto, bookkeeper James Isaac Dickey, John Neill, and Nathaniel Dickey, all Toronto  Thomas McCabe of Lindsay, contractor Jonathan Gill and John Davidson	Contractors.	Sureties.	Amount.
George Sharp, Hamilton, contractor.  James Isaac Dickey, John Neill, and Nathaniel Dickey, all Toronto  Thomas McCabe of Lindsay, contractor.  James McCabe of Lindsay, contractor.  James McGinlay, Lindsay.  Joseph Thornhill and James Henry.  Owen Connor, Lindsay, and Alex.  Ross, Lindsay  W. Staples and George Rumney.  J. S. Garner, Petrolea, contractor.  Benjamin B. C. Perkins, Gravenhurst,  Muskoka District, lumber merchant; Wm. W. McColwell, Toronto; and Henry Colwell, Toronto; and Henry Colwell, Toronto  Erastus Hanes, Village of Utterson,  Muskoka District, contractor  Muskoka District, contractor  Muskoka District, contractor  Hanes	Wm. H. Rice, Toronto, contractor	mour Porter, Toronto, book-	
Thomas McCabe of Lindsay, contractor.  James McGinlay, Lindsay.  James McGinlay, Lindsay.  J. S. Garner, Petrolea, contractor.  Benjamin B. C. Perkins, Gravenhurst, Muskoka District, lumber merchant; Wm. W. McColwell, Toronto; and Henry Colwell, Toronto  Erastus Hanes, Village of Utterson, Muskoka District, contractor.  Lindsay Township of Ops, and James Henry.  Joseph Thornhill and James Henry.  Owen Connor, Lindsay, and Alex.  Ross, Lindsay  W. Staples and George Rumney  Jacob P. Wagner, Toronto, builder, and Wm. Munn, Toronto, joiner  At special rates.  About 1,800 00  White pine, 10 50 per m. White oak, 15 00 per m. About 700 00  White oak, 15 00 per m. About 700 00  Erastus Hanes, Village of Utterson, Muskoka District, contractor  Muskoka District, contractor.  Hanes	James Isaac Dickey, John Neill, and	James Matthews and Donald McPhie	94 89 or
James McGinlay, Lindsay		Michael McCabe, Township of Ops, and James Maguire, Lindsay	Cast iron, 03 per lb. per foot, 9c., or
Robert Staples		Owen Connor, Lindsay, and Alex.	Stone, 3 00 per cord. 234 00 or
J. S. Garner, Petrolea, contractor  Benjamin B. C. Perkins, Gravenhurst, Muskoka District, lumber merchant; Wm. W. McColwell, Toronto; and Henry Colwell, Toronto  Erastus Hanes, Village of Utterson, Muskoka District, contractor  Muskoka District, contractor  At special rates, About 1,800 00  White pine, 10 50 per m. White oak, 15 00 per m. About 700 00  Toporonto  Hanes	Robert Staples		693 36 or
Erastus Hanes, Village of Utterson, Duncan McCaffrey and John L. 13 00 perm, J Muskoka District, contractor Hanes	chant; Wm. W. McColwell, To- ronto; and Henry Colwell, To-	and wm. Munn, 1 oronto, joiner	At special rates. About 1,800 00 White pine, 10 50 per m. White oak, 15 00 per m.
Richard Dinnis, Toronto, contractor Wm. Milligan, Toronto, glazier, and James Walsh, Toronto, builder	Erastus Hanes, Village of Utterson, Muskoka District, contractor	Hanes Wm. Milligan, Toronto, glazier, and	13 00 per m. B.m or about 423 56 598 00
James Morrison, Toronto, contractor, Samuel Davison, Toronto; and J. G. 6,450 00  and Wm. J. McGuire, Toronto, Lawson, Toronto, book-keeper	and Wm. J. McGuire, Toronto,	Samuel Davison, Toronto; and J. G. Lawson, Toronto, book-keeper	,
Wicket, 8 00	Wm. Watt, Brantford, contractor		Wicket. 8 00
Robert Mamer, Orillia, tinsmith At special rates.  About 200 00 Stephen Goring, Orillia, and Henry About 400 00	Stephen Goring, Orillia, and Henry		At special rates.
Wm. Watt, Brantford, contractor James Watt, Brantford, and A. Mur- ray. Brantford	Wm. Watt, Brantford, contractor	ray, Brantford	1,260 00
Michael Short, Toronto, contractor	Neil Livingstone, Village of Brace- bridge, Muskoka, carpenter and	John P. Cockburn and John McNeill.	346 00 2,275 00
Wm. Booth, Toronto, builder John Severn, Yorkville, reeve; and Leonard Pears, Yorkville, brickmaker		Leonard Pears, Yorkville, brick-	14,429 00
Donald S. Ridout, and George A. Work guaranteed for two years 1,500 00  Aird, engineers, Toronto	Aird, engineers, Toronto	Work guaranteed for two years	
Alex. M. Ross and James W. Ross, James Edwin O'Reilly, Hamilton, both of Hamilton, contractors barrister	both of Hamilton, contractors		1,329 90

F. T. JONES, Law Clerk

F. T. JONES, Law Clerk.

No. 6.—PROPERTY PURCHASED by the Department in 1875.

Рисе.	\$ cts.	80 00	200 00
Area.		শ্ব	
For what Purpose used.	For purposes of Lock on Balsam River	Bridge at Port Carling	Engine House, Inebriate Asylum
Desoription.	Such portions of Lot 31, in the 8th Concession, Fenelon, and Lot 32, in 9th Concession, Fenelon, as may be overflowed by keeping the water of the Balsan River of the Water of the Wate	such and an arrange of the lower mitre sill restricted the lower mitre sill the tilt, on the east side of Joseph Street, in Bridge at Port Carling the Village of Port Carling	Lot 46, on Queen Street, in the City of Engine House, Inebriate Hamilton Asylum
То Wном Sold.		Her Majesty	
Ву Wном Sold.	William Margach, John Her Majesty Daniel, Adam Huds- peth, Helen Margach, and Catherine Daniel	October 19 Jeremiah Daniel ·Cock- Her Majesty . burn and wife, Catharrine	November 17 Robert Sconce and Cath. Her Majesty
Бате.	1876. April 9 J	October 19	November 17

N.B.—No Property was purchased by the Department in 1 876.

DEPARTMENT OF PUBLIC WORKS, TORONTO, 1st January, 1877.

# REPORT

OF THE

# LIBRARIAN OF THE LEGISLATIVE ASSEMBLY

OF THE

# PROVINCE OF ONTARIO.

To the Honourable the Legislative Assembly of the Province of Ontario:

The Report of the Librarian on the state of the Library, respectfully represents:—
That, as will be seen by the Supplementary Catalogue, presented to the House, a

considerable addition has been made during the present year to the Library of the Province. The increase has been chiefly in works of practical and permanent utility.

The "Works of Reference" have been augmented. The collection of "Constitutional and Parliamentary History," has been enriched by the purchase of the celebrated "Rushworth's Collections." To the "History of Great Britain and Ireland," have been added the more important publications on this subject issued during the year.

To the Department of "Canadian History and Topography," particular attention has

To the Department of "Canadian History and Topography," particular attention has been directed. The older works on these subjects are becoming, every year, more difficult to obtain; but more than an ordinary share of these books has been secured for

the Library since the last meeting of Parliament.

Considerable additions have been made to the Departments of "Law," "Political and Social Science," "Political Economy," "Art, and Manufactures," and "Physical Science," To the Departments of "Geography, Voyages and Travels," and "Belles Lettres," have been added the more solid works in these classes issued in the course of the year.

In obedience to a Resolution of the Library Committee, which was adopted by the House, at its last session, a correspondence has been opened with the other British Colonies, with the view of inaugurating a system for the interchange of Official Documents, Except from the Australasian Colonies, no replies have been received. From South Australia, in particular, a liberal response has come. There are now in the Library the Official Documents of that Province, ranging from the year 1869–70 to the year 1875.

During the past year the Library has been made the recipient of several donations. The Federal Government of the United States heads the list. Next in order come the States of New York and Ohio. The official donations to the Library, as well as those

from private individuals, will be found enumerated below:-

#### From the Federal Government of the United States:-

Documents of the First Session of the Forty-Third Congress, 1873-4. 42 vols.

Documents of the Second Session of the Forty-Third Congress, 1874-5. 4 vols.

United States Indian Affairs. 8vo. Washington, 1873, 1875.

North Pacific Ocean. Deep Sea Soundings. By the U. S. Steamer, "Tuscarora." Illustrated. 8vo. Washington, 1874.
Gorringe, (Lieut.) U. S. N. The Rio de la Plata. Illustrated. 8vo. Washington,

1875.

Gorringe, (Lieut.) U. S. N. The West Coast of Africa. Illustrated. Svo. Washington, 1873.

Mediterranean Sea. Navigation of. Issued by the U. S. Government. 8vo. Washington, 1872.

Ferrel, Wm. Tidal Researches, U. S. Coast Survey. Illustrated. 4to. Washington,

Potten, (Lieut.) U. S. N. The North-west and Coast of Spain, and the Coast of Portugal. 8vo. Washington, 1874.

Daily Bulletin of Weather Reports, Signal Service. U. S. Army. For October and November, 1872. Maps. 2 vols. 4to. Washington, 1873.

United States Geological and Geographical Survey of the Territories. Illustrated. 8vo. Washington, 1874.

Porter, T. C., and Coulter, John M. Synopsis of the Flora of Colorado. 8vo. Washington, 1874.

United States Scientific Pamphlets. 8vo. Washington, 1874.

Washington Astronomical and Meteorological Observations, for 1872. 4to. Washingington, 1874.

United States Scientific Publications. 4to. Washington, 1875.

#### From the State of Ohio:-

Geological Survey of Ohio. Geology and Palæontology. Geology. Vol. 2. Maps. 8vo. Columbus, 1874.

Geological Survey of Ohio. Vol. 2. Palæontology. Maps. 8vo. Columbus, 1875. Hygenie of the U. S. Army, with Descriptions of Military Posts. Illustrated. 4to. Washington, 1875.

United States Military Reports. Gatling Guns. Illustrated. 4to. Washington, 1874. United States Report on European Artillery. Illustrated. 4to. Washington, 1873.

United States Report on a Naval Mission to Europe. Illustrated. 4to. Washington,

Catalogue of the Ohio State Library. 1875. Compiled by William Holden. (General Library.) 8vo. Columbus, 1875.

Ohio Constitutional Convention. Debates of the Third Constitutional Convention of Ohio. May 13, 1873—May 15, 1874. 2 vols. 8vo. Cleveland, 1873–1874. Vol. 1. Vol. 2, Parts 1, 2, 3.

Catalogue of the Library of the Surgeon-General's Office, U. S. Army. 3 vols. 8vo. Washington, 1873-1874.

List of Lights. America, Africa, and Europe. Corrected to January, 1875, at U.S. Hydrographic Office. 8vo. Washington, 1875.

Patents, U. S. Subject-Matter Index of Patents issued by U. S. Patent Office. From 1790 to 1874, inclusive. 2 vols. 8vo. Washington, 1875.

From the State of New York :-

Senate Journal. 1875.

Senate Documents. Vols. 1, 3, 5, 6, 7. 1875. Assembly Journals. Vols. 1, 2. 1875. Assembly Documents. Vols. 2, 3, 4, 5, 7, 8, 9. 1875.New York State Library Report. 1875. 88th Report. Regents of University. 1875.

#### From South Australia:-

Proceedings of Parliament: and Papers.

1869-70. 3 vols. 1871. 2 vols. 3 vols. 1872. 1873. 3 vols. 1874. 3 vols. 1875. 4 vols.

From Queensland:-

Official Documents.

From Western Australia:-

Notes and Proceedings of the Legislative Council. (With Papers.) 1875-6. Blue Book. 1876.

From New South Wales :-

Official Documents. Blue Book. 1876.

From Tasmania:-

Journals of the Legislative Council. For 1875. (With Papers.) Vols. 21 and 22.

From John Macdonald, Esq., M. P.:-

Twelve Copies of his Lecture on "Business Success."

From Messrs. Willing and Williamson:-

Whitaker's Reference Catalogue of Current Literature.

From Christopher Robinson, Esq., Q. C., Toronto:

Journals. Old Province of Canada. 1857.

Also, for 1858, Parts 1 and 2.

Also, Appendixes for 1857. Nos. 6 and 7 to '58. Also, Appendixes for 1858. Nos. 1 to 2. Then from 4 to 65. (No. 3 wanting.)

From Rev. Dr. Scadding, Toronto:

First Gazetteer of Upper Canada.

From the Cobden Club:-

Free Trade, and the European Treaties of Commerce. Bourne's Romance of Trade.

The History of Free Trade in Tuscany.

From Lieut.-Col. George T. Denison:-

Modern Cavalry.

From Capt. F. C. Denison :-

Historical Record of the Governor-General's Body Guard.

From Belford Bros., Toronto:-

The New Poems of Jean Ingelow, Whittier, and Longfellow.

From Mr. Lovekin :-

Mineral Reports. Victoria. 1873-1875.

Descriptive Catalogue of Rocks, Minerals, &c., of Victoria, Australia. Exhibited at Philadelphia. 1876.

From William Horcus, Esq. :-

South Australia: its History, &c. Presented by W. A. E., West Erskine, South Australia, Commissioner to Philadelphia Centennial.

The number of Books now in the Library, exclusive of the Official Documents of the late Province of Canada, the Confederation, and its various Provinces, is 9,392. The total number of volumes is 11,160.

Respectfully submitted,

SAMUEL JAMES WATSON,

Librarian.

# RETURN

To an Address of the Legislative Assembly to the Lieutenant-Governor, praying that he will cause to be laid before the House a Return showing in detailall property come to hands of the Ontario Government or any officer thereof, representing the Crown, belonging to the late Andrew Mercer, of Toronto, showing:—

- 1. Amount of personal estate, specifying of what the same consists.
- 2. Amount of real property, stating value and where situated.
- 3. Amount realized for the sale or transfer of said property.
- 4. Amounts in detail, paid out for law coses or other expenses, showing to whom paid, and on what authority.
- 5. A statement, showing where moneys and securities of said estate are now deposited, and in whose custody.

By Command,
S. C. WOOD,
Secretary.

Provincial Secretary's Office, Toronto, February 10th, 1877.

Return,—Showing in detail all property come to the hands of the Ontario Government or any Officer thereof representing the Crown, belonging to Andrew Mercer, late of the City of Toronto, Esquire, deceased, who died 13th June, 1871.

## 1.—Personal Estate.

4.-

(c)	STOCKS.	
Dominion Canadian British A	Merchants' Bank, 102 shares, \$100 each, par value  Stock 6%—Toronto Books  Bank of Commerce, 5 shares, \$50 each, par value  merican Assurance Company, 10 shares, \$50 each, 50%	\$10,200 00 8,000 00 250 00
Des Jardi	ns Canal Stock, 20 shares, \$50 each, \$1,000, worthless. exchange, 8 shares, \$50 each, \$400, worthless.	250 00
(d)	Mortgages.	
has beer	on real estate. This amount includes interest which accumulating for periods, in some cases of twenty years wards	\$90,691 00
(e)	Bonds,	
Whereof \$ Mr. Mer	21,200 00 was barred by the Statute of Limitations before reer's death	\$2,400 00
	Promissory Notes,	
(f) Where	eof a large proportion was barred by the Statute of ons before Mr. Mercer's death	\$14,119 00
2.—Amo	OUNT OF REAL ESTATE SPECIFYING OF WHAT THE SAM	E CONSISTS.
Streets, Welling late A. (b) Lots 1, acres (c) Lots 2 of the T (d) South	land on the South-East corner of Bay and Wellington Toronto, being 216½ feet on Bay Street and 196 feet on ton Street, and house thereon being the residence of the Mercer  2, 4, and 5, in the 8th con. of North Gwillimbury, 300  1 and 26 in the 9th, and lot 26 in the 10th concession ownship of Belmont, 600 acres  half of lot 14, concession 10, Township of Tecumseth	\$44,600 00 1,500 00 2,400 00 600 00
3.—Ам	OUNT REALIZED FOR THE SALE OR TRANSFER OF SAID	PROPERTY.
timber i	transfer has taken place except as to a quantity of fallen n one of the lots in Belmont which was sold to prevent he estate.  calized for same	\$200 00
-Amounts	IN DETAIL PAID OUT FOR LAW COSTS OR OTHER EXT TO WHOM PAID AND ON WHAT AUTHORITY.	PENSES, SHOWING
Funeral ex Butcher's le Milk accountailors Newspaper Grocers Mourning	d prior to 15th June, 1874. penses of late Andrew Mercer  ill  nt	\$113 80 126 03 10 64 18 00 7 50 21 03 51 00 168 72

Livery	\$ 57 00
	861 25
City taxes	
Servants' wages	12 00
Medical advice	<b>55</b> 00
Andrew Mercer, jr., rent	660 00
July 27.—Taxes on land in Toronto for 1873	247 09
Oct. 7.—A. Mercer, jr., One half year's rent of Etobicoke farm	220 00
Nov. 6.—Taxes on land in Toronto for 1874	286 81
" 14.—Merchants' Bank to take up Note of A. Mercer	2,201 93
" 17.—H. Wetenhall, on account of enquiries in England as to	
claimant to estate	250 00
1875.	
March 4.—Taxes on land in North Gwillimbury	<b>5</b> 4 33
" 9.— " Peterborough	62 78
" 19.—Messrs. Harrison, Osler & Moss, fee for opinion	40 00
" 10.—C. Robinson, Q.C., retainer in suit Unwin vs. Mowat	50 00
" 15.—Taxes on land in Toronto, 1875	307 88
1876.	00, 00
March 15.—Hy Wetenhall on account of enquiries in England as to	
	250 00
claimants	250 00
" 16.—Messrs. Gamble & Small, taxed costs of R. D. Mercer,	
in suit Unwin vs. Mowat allowed by decree	298 30
" "-Patrick McGregor taxed costs, same suit, allowed by	
decree	409 92
May 9.—Thorne & Foy, Plaintiff's costs in Unwin vs. Mowat,	
taxed by Master and allowed by decree	1,337 60
	· ·
Mercer vs. Mowat Chancery suit as to Pretended Marriage, costs of Defer ney-General up to decree as between Solicitor and Client, and taxed as follows:—	idant the Attor- by taxing officer
Solicitors' fees, Messrs. Edgar, Fenton & Ritchie	\$365 15
Dishumananta and Council for in suit as follows.	
Disbursements and Counsel fees in suit as follows:—	
Col. fee as certified by Special Examiner on examination	
of witnesses before him	
Counsel fee to C. Robinson, Q.C., 6 days in Court 470 00	
Counsel fee to Mr. Edgar, 6 days in Court 260 00	
Counsel fees on Chamber motions	
Witness fees (26 witnesses)	•
Special examiner's fees	
Cab-hire during trial, Law stamps, Court fees, Sheriff's	
fees, travelling and other necessary expenses in this suit 73 35	
rees, travelling and other necessary expenses in this suit	\$1,064 15
Unwin vs. Attorney-General, Chancery suit to establish pretended Wil fendant the Attorney-General, payable under Decree of Court and certification.	l. Costs of De- ified as taxed by
the taxing officer, as follows:—	
Solicitors' fees, Messrs. Edgar, Fenton & Ritchie	\$469 20
Disbursements and Counsel fees, as follows:—	
Counsel fees paid C. Robinson, Q.C	
Counsel fees paid Mr. J. D. Edgar 230 00	
Other Counsel fees 40 00	
Witness, expert, and reporters' fees	
Law stamps, Court fees and other necessary expenses in	
this suit	
ums sure 100 71	078 61
	978 61

1876. July 11.—Charles Moss, taxed costs of Plaintiff in the suit Mercer vs. Mowat, allowed by decree Oct. 26.—Taxes on land in Toronto Nov. 16.—J. B. McWilliams, fees for inspecting and reporting on lands in Belmont	\$412 89 265 20 26 00
Dec. 28.—R. Forsyth, account for making and putting up monu- ment to the late Andrew Mercer	690 00
1875.  Messrs. Edgar, Fenton & Ritchie on account of charges and disbursements of estate and collections from 15th June, 1874, to 1st January, 1877, vi	in management
May 18	<b>5</b> 50 00
1876. On account of costs and disbursements in 12 Chancery suits, 1 County Condition Court suit, all instituted to prevent claims being barred by Stations, and all now pending and in progress, viz:—	ourt suit, and 11 tute of Limita-
Jan. 18.       \$150 00         Sep. 27.       180 00         Dec. 20.       200 00	
Dec. 19.—Taxed costs in 4 mortgage suits in which decrees have been obtained	530 00 177 05

All the payments above set forth were made by the Administrator in the ordinary course of management of the estate, and in suits upon the authority of Decrees or Orders of Court

5.—STATEMENT SHOWING WHERE MONIES AND SECURITIES OF SAID ESTATE ARE NOW DEPOSITED AND IN WHOSE CUSTODY.

The Moneys of said Estate are deposited in the Merchants' Bank of Canada at the credit of Honourable O. Mowat, Administrator of the Estate. The Securities of said Estate are in the custody of Messrs. Edgar, Ritchie & Howell, Solicitors for the Administrator.

# ESTIMATES

OF THE

# PROVINCE OF ONTARIO,

FOR THE

FINANCIAL YEAR ENDING 31st DECEMBER,

1877.



# Toronto:

PRINTED BY HUNTER, ROSE & CO., 25 WELLINGTON ST. WEST. 1877.

# SUMMARY

Of the estimated Expenditures of the Province of Ontario, for the Financial Year ending 31st December, 1877.

27					
No.	SERVICES.	Page.	For current expenditure.	On capital account.	For other purposes.
I.	Civil Government	1	\$ cts. 157,374 00	\$ cts.	\$ cts.
II.	Legislation	7	125,750 00		
III.	Administration of Justice	8	276,222 50		
IV.	Education	11	557,465 00		
V.	Public Institutions, Maintenance	16	<b>43</b> 7,843 00		
VI.	Immigration	24	53,137 42		
VII.	Agriculture, Arts, Literary and Scientific Institutions	25	101,850 00		
VIII.	Hospitals and Charities	26	59,610 90		
IX.	Miscellaneous Expenditure	26	35,700 00		
X.	Unforeseen and Unprovided	26	50,000 00		
XI.	Public Buildings—	27			
	(1) Repairs		33,500 00		
ı	(2) Capital account			320,927 14	
XII.	Public Works—	30			
	(1) Repairs		3,700 00		
	(2) Capital account			34,700 00	
XIII.	Colonization Roads	30		77,300 00	
XIV.	Charges on Crown Lands	32	91,600 00		
XV.	Refund Account	33			104,319 27
XVI.	Services in 1875 (balance)	34	*******		19,223 87
	Total		1,983,752 82	432,927 14	123,543 14
	1. Current expenditure for 1877				
	2. On capital account				
	3. Other purposes				
	Amount of Estimates				2,540,223 10

# ESTIMATES OF EXPENDITURE

OF THE

# PROVINCE OF ONTARIO,

FOR THE YEAR 1877.

# I.—CIVIL GOVERNMENT.

To be voted per Statement (A)......\$157,174 00.

No. of Vote.	To be voted for 1877.	Voted for 1876.
To Salaries and Contingencies of the several Departments at Toronto:  1 Government House	5,512 00 3,350 00 14,570 00 21,300 00 21,100 00 20,022 00 1,200 00 1,400 00 6,650 00 52,060 00	\$ cbs. 5.512 00 3,444 43 14,370 00 18,400 00 21,657 50 20,172 00 1,100 00  6.550 00 51,860 00 10,150 00  153,215 93
S E RV I C E.	To be voted for 1877.	Voted for 1876.
1. Government House.  **Expenses.**  Water Gas Fuel Repairs Furnishings. Planting and Plants Gardener, with house and fuel Caretaker Assistant Gardener Contingencies (clearing away snow, carting ashes, sweeping flues, &c.)	2,000 00 700 00 200 00 100 00 432 00 365 00 350 00	\$ cts  265 00 900 00 2,000 00 700 00 200 00 100 00 432 00 365 00 350 00 200 00

# I.—CIVIL GOVERNMENT.—Continued.

		and and
SERVICE.	To be voted for 1877.	Voted for 1876.
2. Lieutenant-Governor's Office.	0 4	
Salaries.	\$ cts.	\$ cts.
Private Secretary	1,200 00	1,200 00
Official Secretary  Do from 26th October, 1875  Messenger	400 00	144 43 400 00
Expenses.		
Contingencies	950 00	900 00
	3,350 00	3,444 43
3. Executive Council and Attorney-General's Office.		
Salaries,	5,500 00	5,500 00
Attorney-General and Premier.  Clerk of Executive Council and Deputy of Attorney-General	2,800 00	2,800 00
Secretary	1,200 00	1,000 00 900 00
Assistant Glerk, Attorney-General's Department Second do do Assistant Messenger	250 00	600 00 $200 00$
Expenses.		
Towards establishing a Law Library         \$580 00           Fuel, gas and water         \$580 00           Rent         1,200 00	400 00	400 00
Housekeeper		
Contingencies, including stationery and repairs	1,600 00	1,500 00
4. Treasurer's Office. $\frac{1}{2}$ of \$2,640 00	1,320 00	1,470 00
Salaries.	14,570 00	14,370 00
Trassiror	4,500 00	4,500 00
Accountant Clerk	1,800 00 1,100 00	1,800 00 1,000 00
Do	1,000 00	1,000 00 800 00
Do Messenger and Clerk	500 00	500 00
Audit Branch.	2,000 00	2,000 00
Auditor Book-keeper Sook-keeper	1,200 00	1,100 00
Clerk	900 00	
License and Administration of Justice Accounts.  Clerk	1,600 00	1,400 00
罗Do	1,000 00	2,200
<sup>4</sup> Do	500 00	
Expenses.  Cost of maintenance of East Wing, including repairs, one-third formerly charged		
each Department  Housekeeper, with house, fuel and light	2,000 00	$2,000\ 00$ $400\ 00$
	400 00	400 00
Contingencies.	1,500 00	1,500 00
5. Secretary and Registrar's Office.	21,300 00	18,400 00
Salaries.		
Secretary and Registrar	4,500 00	4,500 00
Secretary and Registral Assistant Secretary Clerk	1,600 00	1,600 00 900 00
Do		700 00

# I.—CIVIL GOVERNMENT.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
5. Secretary and Registrar's Office.—Continued	\$ cts.	\$ cts.
Clerk Deputy Registrar Clerk Do Messenger	700 00 1,200 00 750 00 600 00 400 00	$\begin{array}{c} 700 \ 00 \\ 1,200 \ 00 \\ 750 \ 00 \\ 600 \ 00 \\ 400 \ 00 \end{array}$
Expenses.		
Printing and binding         1,000 00           Stationery         350 00           Postage and telegrams         700 00           Contingencies         300 00	2,350 00	1,650 00
Registrar-General's Branch. Salaries.	13,700 00	13,000 00
First Clerk	1,200 00	1,000 00
Clerk. Three Clerks, \$700 each Clerk.	700 00 1 2,100 00 500 00	700 00 2,100 00 500 00
Expenses. Indices	200 00	200 00
Schedules, slips and circulars.	1,100 00	1,000 00 $1,862 50$
Payments to District Registrars (for half-year only)	300 00	300 00
Postages	300 00 50 00	$150 00 \\ 75 00$
Travelling expenses in inspecting District Registrars	600 00 200 00	$\frac{400\ 00}{200\ 00}$
Binding Returns (2 years) Contingencies for this Branch	150 00	170 00
	7,400 00	8,657 50
6. Department of Public Works.		
Salaries.  Commissioner Architect Engineer Secretary of Public Works Accountant and Law Clerk Architectural Draughtsman Engineering do Assistant do First Clerk Second do Carpenter engaged on public buildings generally Messenger	4,500 00 2,200 00 2,000 00 1,600 00 1,200 00 939 00 800 00 800 00 700 00 624 00 400 00	4,500 00 2,200 00 2,000 00 1,600 60 1,300 00 933 00 939 00 800 00 800 00 700 00 624 00 400 00
Expenses.	1 200 00	1 470 00
½ of cost of office maintenance (see details under Executive Council Office)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,470 00 2,000 00
7. Department of Agriculture.	20,022 00	20,172 00
Salaries.		
Secretary	800 00	800 00
Contingencies, including stationery and repairs	400 00	300 00
8. Immigration.	1,200 00	1,100 00
Secretary	1,200 00 200 00	
	1,400 00	

# I.—CIVIL GOVERNMENT.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
9. Public Institutions.		
Salaries.	\$ cts.	\$ cts.
Inspector . First Clerk Second Clerk Clerk (proportion—short-hand writer) Messenger—Youth	3,000 00 900 00 700 00 400 00 250 00	3,000 00 1,400 00 200 00 600 00 250 00
Empenses.		
Travelling         200 00           Postage         300 00           Printing and stationery         50 00           Stationery         50 00           Contingencies         150 00	700 00	700 00
	700 00	400 00
10. CROWN LANDS DEPARTMENT,	6,650 00	6,550 00
Salaries.		
Commissioner Assistant Commissioner Law Clerk Shorthand Writer and Clerk	4,500 00 2,800 00 1,800 00 1,000 00	4,500 00 2,800 00 1,600 00 1,000 00
Lands Sales and Free Grants:—		
Chief Clerk. Clerk Do Do Do	2,000 00 1,700 00 1,250 00 1,000 00 850 00	2,000 00 1,700 00 1,250 00 1,000 00 850 00
Surveys, Patents and Roads :		
Deputy Surveyor-General Clerk Do Chief Clerk Patents Clerk Do Superintendent of Colonization Roads Clerk do	2,000 00 1,250 00 730 00 1,380 00 1,200 00 1,100 00 1,800 00 1,000 00	2,000 00 1,250 00 730 00 1,380 00 1,200 00 1,100 00 1,800 00 1,000 00
Woods and Forests:		
Chief Clerk. Clerk. Do Do	2,000 00 1,200 00 850 00 700 00	2,000 00 1,200 00 850 00 700 00
Aecounts:—		
Accountant Bookkeeper Clerk Do	2,000 00 1,250 00 1,250 00 850 00	2,000 00 1,250 00 1,250 00 850 00
Registrar Housekeeper, with house, fuel and light Messenger, do do	1,600 00 500 00	1,600 00 500 00 500 00

# I.—CIVIL GOVERNMENT.—Concluded.

SERVICE.	To be voted for 1877.	Voted for 1876.
10. CROWN LANDS DEPARTMENT.—Continued.  Expenses.	\$ ets.	\$ cts.
Contingencies, including repairs, west wing	12,000 00	12,000 00
11. Miscellaneous.	52,060 00	51,860 00
Cost of Official Gazette Queen's Printer, salary Člerk Inspector of Registry Offices (including travelling expenses) Inspector of Division Courts	4,200 00 1,200 00 360 00 2,000 00 1,400 00	4,200 00 1,200 00 300 00 2,000 00 1,400 00
Do Travelling expenses  Inspection of Offices of Deputy Clerks of the Crown, Deputy Master and Registrars in Chancery and County Courts, travelling expenses  Contingencies, including stationery and postage	300 00 100 00	650 00 300 00 100 00
	10,210 00	10.150 00

# II.—LEGISLATION.

To be voted per Statement (A.).....\$125,750 00.

No. of Vote.	To be voted for present Session, and for Salaries, &c., in 1877.	Voted for 1876.
1 Legislation	\$ ets. 125,750 00	\$ cts. 128,200 00
SERVICE.	To be now voted.	Voted in 1876.
1. LEGISLATION.  Detaile.	\$ cts.	S ets,
Mr. Speaker's salary Clerk of the House, salary Clerk of Private Bills Law Clerk Clerk of Routine and Records Clerk Librarian Clerk of the Crown in Chancery	1,800 00 1,000 00 1,000 00 600 00 1,200 00	1,500 00 1,800 00 1,200 00 1,000 00 1,000 00 1,000 00 1,200 00 700 00

# II.—LEGISLATION.—Continued.

SERVICE.	To be now voted.	Voted for 1876.
Details.—Continued.  Accountant of the House and Stationery Clerk (also Queen's Printer).  Sergeant-at-Arms.  Housekeeper and Chief Messenger, with house, fuel and light.  Three Messengers.  Fireman  Night Watchman  Sessional Clerks, Writers, Messengers and Pages.	\$ cts. 400 00 600 00 600 00 1,350 00 400 00 450 00 5,000 00	\$ cts. 400 00 600 00 600 00 1,350 00 400 00 400 00 5,000 00
Expenses.  Postages and cost of House Post Office Stationery, including Printing Paper, Printing and Binding Printing Bills and Distributing Statutes Library for Books and binding Indemnity to Members, including Mileage Subscriptions to newspapers and periodicals Repairs and furniture Fuel Gas and other lighting Water Contingencies	4,000 00 20,000 00 3,000 00 2,800 00 72,600 00 1,000 00 2,000 00 1,500 00	4,000 00 20,000 00 3,000 00 2,000 00 72,600 00 4,000 00 2,350 00 1,000 00 300 00 200 00

# III.—ADMINISTRATION OF JUSTICE.

To be voted per Statement (A.).....\$276,222 50.

No. of Vote.	Α.	To be voted for 1877.	Voted for 1876.
1 2 3 4 5 6 7	Court of Chancery Court of Queen's Bench Court of Common Pleas Superior Judges and Court of Appeal Practice and other Courts Criminal Justice Miscellaneous Justice	\$ cts. 20,145 00 9,520 00 5,340 00 15,610 00 4,860 00 163,200 00 57,547 50 276,222 50	\$ cts. 20,720 00 9,520 00 5,310 00 16,410 00 4,400 00 175,000 00 53,460 00 284,820 00
	SERVICE.	To be voted for 1877.	Voted in 1876.
	Details.		
	1. COURT OF CHANCERY.	\$ cts.	\$ cts.
	Salaries.		
Taxin Clerk Junio Accou	g Officer. r Clerk ntant	3,000 00 1,400 00 1,000 00 600 00 1,200 00	3,000 00 1,400 00 1,400 00 600 00 2,240 00 800 00

#### III.—ADMINISTRATION OF JUSTICE.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
1. Court of Chancery.—Continued.	\$ ets.	\$ cts.
Salaries.—Continued.		
Registrar (previously Referee in Chambers)  First Assistant Registrar Second do Clerk (Transferred from Court of Appeal, at same salary)  Do in Registrar's Department.  Do of Records and Writs Do Records Office	$ \begin{array}{c cccc} 2,100 & 00 &   \\ 1,200 & 00 &   \\ 1,000 & 00 &   \\ 600 & 00 &   \\ 500 & 00 &   \\ 1,200 & 00 &   \\ 650 & 00 &   \end{array} $	1,840 00 1,200 00 1,000 00 500 00 1,000 00 600 00
Referee in Chambers Clerk to do (transferred from Registrar's Office) Usher of Court Messenger and Housekeeper, with house, fuel and light	2,000 00 900 00 600 00 400 00	2,000 00 800 00 540 00 400 00
Expenses.		
Contingencies of the following offices:—         Judges' Library         200 00           Referee in Chambers         350 00           Accountant         225 00           Master's Office         300 00           Registrar's Office         720 00		
Registrar's Office.	1,795 00	1,400 00
2. Court of Queen's Bench.	20,145 00	20,720 00
Salaries.		
Clerk of Crown and Pleas Senior Clerk Clerk (including attendance at Court of single Judge) Junior t lerk Clerk of Process. Assistant to do Housekeeper and Messenger, with house, fuel and light Usher and Crier, do Assistant Messenger Expenses of Copies of Judges' Notes for Arguments in Term.	3,000 00 1,400 00 1,300 00 600 00 1,400 00 500 00 160 00 160 00 500 00	3,000 00 1,400 00 1,000 00 600 00 1,400 00 500 00 160 00 160 00 300 00 500 00
Contingencies, including \$100 for Judges' Library	9,520 00	9,520 00
2. Claure on Claurery Person	3,320 00	3,020 00
3. Court of Common Pleas.  Salarics.		
Clerk of Crown and Pleas. Senior Clerk Junior do Usher and Crier	2,500 00 1,400 00 1,000 00 140 00	2,500 00 1,400 00 1,000 00 160 00
Expenses.		; 
Contingencies, including \$100 for Judges' Library	300 00	250 00
	5,340 00	5,310 00
4. Superior Judges and Court of Appeal.		
Salaries.		
Allowances granted by 33 Vic., cap. 5, Ont. Statutes  Registrar of Court of Appeal.  Clerk (transferred to the Court of Chancery)	13,000 00 2,000 00	13,000 00 2,000 00 600 00
Usher and Crier. Assistant Messenger		50 00 160 00

## III.—ADMINISTRATION OF JUSTICE.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
4. Superior Judges and Court of Appeal.—Continued.	\$ cts.	\$ cts.
Expenses.		
Law Library	100 00 300 00	200 00°3 400 00
5. Practice and other Courts.	15,610 00	16,410 00
Salaries.	7 000 00	4 000 00
Clerk of Practice Court Clerk of Surrogate Court (including expense of assistance) Clerk of Assizes	1,800 00 2,000 00 1,000 00	1,800 00 1,600 00 1,000 00
Expenses.		
Contingencies of Practice Court         20 00           do         Surrogate Court         20 00           do         Assize Clerk         20 00	60 00	
6. Criminal Justice.	4,860 00	4,400 00
Crown Council Prosecutions Administration of Criminal Justice Special Services. To meet payments to witnesses in Criminal cases To meet balance of unpaid accounts for Administration of Justice	11,200 00 120,000 00 2,000 00 20,000 00 10,000 00	10,000 00 120,000 00 2,000 00 20,000 00 23,000 00
7. Miscellaneous Justice.	163,200 00	175,000 00
Deputy Clerks of the Crown and Pleas, salaries		
District of Algoma.	16,000 00	16,000 00
Sheriff's salary Registrar's salary Clerk of the Peace and District Attorney Clerk of the District Court Administration of Justice	1,400 00 800 00 800 00 500 00 4,000 00	1,400 00 800 00 800 00 500 00 3,000 00
District of Thunder Bay.	7,500 00	6,500 00
Stipendiary Magistrale, salary Administration of Justice	1,200 00 3,500 00	1,200 00 3,000 00
District of Nipissing.	4,700 00	4,200 00
Stipendiary Magistrate, salary	1,400 00 500 00	1,400 00 500 00
District of Parry Sound.	1,900 00	1,900 00
Stipendiary Magistrate, salary	1,400 00 600 00	1,400 00 500 00
District of Muskoka.	2,000 00	1,900 00
Stipendiary Magistrate, salary	1,000 00   500 00	1,000 00 500 00
Provisional County of Haliburton.	1,500 00	1,500 00
Stipendiary Magistrate, salary Administration of Justice	1,000 00 500 00	1,000 00 500 00
Administration of Justice		

#### III.—ADMINISTRATION OF JUSTICE.—Concluded.

SERVICE.	To be voted for 1877.	Voted for 1876.
6. MISCELLANEOUS JUSTICE. Continued.  Provincial Police, at Clifton and Fort Erie.	\$ cts.	\$ cts.
Salary of Police Magistrate Administration of Justice	1,000 00 4,247 50	1,000 00 3,760 00
Other Services.	5,247 50	4,760 00
To pay Sheriffs, Criers and Constables in attending Courts of Chancery and County Courts, Deputy Clerks of the Crown and Pleas attending Assizes, and their postages, &c	6,000 00 500 00 200 00 3,000 00 500 00	6,000 00 500 00 200 00 3,000 00 500 00 5,000 00 15,200 00

#### IV.—EDUCATION.

To be voted per Statement (A.)......\$557,465 00.

No. of Vote.	А.	To be voted for 1877.	Voted for 1876.
1 2 3 4 5 6 7 8 9 10 11 12 13 14	Public and Separate Schools Inspection of Public and Separate Schools Schools in New and Poor Townships Collegiate Institutes and High Schools Inspection of Collegiate Institutes and High Schools Central Committee of Examiners Training of Teachers Superannuated Teachers Normal and Model Schools (Toronto) Educational Museum and Library Journal of Education Maps, Apparatus and Library Books Educational Depository Education Depository Education Department Council of Public Instruction Normal School, Ottawa, salaries and contingencies	12,000 00 78,000 00 8,200 00 6,450 00 12,250 00 26,750 00 3,950 00 2,360 00 60,000 00 9,205 00 20,350 00	\$ cts.  240,000 00 28,350 00 10,000 00 82,000 00 8,080 00 3,950 00 2,800 00 25,450 00 2,500 00 2,500 00 2,360 00 50,000 00 8,215 00 19,475 00 2,800 00 14,120 00

## IV.—EDUCATION.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
Details.  1. Public and Separate Schools.	8 cts.	\$ cts
2. Inspection of Public and Separate Schools.		
5,050 schools and departments at \$5 Additional cost of inspecting and organizing schools in Territorial and other remote Districts, viz., Algoma, Muskoka, Parry Sound, Nipissing, and northern parts of the Counties of Victoria, Peterborough, Hastings, Adding-	25,250 00	25,000 00
ton and Řenfrew Printing inspectors' annual and special reports, including paper Postages, stationery and incidentals	2,500 00 450 00 400 00	$\begin{array}{c} 2,500 \ 00 \\ 450 \ 00 \\ 400 \ 00 \end{array}$
	28,600 00	28,350 00
3. Schools in New and Poor Townships	12,000 00	10,000 00
4. Collegiate Institutes and High Schools.	1	
Existing High Schools.  New do	72,000 00	72,000 00 2,500 00
Collegiate Institutes	6,000 00	6,000 00 1,500 00
	78,000 00	82,000 00
5. Inspection of Collegiate Institutes and High Schools.		
Three Inspectors' salaries Travelling allowances of ditto Six Sub-Examiners of "Intermediate" Examination Papers. Office and Inspectors' stationery, printing examination papers, postage and	6,000 00 600 00 400 00	6,000 00 600 00 300 00
incidentals	1,200 00	1,180 00
	8,200 00	8,080 00
6. Central Committee of Examiners.		
Central Committee of Examiners, including Chairman, 3 High School Inspectors, and 4 Public School Inspectors  Travelling expenses of non-resident Members, ditto Printing examination papers, forms of certificates, &c. Postages, stationery and incidentals  Medals for competition, Teachers' examination Revision of text-books (re-vote)  Examining and reporting on Library and Prize Books  Do do for 1876.	1,800 00 400 00 750 00 400 00 100 00 1,000 00 1,000 00 1,000 00 6,450 00	1,000 00 400 00 750 00 400 00 400 00 1,000 00 3,950 00
7. Training of Public School Teachers.		
1. Travelling expenses of students at Normal Schools, Toronto and Ottawa, for half-year, beginning 1st July, 1877		

## EDUCATION.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
7. Training of Public School Teachers.—Continued.  2. Towards Public Schools selected as County Model Schools, for the half-year beginning 1st July, 1877	\$ cts.	న cts.
Printing, stationery and travelling expenses (re-vote)	12,250 00	2,800 00
8. Superannuated High and Public School Teachers.  Annual retiring allowance to old Teachers (258) in 1876  Do for 1st and 2nd class Teachers and High School Masters  Do to worn-out Teachers, non-contributors, over 60 years of age	32,500 00 2,000 00 1,000 00 35,500 00	30,000 00 2,000 00 1,000 00 33,000 00
9. Normal and Model Schools, Toronto.  Salaries.  The Principal . Science Master Mathematical Master Writing and Bookkeeping Master Drawing Master Music Master. Gymnastic Master. Head Master of Boys' Model School First Assistant do Second do do Third do do Head Mistress of Girls' Model School. First Assistant do Second do do Clerk of the Normal and Model School. Head Gardener and Keeper of Grounds, with house and fuel First Engineer, with fuel and rooms Second do Third do Janitor of Normal School, including scrubbing, washing, &c Do Boys' Model School Do Girls' do Assistant Gardener	2,000 00 1,800 00 1,500 00 900 00 600 00 500 00 1,000 00 1,000 00 1,000 00 800 00 700 00 650 00 650 00 410 00 410 00 420 00 400 00 400 00	2,000 00 1,800 00 1,500 00 900 00 600 00 300 00 1,200 00 1,000 00 700 00 800 00 700 00 650 00 650 00 410 00 410 00 330 00 420 00 420 00 420 00 420 00 420 00
10		

#### IV.—EDUCATION.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
9. Normal and Model Schools, Toronto.—Continued.  Empenses.  Half cost of stationery and text-books (other half paid by the students) Half cost of maps, apparatus and library books (other half paid out of library, map and apparatus grant). Half cost of prize books for Model School pupils (other half paid out of library, map and apparatus grant) Large models of mechanical powers, geological specimens and instrument for vocal music Text and reference books for master and reading room for students. Printing and stationery, chemicals and supplies Expenses of grounds, plant and plant-house. Fuel and light Water Contingencies.	\$ cts. 2,500 00 550 00 250 00 950 00 500 00 650 00 1,750 00 550 00 550 00	\$ ets.  2,500 00  550 00  250 00  150 00  500 00 600 00 1,650 00 400 00 550 00  25,450 00
10. Educational Museum and Library.  Specimens of school furniture and fittings, apparatus, maps, and other appliances (in part to replace articles sold or exchanged at the Philadelphia Exhibition).  Models of school houses (to replace those sold at Philadelphia)  Books and illustrations of Canadian history.  Casts, photographs and engravings  Frames, glass, painting and fittings  Binding Canadian books and pamphlets.  Restoring pictures and casts,  Fuel, water and light  Printing, furnishings and incidentals  Caretaker.	1,200 00 800 00 200 00 200 00 400 00 100 00 200 00 450 00 200 00 200 00 3,950 00	500 00 200 00 200 00 200 00 400 00 100 00 200 00 400 00 200 00 2,500 00
11. Journal of Education.  Printing, folding and mailing 6,500 copies (formerly 6,250)  Postages on 6,500 copies.  Plans for schoolhouses and grounds.  Engraving plans of new schoolhouses in Ontario, and other illustrations.  Periodicals and incidentals.  12. Maps, Apparatus, Library and Prize Books,	2,360 00	1,860 00 200 00 100 00 100 00 100 00 2,360 00
13. Educational Depository.  Salaries.  Superintendent of Depository Cashier Despatch Clerk Clerk of Sales Do Stores 14	1,400 00 900 00 500 00 400 00 400 00	1,400 00 900 00 500 00 400 00 400 00

## IV.—EDUCATION.—Continued.

SERVICE.	To be voted for 1877.	Voted for 1876.
13. Educational Depository—Continued.	\$ cts.	& cts.
Clerk of Stock Do Invoices Copying Clerk Junior Assistant Clerk Furnaceman and Messenger	400 00 300 00 240 00 200 00 365 00	400 00 300 00 240 00 200 00 365 00
Expenses.		
Postages Stationery Fuel, water and light Printing forms and circulars Printing catalogues Packing paper, twine, nails, &c. Shelving, fixtures and painting Furnishings and incidentals Expenses of purchases and revising arrangements in England and United	500 00 500 00 650 00 450 00 350 00 350 00 300 00 300 00	450 00 485 00 525 00 400 00 300 00 350 00 300 00 300 00
States	700 00	
14. Education Dupartment.	9,205 00	8,215 00
Salaries		
Minister of Education Deputy Minister Secretary and Accountant Chief Clerk. Clerk of Statistics Do Correspondence Do Reference and Records Assistant Accountant Assistant Clerk of Correspondence Second do do Clerk of Returns and Forms Assistant Clerk of Returns and Forms Junior do do Caretaker, including all allowances for cleaning, washing and scrubbing.	500 00 600 00 500 00 450 00 400 00	Nil. 2,800 00 1,800 00 1,200 00 1,000 00 900 00 500 00 450 00 400 00 400 00 250 00 500 00
Expenses.		
Postages Printing circulars, blanks and paper Fuel and light. Office stationery and account books. Books, newspapers, law and other reports Public School Acts and General Regulations 15,000 yearly and half-yearly blank forms for trustees, &c. Law appeal cases (re-vote) Office furniture and fixtures, petty repairs and various incidentals. 6.000 Annual Reports for 1876 To pay retiring allowance for year 1877 to Rev. Dr. Ryerson	500 00 400 00 200 00 300 00 300 00	550 00 690 00 500 00 400 63 200 00 350 00 275 00 250 00 450 00 1,200 00 4,000 00
15. NORMAL SCHOOL, OTTAWA.	20,350 00	19,475 00
15. NORMAL SCHOOL, OTTAWA.  Solaries.		
The Principal Mathematical Master Science Master Writing and Bookkeeping Master Drawing Master Music Master Clerk	150 00 150 00	2,000 00 1,500 00 1,500 00 200 00 150 00 150 00 800 00

#### IV.—EDUCATION.—Concluded.

SERVICE.	To be voted for 1877.	Voted for 1876.
15. Normal School, Ottawa—Continued.	\$ cts.	\$ ets.
Saluries—Continued.  First Engineer and Gardener Second do and Assistant Gardener Two Labourers on grounds in summer, at \$240 Janitor Do to pay for scrubbing and cleaning	360 00	600 00 360 00 480 00 360 00 150 00
Expenses.  Half cost of stationery and text books (other half paid by the students)	2,000 00	1,800 00
Half cost of maps, apparatus and library books (other half paid out of library, map and apparatus grant)  Text and reference books for masters, and reading-room for students  Printing and stationery, chemicals and supplies  Expenses of grounds (including plants, shrubs, &c.)  Fuel and light.  Water	1,200 00   1,200 00   300 00	400 00 200 00 400 00 400 00 1,200 00 300 00
Balance of account for fuel and supplies in 1875	13,850 00	670 00 500 00 14,120 00

#### V.—PUBLIC INSTITUTIONS, MAINTENANCE.

To be voted per Statement (A).....\$437,843 00.

No. of Vote.	A.	To be voted for 1877.	Voted for 1876.
1 2 3 4 5	Asylum for the Insane, Toronto	86,800 00	\$ cts. 85,446 00 85,030 00 52,195 00 32,028 00 20,908 00
6	Provincial Reformatory, Penetanguishene Central Prison	23.190 00 47,890 00	22,130 00 50,230 00
8	Institution for the Deaf and Dumb, Belleville Do Blind, Brantford	35,683 00 25,995 00	33,759 00 27,047 23
10 11	School of Agriculture Do Practical Science	17,360 00 5,690 00	18,240 00 6,200 00
		437,843 00	433,213 23

SERVICE.	To be voted for 1877.	Voted for 1876.
T 10		
1. Asylum for the Insane, Toronto.	\$ cts.	\$ cts.
(For 660 Patients.)	il	
Salaries. No. of officers		
Medical Superintendent and employees.	2,000 00	2,000 00
Assistant do	1 2000 00	1,000 00
Clinical Assistants		700 00
Bursar	2000 00	1,400 00
Steward 1	m 0 0 0 0	600 00
Matron 1		400 00
Assistant Matron 1 Engineer 1	710 00	$\frac{192}{740} \frac{00}{00}$
Assistant Engineer 1	1.30 00	432 00
Stokers 2		480 00
Carpenters         2           Gardener         1		1,050 00 216 00
Assistant Gardener	11 040 00 1	216 00
Porter or Messenger		240 00
Baker         2           Tailor         1		350 00 400 00
Farmer and Assistant	11 400 00	456 00
Night Watchers	720 00	720 00
Chief Attendants 7 Ordinary Male Attendants 17	N MM2 00	792 00 4,464 00
	.,,,,,,	1
Females.		
Chief Attendants 6	672 00	1 000 00
Ordinary Female Attendants	. 1,656 00	} 1,968 00
Night Attendants 3 Cooks 9		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Laundresses	1 000 00	612 00
Housemaids 5		468 00
Seamstress	108 00	108 00 200 00
Expenses.	22,548 00	21,696 00
Medicine and medical comforts.	350 00	350 00
Fuel		12,000 00
Butchers' meat		12,000 00
FlourButter		8,000 00 4,750 00
Beer, wine and spirits		1,850 00
Gas and oil		2,300 00
Groceries Fruit and vegetables.		$7,750 00 \\ 750 00$
Bedding, clothing and shoes	6,000 00	6,000 00
Furniture and furnishings		1,000 00
Farm.		$1,200 00 \\ 2,000 00$
Miscellaneous	1,500 00	1,800 00
Repairs and alterations Printing, Postage and Stationery	2,000 00 750 00	2,000 00
Timong, Lostage and Stationery		
2. Asylum for the Insane, London.	87,048 00	85,446 00
(For 650 Patients.)		
Salaries. No. of officers and employees.		
Medical Superintendent 1	2,000 00	2,000 00
Assistant do		1,000 00
Clinical Assistant 1 Bursar 1	1,200 00	400 00 1,200 00
Steward 1	600 00	600 00
Matron 1	400 00	400 00
2 17		

SERVICE.	1	To be voted for 1877.	Voted in 1876.
2. Asylum for the Insane, London.—Continued		S ets.	\$ cts.
	of officers employees.	İ	
Engineer Bricklayer and Plasterer	1	740 00 550 00	740 00
Stokers	4	1,104 00	960 00
CarpentersGardener	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 1,050 & 00 \\ 400 & 00 \end{bmatrix}$	1,000 00
Assistant Gardener	1	240 00	240 00
Butcher and JobberPorter or Messenger	1	$\begin{vmatrix} 216 & 00 \\ 192 & 00 \end{vmatrix}$	$192 00 \\ 192 00$
Baker	1	360 00	360 00
Assistant Baker Tailor	1	192 00   264 00	264 00
Farmer Ploughmen	$\frac{1}{2}$	400 00 672 00	$\frac{400\ 00}{672\ 00}$
Night Watchers	2	480 00	480 00
Chief Attendants Ordinary Male Attendants	5  17	1,356 00 3,576 00	1,356 00 3,384 00
Cowman	1	216 00	216 00
Females.			
Chief Attendants	3	540 00	540 00
Ordinary Female Attendants Night Attendants	18 2	2,160 00	$2,040 \ 00$ $240 \ 00$
Cooks	4	540 00	828 00
Laundresses Housemaids	7	456 00	456 00 504 00
Dairymaid	1	120 00	96 00
Seamst esses Extra assistance	2	240 00	120 00 200 00
	90	22,800 00	21,480 00
Expenses.			
Medicine and medical comforts		350 00	350 00
Fuel Butchers' meat		$11,500 00 \ 12,500 00$	11,500 00 $12,500 00$
Flour. Butter		6,500 00 4,000 00	7,000 00 4,250 00
Beer, wine and spirits		1,850 00	1,850 00
Gas and oil Groceries		$\begin{bmatrix} 2,300 & 00 \\ 7,500 & 00 \end{bmatrix}$	2,300 00 7,500 00
Fruit and vegetables		1,000 00	1,000 00
Bedding, clothing and shoes Furniture and furnishings.		7,000 00 1,500 00	6,500 00 1,500 00
Laundry and soap		1,750 00	1,500 00
Farm, feed and fodder. Miscellaneous.		2,000 00   1,500 00	2,000 00 1,800 00
Repairs and alterations		2,000 00	2,000 00
Printing, Postage and Stationery		750 00	05 000 00
3. Asylum for the Insane, Rockwood, Kingsto		86,800 00	85,030 00
Maintenance of Ontario Patients at Rockwood Asylum, for medical attendance, &c., &c., for 365 patients, at \$143 per at	food, clothing, num each	52,195 00	52,195 00
4. Asylum for the Insane, Hamilton.			
(For 210 Patients.)			
	of officers employees.		
Medical Superintendent	1	1,600 00	1,600 00
Assistant do Bursar.	1 1	700 00 800 00	600 00 800 00
Engineer	i i	600 00	600 00 360 00
Assistant Engineer			

SERVICE.	To be voted for 1877.	Voted for 1876.
4. Asylum for the Insane, Hamilton -Continued.	\$ ets.	\$ cts.
Salaries—Continued. No. of officers and employees.		
Gardener and Farmer 1	400 00 200 00	400 00 200 00
Baker (dispensed with)       1         Chief Attendant       1         Night Watch       1         Ordinary Male Attendants       5         Extra assistance       1	300 00 240 00 1,200 00 240 00	300 00 300 00 240 00 960 00
Females. 1	300 00	300 00
Chief Attendant 1 Ordinary Female Attendants 8	200 00   960 00	200 00 1,080 00
Night Attendant 1	120 00	120 00
Cooks         2           Laundresses         3	264 00 384 60	264 00 372 00
Housemaids 4 Seamstress and Tailoress 1	432 00 144 00	432 00
$Expenses. \qquad \qquad \frac{-}{37}$	9,824 00	9,628 00
Medicine and medical comforts.	100 00	200 00
Beer, wine and spirits	3,000 00	600 00 3,000 00
Butchers' meat, fish and fowl	4,000 00	4,500 00
FlourButter	1,600 00 1,500 00	2,500 00 1,500 00
Gas and oil	1,000 00	800 00
Groceries	1,200 00	3,000 00 850 00
Bedding, clothing and shoes	2,200 00	2,000 00
Laundry, soap and cleaning Furniture and furnishings	750 00 500 00	600 00 750 00
Farm, feed and fodder	750 00	600 00
Repairs and alterations Miscellaneous	500 00 1,200 00	500 00 500 00
Water supply. Printing, postage and stationery.	500 00 350 00	500 00
5. Asylum for Idiots, Orillia.	33,474 00	32,028 00
(For 150 Patients.)		
Salaries. No. of officers and employees.		
Medical Superintendent 1 Bursar 1	1,600 00 800 00	1,600 00 800 00
Engineer 1	600 00	600 00
Assistant Engineer. 1 Gardener 1	240 00 300 00	$\frac{240\ 00}{300\ 00}$
Chief Attendant 1	300 00	300 00
Night Watch	240 00 960 60	240 00 960 60
Messenger and Porter 1	240 00	200 00
Baker (dispensed with)		300 00
Matron 1	360 00	300 60
Chief Attendant 1	260 00	180 00
Ordinary Female Attendants         4           Night Attendant         1	480 00 120 00	480 00 126 00
Cooks	252 00	$\begin{array}{ccc} 252 & 00 \\ 252 & 00 \end{array}$
Housemaids	252 00   384 00	384 00
Seamstress 1 Extra assistance	200 00 1	
Extra assistance		

SERVICE.	To be voted for 1877.	Voted for 1876.
	S ets.	\$ ets
5. Asylum for Idiots, Orillia—Continued.		
Expenses.		
Medicines and medical comforts Fuel Butchers' meat, fish and fowl Flour Butter Gas and oil Groceries Fruit and vegetables Bedding, clothing and shoes Laundry, soap and cleaning Furniture and furnishings Farm, feed and fodder Repairs and alterations Miscellaneous Milk  6. Provincial Reformatory, Penetanguishene.	200 00 2,000 00 2,500 00 1,500 00 1,500 00 2,000 00 600 00 1,500 00 400 00 400 00 400 00 400 00 600 00 600 00 22,518 00	200 00 2,000 00 2,500 00 1,500 00 1,500 00 1,750 00 500 00 1,500 00 400 00 400 00 400 00 400 00 20,908 00
(For 190 Offenders—175 in 1876).		
Salaries	1,600 00 850 00 500 00 600 00 800 00 800 00 1,600 00 1,840 00 400 00 260 00 260 00 260 00 260 00	1,600 00 850 00 500 00 600 00 800 00 800 00 1,440 00 260 00 260 00 260 00 600 00 200 00
Expenses. 23	2.00	200 00
Rations Clothing Bedding Farm, farm stock and stables Hospital Library and schools Fuel Cleaning, light and laundry Furniture, tools and shop fixtures Repairs, ordinary	5,500 00 2,800 00 700 00 500 00 100 00 500 00 450 00 500 00	5,000 00 2,500 00 500 00 500 00 100 00 500 00 350 00 450 00 500 00
Incidentals Postage and stationery	700 00   250 00	600 00 200 00
t ostage and stationery		
7. Central Prison.	23,190 00	22,130 00
(336 Prisoners.)		
Salaries. No. of officers and employees.		
Warden         1           Bursar         1           Physician         1	2,000 00 1,200 00 1,000 00	2,000 00 1,209 00 1,000 00

grant or the region of the second of the sec		
SERVICE.	To be voted for 1877.	Voted for 1876.
7. Central Prison.—Continued.	\$ cts.	\$ cts
Salaries.—Continued. No. of officers		
Chief Guard         and employees,           Chief Guard         1           Steward and Storekeeper         1           Prison Bailiff         1           Day Guards and Shop Supervisors         22           Deputy Chief Guard         1           Engineer         1           Stoker (dispensed with)            Baker and Cook         1           Messenger (dispensed with)            31	800 00 600 00 800 00 8,800 00 600 00 740 00	800 00 600 00 800 00 6,500 00 600 00 740 00 240 00 600 00 250 00
Expenses.		
Medicine and medical comforts Butchers' meat and fish Flour, bread and meal Groceries Bedding, clothing and shoes Fuel Gas and oil Laundry, soap and cleaning Stationery, advertising, printing and postage Library, schools and lectures. Furniture and furnishings Stable forage, &c. Repairs, &c. Unenumerated For the purchase of material in order to employ, temporarily, prisoners during 1876		200 00 7,000 00 5,000 00 5,000 00 4,500 00 1,200 00 600 00 500 00 500 00 500 00 500 00 5,000 00 5,000 00
	47,890 00	50,230 00
8. Institution for the Deaf and Dumb, Belleville.		
(For 220 Pupils—220 in 1876.)		
Salaries. No. of officers and employees.		
Principal       1         Physician       1         Bursar       1         Matron       1         Teachers       12         Visitors' attendant and Telegraph operator       1         Housekeeper       1         Engineer       1         Fireman       1         Farmen       1         Gardener       1         Baker and Cook       1         Night Watchman       1         Carpenter and Assistant       2         Shoemaker       1         Messenger       1         Cook       1         Maids       12         Extra assistance       1         Supervisor of Boys       1         43	1,800 00 500 00 800 00 300 00 7,300 00 100 00 200 00 600 00 240 00 240 00 240 00 240 00 240 00 500 00 84 00 132 00 1,104 00 15,908 00	1,800 00 500 00 800 00 300 00 6,250 00 200 00 600 00 228 00 400 00 240 00 240 00 240 00 650 00 84 00 120 00 1,100 09 200 00
Expenses,		
Medicine and medical comforts. Butchers' meat, fish and fowl Flour. Butter	$\begin{bmatrix} 125 & 00 \\ 5,000 & 00 \\ 2,000 & 00 \\ 1,500 & 00 \end{bmatrix}$	125 00 4,000 00 2,500 00 1,500 00

SERVICE.	To be voted for 1877.	Voted for 1876.
8. Institution for the Deaf and Dumb, Belleville.—Continued.	\$ cts.	\$ ets.
Expenses.—Continued.		
Groceries Fruit and vegetables Bedding, clothing and shoes Fuel Gas and oil Laundry, soap and cleaning Furniture and furnishing. Farm, feed and fodder Repairs and alterations Advertising, printing, stationery and postage Books, apparatus and appliances Unenumerated	2,300 00 600 00 400 00 3,000 00 1,200 00 500 00 600 00 500 00 400 00 400 00 750 00	2,300 00 500 00 500 00 2,500 00 1,100 00 500 00 500 00 500 00 400 00 500 00 750 00
9. Institution for the Blind, Brantford.	35,683 00	33 759 00
·		
(For 140 Pupils.) No. of officers		
Salaries.   and employees.   Principal   1	1,600 00 400 00 800 00 300 00 3,700 00 1,000 00 120 00 600 00 240 00 288 00 216 00 144 00 204 00 144 00 204 00 192 00 360 00 100 00	1,600 00 300 00 300 00 3,500 00 1,000 00 120 00 600 00 360 00 400 00 240 00 240 00 144 00 228 00 192 00 240 00 192 00 250 00 100 00
of pupils from 50 to 101, for the latter part of the year 1874		1,878 23
Expenses.	12,020 00	13,672 23
Medicine and medical comforts Butchers' meat, fish and fowl Flour Butter General groceries Fruit and vegetables Bedding, clothing and shoes Fuel Gas and oil Laundry, soap and cleaning Furniture and furnishing Farm, feed and fodder. Repairs and alterations Advertising, printing, stationery and postage Books, apparatus and appliances Unenumerated	3,000 00 800 00 300 00 400 00 400 00 500 00 400 00	$\begin{array}{c} 75\ 00 \\ 2,500\ 00 \\ 1,150\ 00 \\ 800\ 00 \\ 1,800\ 00 \\ 250\ 00 \\ 400\ 00 \\ 2,500\ 00 \\ 300\ 00 \\ 400\ 00 \\ 400\ 00 \\ 400\ 00 \\ 450\ 00 \\ 400\ 00 \\ 550\ 00 \end{array}$
	25,995 00	27,047 23

SERVICE.	To be voted for 1877.	Voted for 1876.
10. School of Agriculture.	\$ ets.	\$ ets.
Salaries. No. of officers		
President and Science Master and employees.	1,500 00	1,500 00
Professor of Agriculture and Farm Manager. 1  Leeturer on Chemistry —	2,000 00	2,000 00 1,000 00
Bursar 1 Lecturer on Veterinary Surgery and Practice 1	1,000 00 600 00	600 00
Physician	300 00	200 00
Foremen 3	1,600 00	$\left\{\begin{array}{c} 600 \ 00 \\ 600 \ 00 \\ 600 \ 00 \\ 600 \ 00 \end{array}\right.$
Matron	300 00	300 00
Kitchen, dining room and housemaids. 4 Laundress . 1	420 00 120 00	420 00   120 00
Dairymaid         1           Engineer         1	120 00 400 00	120 00 360 00
Assistant do for 5 months	100 00	100 00
Messenger 1 Bonus to pupils	100 00 800 00	120 00 900 00
18	9,360 00	10,140 00
Expenses.		
,		
Medicines and medical comforts	50 00 1,500 00	50 00 1,600 00
Meat, fish and fowl Bread and biscuit	600 00	600 00
General groceries Fuel	1,500 00 1 1,200 00 1	1,600 00
Light	200 00 150 00	250 00 150 00
Laundry, soap and cleaning Furniture, furnishing and bedding	250 00	250 00
Repairs and alterations Laboratory, maintenance of chemicals, &c.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	400 00
Laboratory, maintenance of chemicals, &c. Advertising, postage and stationery	600 00	600 00
Experiments Unenumerated	600 00 600 00	1,000 00
Statistical Bureau, printing and postage	300 00	
11. School of Practical Science,	17,360 00	18,240 00
Salaries,		
Instructor in Engineering	1,200 00	
Do Chemistry	1,200 00	
Do Drawing Assistant in Natural Philosophy	800 00 600 00	
A "		4,000 00
Expenses.		
Apparatus and chemicals	200 00	400 00
Gas Fuel	300 00 400 00	300 00 500 00
Water	290 00 ]	200 00 200 00
Ordinary repairs and incidentals Housekeeper	100 00 600 00	600 00
	5,690 00	6,200 00
	,	

#### VI.—IMMIGRATION.

A	To be voted for 1877.	Voted for 1876.
Dominion Government, to meet proportion of charges for forwarding Immigrants to Ontario  Do do Balance due on account during previous years  Carriage of Immigrants in Ontario, including maintenance  Provisions for same, including medical attendance  Assistance by way of payments in reduction of passage money to selected Emigrants, and specially consigned to Ontario  Commissions to shipping and other occasional Agents forwarding Emig-	10,000 00 11,637 42 5,000 00 5,500 00 10,000 00	\$ cts. 7,800 00 2,400 00 25,000 00 8,000 00 8,000 00 25,000 00 25,000 00 2,000 00 79,000 00
SERVICE.		
Details.  1. Agencies in Europe.		
	2,000 00	
ntingencies, under agreement with the Province, approved by Resolution the Legislative Assembly, 20th November, 1874 gencies	5,500 00	7,800 00
Agencies in Canada.		
torwarding Immigrants from Quebec to Agencies in Ontario	1,000 00 600 00 400 00 400 00	2,400 00
	Agencies in Europe	Agencies in Europe

#### VII.—AGRICULTURE, ARTS, LITERARY AND SCIENTIFIC INSTITUTIONS.

To be voted per Statement (A.).....\$101,850 00.

No. of Vote.	А.	To be voted for 1877.	Voted for 1876.
		101 101	
	Agriculture.	\$ cts.	\$ cts
1 2 3 4 5 6 7 8 9	Electoral Division Societies, 81 at 8700	56,700 00 550 00 2,100 00 300 00 1,000 00 750 00 2,000 00 10,000 00 600 00	$\begin{array}{c} 56,700 \ 00 \\ 550 \ 00 \\ 2,100 \ 00 \\ 300 \ 00 \\ 1,000 \ 00 \\ 750 \ 00 \\ 2,000 \ 00 \\ 10,000 \ 00 \\ 400 \ 00 \end{array}$
	investigations of disease in animals and crops, and of ravages of insects; and for agricultural instruction, dairy products, and other charges not otherwise provided for	76,000 00	2,000 00 2,000 00 77,800 00
	Arts.		
11 12 13	Mechanics' Institutes . Art Union Grant towards establishing a School of Art and Design	23,000 00 500 00 500 00	20,000 00 500 00 1,000 00
		24,000 00	21,500 00
	Literary.		
14 15 16	Aid to Canadian Institute, Toronto Do Institut Canadien, Ottawa Do Athenæum, Ottawa	750 00 300 00 300 00	750 00 300 00 300 00
		1,350 00	1,350 00
	Scientific.		
17	To promote scientific research	500 00	500 00
-	Totals.	101,850 00	101,150 00

#### VIII.—HOSPITALS AND CHARITIES.

To be voted	per Statement	(A.)	\$59,610 90
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No. of Vote.		To be voted for 1877.	Voted for 1876.
	(Upon the terms and conditions of Statute 37 Vic., ch. 33.)  Details.  For Hospitals and Institutions mentioned in Schedule "A" of Statute  For Institutions in Schedule "B" of Statute  For do in Schedule "C" of Statute	\$ / cts. 39,614 48 10,291 52 9,704 90 59,610 90	\$ cts.  44,060 33 11,551 65 9,883 09  65,495 07

#### IX.—MISCELLANEOUS EXPENDITURE.

To be voted per Statement (A.) ......\$35,700 00.

-			
No. of Vote.	Α.	To be voted for 1877.	Voted for 1876.
	To cover expenses of collection of revenue for law stamps and licenses To cover expenses in connection with municipalities and other funds To provide for expenses attending the settlement of the Municipal Loan	\$ ets. 2,500 00 500 00	\$ cts. 1,000 00 100 00
4 5	Fund debt and surplus schemes To provide for expenses re Ontario and Quebec Settlement (re-vote in part) To provide for expenses re Northern and Western boundaries (re-vote	4,000 00	1,000 00 4,000 00 4,000 00
6 7 8 9	in part) Marriage Licenses, printing and incidentals Inspection of Railways Ontario Rifle Association Insurance on public buildings and furniture	500 00	400 00 500 00 600 00 1,000 00
10 11 12 -13	Consolidation of Statute Law  Do do (for advance on type)  Expenses of elections  Do contested elections	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,000 00 4,000 00 5,000 00 2,000 00
14 15 16	County Court Judges, for expenses of revision of voters' lists for 1877 To cover gratuities to officers whose services may be dispensed with For repairs and care of Brock's "Monument" (Further Hems under this head in 1876.).	5,000 00 400 00	3,000 00 5,000 00 400 00 43,860 45
		35,700 00	79,860 45

#### X.—UNFORESEEN AND UNPROVIDED.

To be voted per Statement (A.) ...... \$50,000 00.

No. of Vote.	Α.	To be voted for 1877.	Voted for 1876.
To	meet unforeseen and unprovided expenses	\$ ets. 50,000 00	\$ cts. 50,000 00

#### XI.—PUBLIC BUILDINGS.

To be voted per Statement (A.).....\$354,427 14.

No. of Vote	Α.	To be voted for 1877.	Voted for 1876.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Asylum for the Insane, Toronto.  Do London Do Hamilton Asylum for Idiots, Orillia. Provincial Reformatory, Penetanguishene Central Prison, Toronto Deaf and Dumb Institute. Blind Institute. School of Agriculture Do Practical Science Education Department and Normal School, Toronto Normal School, Ottawa Osgoode Hall Government House. Parliament Buildings Algoma District Thunder Bay District. Nipissing do Muskoka do Parry Sound do	\$ cts. 27,075 00 88,840 00 103,950 00 67,732 14 2,900 00 15,250 00 23,025 00 16,800 00 4,000 00 1,200 00 5,000 00 20,000 00 20,000 00 2,500 00 3,000 00 4,400 00 200 00 354,427 14	\$ cts. 4,341 72 20,000 00 41,330 00 29,000 00 5,000 00 16,676 07 2,500 00 14,243 15 1,000 00 4,000 00 4,000 00 4,500 00 10,000 00 3,500 00 1,000 00 5,000 00 3,000 00 100 00 100 00 100 00 100 00
	SUMMARY.  1 Re-votes, included in above	2,000 00	
	2 Expenditure on Capital Account (new)	318,927 14 33,500 00	
		354,427 14	
	. SERVICE.	To be voted for 1877.	
	Details.	\$ ets.	\$ ets.
	1. ASYLUM FOR THE INSANE, TORONTO.		
in cr re	al repairs and additions, including house for Superintendent (allowing creased accommodation in Asylum for 28 patients), and also including ineased water supply for fire and other purposes, new flooring and other pairs  ture, additions to, and renewals \$8,275 00 en range and washing machine and motive power for same 2,300 00	16,500 00	27,075 00
	2. Asylum for the Insane, London.		
pa	ional cottages for 120 patients, and addition to Refractory Wards for 140 atients, estimated to cost \$120,000, but required for this year's service		
Pump Furni	aly ing engine, filter and pipes, coal-shed and general repairs tree, additions to, and renewals \$7.540.00	70,000 00 10,000 00	
New 1	Boiler and additions to machinery	8,840 00	88,840 00
	97		

#### XI.—PUBLIC BUILDINGS.—Continued.

SERVICE.	To be voted for 1877.	
3. Asylum for the Insane, Hamilton.	\$ cts.	\$ cts.
Increased accommodation for 300 patients, requiring the following additions:— Two wings, house for Superintendent, rear addition to main building for associated dining-room, &c., cottages for Bursar, Farmer, and Engineer, coal-shed, outhouses, outside water-closets, fences, &c., estimated to cost \$160,000, but required for this year's service only  Furniture and furnishings\$2,600 00.  Live stock, farm implements, &c	3,950 00	103,950 00
4. Asylum for Idiots, Orillia.		
General repairs and additions, including brick shed for wood, wire guards for windows, and gas apparatus, &c	4,000 00	
Planting and improvement of roads	2,732 14	6,732 14
5. Provincial Reformatory, Penetanguishene.		
General repairs, including boilers, bath tubs, steam pipes, connections, and material for work by inmates	2,150 00 750 00	2,900 00
6. Central Prison, Toronto.		
Additions, including outside hospital, lodge for Gatekeeper, tower in lumber yard, additional hydrants and pipes for fire purposes, bricks, lumber and material for other works and for roads, &c	14,825 00 425 00	15,250 00
7. Deaf and Dumb Institute, Belleville.		
General repairs and additions, including cottage for Principal, new building for hospital, increased class room, dining, dormitory, and chapel accommodation outside water closets, new boilers, hard wood for flooring, &c	26,100 00	
•		28,355 00
8. Blind Institute, Brantford.		
Addition for class and work rooms, &c. (to accommodate 60 additional pupils), new boiler for engine house, &c., estimated to cost \$32,000, but required for this year's service only.  Furniture. additions to and renewals \$700 00  Laundry, Machinery and motive power for same 1,295 00	20,000 00	
Industrial and Educational appliances	3,025 00	23,025 00

#### XI.- PUBLIC BUILDINGS.—Concluded.

12. Normal School, Ottawa.  Repairs and improvement of grounds			
Addition to accommodate 30 pupils (estimated to cost \$20,000, but required for this year's service, only)  Library, Laboratory and Museum \$1,000 00  Pencing 1,500 00  Pencing 1,500 00  Dainy 1,500 00  Dainy 1,500 00  Bary 1,500 00  Roote House 200 00  Roote House 200 00  Roote House 200 00  Roote House 200 00  Inplements 800 00  10. School of Practical Science, Toronto.  General repairs 500 00  11. Education Department and Normal School (Toronto).  General repairs to building and house for Engineer 4,000 00  12. Normal School, Ottawa.  Repairs and improvement of grounds 1,200 00  13. Oscoode Hall, Toronto.  General repairs, plainting, &c 5,000 00  14. Government House, Toronto.  General repairs, plainting, furniture, furnishings, and improvements to grounds (including fence on King, Wellington, and Sincee Streets 20,000 00  15. Parliament Buildings, Toronto.  General repairs, planting, &c 2,500 00  16. Algona District.  Court House and Gool, repairs (re-vote) 1,000 00  Separate building for Registry Office on grounds 2,000 00  17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building 4,000 00  18. Nipissing District.  Lock-up at Matawan, repairs 200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote) 600 00  20. Parky Sound District.	SERVICE.		
this year's service, only   10,000 00	9. School of Agriculture, Guelph.	\$ ets.	
Implements   800 00   250 00   6,800 00   10,800 00   10,800 00   10,800 00   10,800 00   10,800 00   10,800 00   10,800 00   10,800 00   10,800 00   11. EDUCATION DEPARTMENT AND NORMAL SCHOOL (TORONTO).    General repairs to building and house for Engineer   4,000 00   12. NORMAL SCHOOL, OTTAWA.	this year's service, only) Library, Laboratory and Museum \$1,000 00 Fencing 1,500 00 Draining 600 00 Dairy 1,500 00 Carpenter's shop 200 00 Root House 200 00	10,000 00	
10. School of Practical Science, Toronto.   16,800 00   500 00   11. Education Department and Normal School (Toronto).   4,000 00   12. Normal School, Ottawa.   1,200 00   13. Oscoode Hall, Toronto.   1,200 00   13. Oscoode Hall, Toronto.   1,200 00   14. Government House, Toronto.   14. Government House, Toronto.   20,000 00   15. Parliament Buildings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets	Implements	0.000.00	
General repairs	Trees and shrubs		
11. EDUCATION DEPARTMENT AND NORMAL SCHOOL (TORONTO).  General repairs to building and house for Engineer	10. School of Practical Science, Toronto.	16,800 00	
12. Normal School, Ottawa.   1,200 00	General repairs	500 00	
1,200 00   13. Osgoode Hall, Toronto.   1,200 00   14. Government House, Toronto.   5,000 00   14. Government House, Toronto.   20,000 00   15. Parliament Buildings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets   20,000 00   15. Parliament Buildings, Toronto.   2,500 00   16. Algoma District.   2,500 00   16. Algoma District.   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,000 00   2,	11. EDUCATION DEPARTMENT AND NORMAL SCHOOL (TORONTO).  General repairs to building and house for Engineer	4,000 00	
13. Osgoode Hall, Toronto.  Repairs, furniture, matting, &c	12. Normal School, Ottawa,		
Repairs, furniture, matting, &c. 5,000 00  14. Government House, Toronto.  General repairs, painting, furniture, furnishings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets 20,000 00  15. Parliament Buildings, Toronto.  General repairs, planting, &c. 2,500 00  16. Algoma District.  Court House and Gaol, repairs (re-vote) 1,000 00  Separate building for Registry Office on grounds 2,000 00  17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building 4,000 00  Re-vote, unexpended balance 4,000 00  18. Nipissing District.  Lock-up at Matawan, repairs 200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote) 600 00  20. Parry Sound District.	Repairs and improvement of grounds	1,200 00	
Repairs, furniture, matting, &c. 5,000 00  14. Government House, Toronto.  General repairs, painting, furniture, furnishings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets 20,000 00  15. Parliament Buildings, Toronto.  General repairs, planting, &c. 2,500 00  16. Algoma District.  Court House and Gaol, repairs (re-vote) 1,000 00  Separate building for Registry Office on grounds 2,000 00  17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building 4,000 00  Re-vote, unexpended balance 4,000 00  18. Nipissing District.  Lock-up at Matawan, repairs 200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote) 600 00  20. Parry Sound District.	12 Ouggons Harr Topovero		
14. Government House, Toronto.  General repairs, painting, furniture, furnishings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets		5 000 00	
General repairs, painting, furniture, furnishings, and improvements to grounds (including fence on King, Wellington, and Simcoe Streets		5,000 00	
(including fence on King, Wellington, and Simcoe Streets 20,000 00  15. Parliament Buildings, Toronto.  General repairs, planting, &c. 2,500 00  16. Algoma District.  Court House and Gaol, repairs (re-vote) 1,000 00 2,000 00  17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building 4,000 00 400 00  18. Nipissing District.  Lock-up at Matawan, repairs 200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote) 600 00  20. Parry Sound District.	·		
Court House and Gaol, repairs (re-vote)	(including fence on King, Wellington, and Simcoe Streets	20,000 00	
16. Algoma District.  Court House and Gaol, repairs (re-vote)	15. Parliament Buildings, Toronto.		
Court House and Gaol, repairs (re-vote)	General repairs, planting, &c	2,500 00	
Separate building for Registry Office on grounds. 2,000 00  17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building. 4,000 00 400 00  18. Nipissing District.  Lock-up at Matawan, repairs 200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote) 600 00  20. Parry Sound District.			
17. Thunder Bay District.  Gaol and Registry Office at Prince Arthur's Landing, to complete building.  18. Nipissing District.  19. Muskoka District.  Registry Office, Bracebridge (re-vote)  20. Parry Sound District.	Court House and Gaol, repairs (re-vote)		
18. Nipissing District.  18. Nipissing District.  200 00  19. Muskoka District.  Registry Office, Bracebridge (re-vote)  20. Parry Sound District.		3,000 00	
18. Nipissing District.  Lock-up at Matawan, repairs	Gaol and Registry Office at Prince Arthur's Landing, to complete building.		
Lock-up at Matawan, repairs	10 Ningapo Iv	4,400 00	
19. Muskoka District.  Registry Office, Bracebridge (re-vote)		200 00	
Registry Office, Bracebridge (re-vote)	* -	200 00	
20. Parry Sound District.		600,00	
		000 00	
Too oo	Registry Office, repairs	100 00	
	00		

#### XII.—PUBLIC WORKS.

To be voted as per Statement (A).....\$38,400 00.

No. of		To be voted	d for 1877.
Vote.	A.	Re-vote. (Estimated.)	New vote.
	Public Works.	\$ ets.	\$ ets.
	Muskoka River Works         Wye River—dredging.           Mary and Fairy Lakes Works, viz.:—         Stop log dam at lock         1,800 00           Bridge to mill         300 00           Breastwork belew lock         550 00           Bridge on river, near lock         2,200 00           Dredging in river         1,200 00	800 00 7,900 00	4,000 00
4	School river crib-work. &c.	1	6,000 00 1,000 00
5	Balsam River—piers and booms to protect dam, and at outlet of Burnt River.		2,000 00
6	Gull and Burnt River Works, viz.—Completion of Norland dam and		8,000 00
7	slide, Kenn-ess-es Lake dam, and works on Burnt River Surveys, inspections, arbitrations and awards, and charges not otherwise		į ,
8	provided for		5,000 00 2,000 00
9	Lockmasters', caretakers' and bridge-tenders' salaries		1,700 00
		8,700 00	29,700 00
	SUMMARY.		Voted for 1876.
	1. Re-vote, included in above 2. Expenditure on capital account (new) 3. Do for repairs and maintenance	8,700 00 26,000 00 3,700 00	
		38,400 00	44,090 00

#### COLONIZATION ROADS.

To be voted as per Statement (A).....\$77,300 00.

No. of Vote.	A.	To be voted for 1877.	Voted for 1876.
1	Construction and repairs	\$ cts.	\$ ets. 85,800 00

#### COLONIZATION ROADS.—Continued.

	1	
SERVICE.	To be voted for 1877.	
Details.	S cts.	& cts.
I.—North Division.  1. Great Northern Road—  To produce southward and build a bridge	2,500 00	
2. St. Joseph's Island Road— From Hilton to west side of Island		
3. Thunder Bay Roads— Extension of same in Oliver and McIntyre	2,000 00	
4 Rose and Lefroy Roads— To extend the same	1,500 00	7,500 00
II.—West Division.  1. Parry Sound Road— To continue permanent improvements	5,000 00	1,500 00
2. Northern Road— To improve between McKellar and Township of Ferrie	2,000 00	
3. Northern Road— To extend across the Township of Ferrie	1,100 00	
4. Rousseau and Nipissing Road— To improve to Maganetawan (about 13 Miles)	6,000 00	
5. McDougall Road— To complete to town line of McKellar	500 00	
6. Maganetawan Road— To continue 5 miles eastward.	1,200 00	
7. Stisted Road— To extend to the Monteith and Perry Road.	3,000 00	
8. East River Road— To open from Bridge to Hood's Road	1,000 00	
9. Peninsula Road— To open 5 miles	1,000 00	
10. Muskoka Road— To improve swamp in Perry	500 00	
11. Baysville Road— To complete to Hunsville	1,500 00	
12. Brunel Road— To improve to intersection of Baysville Road	1,500 00	
13. Macaulay Road— To continue extension through McLean	1,500 00	
14. Muskoka Road— To improve between Bracebridge and Huntsville	3,000 00	28,800 00
III _ Raem Division		,
111.—East Division,  1. Mississippi Road—  'To restore bridges and repair from Hastings Road eastward	1,500 00	1
2. Hastings Road To repair between Millbridge and Thanet	1,000 00	
3. Addington Road— To improve south of Madawaska River	1,000 00	
21	11	

#### COLONIZATION ROADS.—Concluded.

SERVICE.	To be voted for 1877.	
III.—East DivisionContinued.	\$ ets.	\$ cts.
4. Hagarty and Brudenel Road— To extend through Hagarty	1,500 00	
5. Wilberforce Road— To extend and improve	1,500 00	
6. Eganville and Douglas and Pierreault settlement roads	1,000 00	7,500 00
IV.—Bridges.	1	
Garden River Bridge     Parry River Bridge     Seguin River Bridge     Madawaska Bridge (on the Addington Road)     Matawan Bridge	2,000 00 1,500 00 1,000 00 3,000 00 3,000 00	10,500 00
V.—General Purposes.		
1. Inspection and locations	3,000 00 20,000 00	23,000 00
RECAPITULATION.		
1. North Division 2. West Division 3. East Division 4. Bridges 5. General Purposes	7,500 00 28,800 00 7,500 00 10,500 00 23,000 00	77,300 00
Total Estimates	- Comment	

#### XIV.—CHARGES ON CROWN LANDS.

No. of Vote.	Α.	To be voted for 1877.	Voted for 1876.
1	Expenditure on account of Crown Lands.	\$ ets. 91,600 00	\$ cts.
	SERVICE.	To be voted for 1877.	
	Details.	\$ cts.	
Board Agents Forest	of Surveys 's salaries, commissions and disbursements ranging and inspection of timber lands	400 00 18,000 00 14,000 00	

#### XIV.—CHARGES ON CROWN LANDS.—Continued.

SERVICE.	To be voted for 1877.	
Details.—Continued.  Surveys as follow: Townships near the Bruce Mines, and in the vicinity of Sault Ste. Marie Township of Mineral Lands at Pigeon River. Townships in the Huron and Ottawa Territory Township of Sunnidale (re-vote). Township of Bedford (re-vote). Maps. Survey of limits in Huron and Ottawa Territory chargeable against holders	\$ cts. 12,000 00 5,000 00 32,000 00 1,600 00 1,600 00 2,000 00 5,000 00	\$ cts.

#### XV.—REFUND ACCOUNT.

To be voted as per Statement (A) ......\$104,319 27.

No. of Vote.	Α.	To be voted for 1877.	Voted for 1876.
1 2 3 4	Education Crown Lands Municipalities Fund Land Improvement Fund	\$ cts. 750 00 23,000 00 65,062 66 15,506 61 104,319 27	\$ cts. 750 00 23,000 00 25,521 24 18,630 16 67,901 40
No. of Vote.	SERVICE.		
	EDUCATION.	\$ cts.	\$ cts.
1	Account of contributions to Superannuation Fund, withdrawn		750 ú0
	Crown Lands.		
2	For payments made to the credit of the Department on account of uncompleted purchases, and afterwards returned to proposed purchasers on purchases not being carried out		23,000 00
3	To pay over to Municipalities the amount collected in 1876, 11 months  Less 20 per cent. commission, &c  Vide Stat. Can. 18 V., c. 2, and 19 V., c. 16.  Balance at credit of Fund, January 1st, 1876	38,779 52 7,755 90 31,023 62	
	Less paid to Municipalities in 1876. 22,361 91	34,039 04	65,062 66
		1	

## XV.—REFUND ACCOUNT.—Continued.

No. of Vote.	SERVICE.			
4	Land Improvement Fund.  Moneys collected from sale of Crown Lands, subject to the Land Improvement Fund, for the year ending 30th June, 1876.  Less 4-5, leaving 1-5 to the Land Improvement Fund	23,183 53 18,546 82	\$ cts.	\$ cts.
	Can. c. 26.  Less 6 per cent. for cost of collection and management.  Moneys collected from the sale of Common School Lands, subject to the Land Improvement Fund, for the year ending 30th June, 1876.  Less 6 per cent. for collection and management	4,636 71 278 20 44,394 41 *2,663 66	4,358 51	
	To be distributed as follows:  \[ \frac{1}{4} \to \text{ to the Land Improvement Fund}    \text{\frac{3}{4}} \to \text{ be added to the Common School Fund}      \text{Moneys collected from the sale of Grammar School Lands,} \]	41,730 75 10,432 68 31,298 07	10,432 68	
	June, 1875, to 30th June, 1876.  Less 6 per cent. for collection and management  Less 3, leaving 1 to the Land Improvement Fund	3,044 33 182 65 2,861 68 2,146 26	715 42	15,506 61

XVI.—Balance to be provided for to complete the Services of 1875.

To be voted per Statement (A)......\$19,223 87

SERVICE.	<u>:</u>
Amount as per Statement No. 26 in the Public Accounts of 1875.	\$ ets. 19,223 87

# RETURN,

In obedience to an Order of the House directing, That the Clerk of the House do compile from the various Returns and Papers relating to the Railways of Ontario, a Tabular Statement containing the following information respecting each Railway:

- (1.) The number of miles authorized by Charter, the number of miles constructed, the number of miles under contract, the number of miles for which aid has been granted by Order in Council.
- (2.) The Capital authorized by Charter, the amount of stock actually and *bona fide* subscribed, the amount paid on such stock.
  - (3.) The amount of Municipal Bonuses.
- (4.) The average cost per mile of such Railway, the total cost of such Railway, including rolling stock.
- (5.) The amount per mile authorized to be paid from the "Railway Aid Fund," or "Railway Subsidy Fund," the amount actually paid; also, any special conditions in the Order in Council.

CHARLES T. GILLMOR, Clerk Legislative Assembly.

Clerk's Office, Legislative Assembly, 3rd January, 1877.

#### LIST OF RAILWAYS RECEIVING AID

Name of Railway.	Statute under which incor-	Miles authorized by Charter.	Miles constructed.	Miles under contract.	Miles for which Aid has been granted by Order in Council.	Capital authorized by Charter.	Stock bona fide Subscribed.	Amount paid on Stock.
Belleville and North Hastings	{ 37 V. c. 38 } 38 V. c. 45 }	120	5	none	22	\$300,000	\$170,000	\$17,000
Belleville and Ottawa River	39 V. c. 68.					\$300,000		
Brantford, Norfolk & Port Burwell	$   \left\{     \begin{array}{l}       32 \text{ V. c. } 58 \\       34 \text{ V. c. } 52 \\       35 \text{ V. c. } 52 \\       36 \text{ V. c. } 92 \\       37 \text{ V. c. } 53     \end{array}   \right\} $	58	33	19	49	\$200,000	\$30,000	\$30,000
Brockville and Otta- wa	$   \left\{     \begin{array}{l}       31 \text{ V. c. } 44 \\       36 \text{ V. c. } 98 \\       37 \text{ V. c. } 40     \end{array}   \right\} $	57	57			\$500,000	\$483,980	\$483,980
Brockville and West-	{34 V. c. 45 } 36 V. c. 96 }	42	none	none	none	\$500,000	none	none
Canada Air Line	33 V. c. 33	$145\frac{1}{2}$	$145\frac{1}{2}$			\$3,000,000		
Canada Central	36 V. c. 98	500	76	130	45	\$1,500,000	\$800,000	\$82,000
Canada Southern	31 V. c. 41 33 V. c. 32 35 V. c. 48 36 V. c. 86 37 V. c. 41)	322	322	none	62½	\$15,000,000	<b>\$</b> 10,180,500	\$10,180,500
Cobourg, Peterboro' and Marmora	31 V. c. 43 33 V. c. 38 36 V. c. 59, 95 38 V. c. 47	3155	47	none	$22\frac{1}{2}$	\$600,000 and \$400,000 bonds	} \$600,000	\$600,000
Credit_Valley	$     \begin{cases}       34 \text{ V. c. } 38 \\       35 \text{ V. c. } 47 \\       36 \text{ V. c. } 80 \\       36 \text{ V. c. } 42     \end{cases} $	152		132	140 {	\$140,000 and \$500,000 bonds	}	
Erie and Huron	36 V. c. 70 38 V. c. 40					\$150,000		
Grand Junction	$ \begin{cases} 34 \text{ V. c. } 48 \\ 37 \text{ V. c. } 43 \\ 39 \text{ V. c. } 71 \end{cases} $	90	20		86	\$1,000,000	\$111,000	\$30,000
Hamilton and North Western	35 V. c. 68 36 V. c. 84 & 85 37 V. c. 44 & 45 38 V. c. 48 39 V. c. 72	300	33		162½	\$1,000,000	\$268,400	\$145,000
Huron and Quebec .	$ \begin{bmatrix} 37 \text{ V. c. } 47 \\ 38 \text{ V. c. } 49 \\ 39 \text{ V. c. } 73 \end{bmatrix} $					\$300,000		

#### FROM THE ONTARIO GOVERNMENT.

-								
pal Bo-		Rolling	Amoun rize	t per mil d to be gi	e autho- iven.	zed.		
Municiŗ	er mile	luding	y Aid	y Sub-	y Aid c. 22.	Total amount authorized	lly paid	Special Conditions
Jo a	e cost p	est, inc	Railwa	Railwa Tund.	Railwa 39 Vic.	nount	t actua	by Order in Council.
Amount of Municipal Bonuses,	Average cost per mile.	Total cost, including Rolling Stock.	Under Railway Aid Fund.	Under Railway Subsidy Fund.	Under Railway . Act, 39 Vic. c.	Total a	Amount actually paid	
\$80,000	{ about } \$22,000	about \$300,000	none	{	\$3000 on 22 miles	\$66,000	none	
\$182,000	\$20,000	all leased	{	\$194 40 on 49 miles		\$9,525 60 per year	\$4,832 60 for 30 miles	Journals (1874, 1st Session) 222. " (1874, 2nd Session) 145.
	engineer's	```	• • • • • • •	* * * * * * * *				
none {	estimate \$18,000	}	none	• • • • • •			none	
\$75,000	\$32,600 \$26,000	\$30,000	$\begin{cases} \$2,650\\ \text{on } 45\\ \text{miles} \end{cases}$			\$119,250	\$556,292 Mun. Loan Fund	Journals (1871-2) 237 '' (1873) 358.
\$322,500			{	\$194 40 on 63 miles		\$12,247 20 per year	\$6,113 98	Journals (1874, 1st Session) 221.
<b>\$</b> 113,500	\$25,000	\$940,000	$\begin{cases} \$2,000\\ \text{on } 9\frac{1}{2}\\ \text{miles} \end{cases}$	{	\$2000 on 13 miles	\$44,740	\$18,740	Journals (1873) 358.
\$810,000		\$3,375,000	{	\$194 40 on 60 miles	\$2000 on 80 miles	\$11,664 per year and \$100,000	}	Journals (1873) 358. " (1874, 1st Session) 225. " (1874, 2nd
								Session) 146.
\$225,000	\$15,000	\$1,350,000	$\begin{cases} \$2,000\\ \text{on } 86\\ \text{miles} \end{cases}$	{	\$1000 on 45 miles	\$175,000	\$40,000	
\$719,000		\$3,084.000	${f \$2,000 \atop { m on } 33rac{1}{2} \atop { m miles}}$	\$243 on 130 miles & \$48 60 on 44 miles		\$33,728 40 per year and \$66,960	\$66,960	Journals (1871-2) 237 " (1874, 1st Session) 236. " (1874, 2nd Session) 145.
\$165,000								

## LIST OF RAILWAYS RECEIVING AID

Name of Railway.	Statute under which incorporated.	Miles authorized by Charter.	Miles constructed.	Miles under contract.	Miles for which Aid has been granted by Order in Council.	Capital authorized by Charter.	Stock bona fide Subscribed.	Amount paid on Stock.
Kingston and Pembroke	{ 35 V. c. 57 }	150	45 <del>1</del>	150	125 {	\$1,250,000 & \$2,000,000 bnds	\$285,900	\$82,320
Lake Simcoe Junction	{ 38 V. c. 52 } { 39 V. c. 76 }	26½	none	none	$26\frac{1}{2}$	\$175,000	\$48,200	\$3,500
Lambton Central	39 V. c. 75					\$100,000		 
London, Huron and Bruce	\begin{cases} 34 \ V. \ c. \ 42 \\ 35 \ V. \ c. \ 49 \\ 36 \ V. \ c. \ 89 \\ 37 \ V. \ c. \ 49 \\ 39 \ V. \ c. \ 77 \end{cases} \end{cases}	69	69		69	\$400,000	\$22,210	\$22,210
L'Orignal and Caledonia	38 V. c. 51					\$50,000		! !
Midland	32 V. c. 71 33 V. c. 31 34 V. c. 51 35 V. c. 97 36 V. c. 90 37 V. c. 52		134	14	64	\$2,000,000	\$1,639,017 88	\$1,639,017
Montreal and City of Ottawa	34 V. c. 47	80			66	\$1,000,000		\$43,000
Niagara Falls and Lake Erie	39 V. c. 80	 	 	 		\$150,000	•••••	
North Simcoe	$\left\{ \begin{array}{l} 37 \text{ V. c. } 54 \\ 38 \text{ V. c. } 53 \end{array} \right\}$		6	24		\$50,000	\$25,000	\$2,500
Northern Extensions	33 V. c. 40 34 V. c. 43 34 V. c. 53 35 V. c. 43		166		166	\$400,000		\$13,800
Ontario Mineral Ontario and Pacific	39 V. c. 80					\$500,000		
Junction	37 V. c. 74					\$1,000,000		
Port Dover and Lake Huron	\begin{cases} 35 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	63			63	\$250,000	'\$104,000	\$82,000
Port Stanley, Strath- roy & Port Franks.						\$200,000		
Prince Arthur's Land- ing & Kaministiquia	39 V. c. 83					\$150,000		
Prince Edward County	36 V. c. 73 } 37 V. c. 70 }	34		34	34	\$700,000	\$112,000	\$10,200

#### FROM THE ONTARIO GOVERNMENT.—Continued

al Bo-	e°	Rolling	Amount per to l	mile au be given.	thorized	zed.		
Amount of Municipal Bonuses.	Average cost per mile.  Total cost, including Rolling Stock.		ay Aid	ay Sub-	ay Aid 5. c. 22.	Total amount authorized	Amount actually paid.	Special Conditions by
nat of es.	age cost	cest, in	Under Railway Aid Fund.	Under Railway Sub- sidy Fund.	Under Railway Act, 39 Vic. c.	amoun	ınt actu	Order in Council.
Amou	Avera	Total   Sto	Under Fund.	Unde	Unde	Total	Ато	
\$450,000	\$20,066	\$913,000	20miles\$2000 15 '' \$2650 93 '' \$3250 7 '' \$2650	}{	\$7000 on 16 miles	\$400,550	\$115,274 50	Journals (1871-2) 235.
\$100,000	\$13,000	\$450,000		{	$ \begin{pmatrix} \$2,000 \\ \text{on } 26\frac{1}{2} \\ \text{miles} \end{pmatrix} $	\$53,000		
						* * * * * * * * * * * * * * * * * * * *		
\$311,500	\$20,290 exclusive S	\$1,400,000 e of Rolling tock	{	\$194 40. on 69 miles.	{	\$12,985 92 per year		Journals (1873) 325. '(1874, 2nd Session) 145.
\$142,500	\$29,500	\$3,989,000	\$2,250 on — miles \$2,000 on 21 miles	}{	\$1750 on 13 miles		\$84,900	Journals (1871) 238. " (1874, 1st Session) 235. " (1874, 2nd
<b>\$1</b> 80,000			\$2,000 on 66 miles	{	\$1000 on 66 miles	\$198,000	none	Session) 146. Journals (1871-2) 238. "(1874, 2nd Session) 145.
\$75,000	\$11,000							Journals (1873) 325.
\$241,980			\$2,000 for 43 miles \$4,000 for 26 miles	11		\$196,188	\$196,188	(1874, 1st Session) 222. (1874, 2nd sion) 76.
								4
\$10,000								
\$200,000			\$2,000			\$120,000	\$106,000	Journals (1873) 336.
•••••								
								Journals (1871-2) 326.
\$87,500	\$15,000		annual \$243			{ \$7,776 per year		" (1874, 1st Session) 222. " (1874, 2nd Session) 74.

#### LIST OF RAILWAYS RECEIVING AID

NAME OF RAILWAY.	Statute under which incorporated,	Miles authorized by Charter.	Miles constructed.	Miles under contract.	Miles for which Aid has been granted by Order in Council.	Capital authorized by Charter.	Stock bona file Subscribed.	Amount paid on Stock.
St. Lawrence and Ottawa	31 V. c. 20	59	59			\$2,710,090	\$789,909	\$789,909
Sarnia, Chatham and Erie	{36 V. c. 69 } 39 V. c. 70 }	62				\$150,000	\$50,000	\$5,000
Streetsville and Port Credit	$   \left\{     \begin{array}{l}       34 \text{ V. c. } 40 \\       36 \text{ V. c. } 81 \\       39 \text{ V. c. } 84     \end{array}   \right\} $					\$200,000		
Stratford and Lake Huron	35 V. c. 51 36 V. c. 87 37 V. c. 56 38 V. c. 55	100		15	25	\$50,000	\$48,850	\$4,850
Toronto, Grey and Bruce	31 V. c. 40 32 V. c. 82 33 V. c. 41 35 V. c. 46 36 V. c. 78 38 V. c. 56	300	191	none	151 {	cap. \$3,000,000 bonds2,250,000	} \$325,000	\$275,240
Toronto and Nipissing	31 V. c. 41 32 V. c. 83 33 V. c. 42 34 V. c. 54 36 V. c. 79 38 V. c. 57	••••	89		46	\$3,000,000	\$200,000	\$193,350
Trent Valley	{36 V. c. 76 } 38 V. c. 58}	125	1	22		\$80,000	\$50,000	\$5,000
Victoria	34 V. c. 43 35 V. c. 60 36 V. c. 97 37 V. c. 73 38 V. c. 61	193	33	55	33{	\$300,000, with power to increase	} \$151,000	\$15,100
Wellington, Grey and Bruce	$             \begin{vmatrix}                  31 \text{ V. c. } 10 \\                  34 \text{ V. c. } 37 \\                   36 \text{ V. c. } 82 \\                   38 \text{ V. c. } 59             \end{vmatrix}     $	195	195		120	\$1,500,000	\$221,200	\$221,200
Whitby and Port Perry Extension		260	20	25	20 {	\$300,000, and bonds \$300,000 on 20 miles con- structed, and bonds \$12,000 per mile or ex- tensions.	\$158,986 14	\$110,080.33
Yorkville Loop Line	36 V. c. 77 } 39 V. c. 84 }	about 10	none	none	none	cap. \$500,000 bonds \$250,000		

#### SUMMARY.

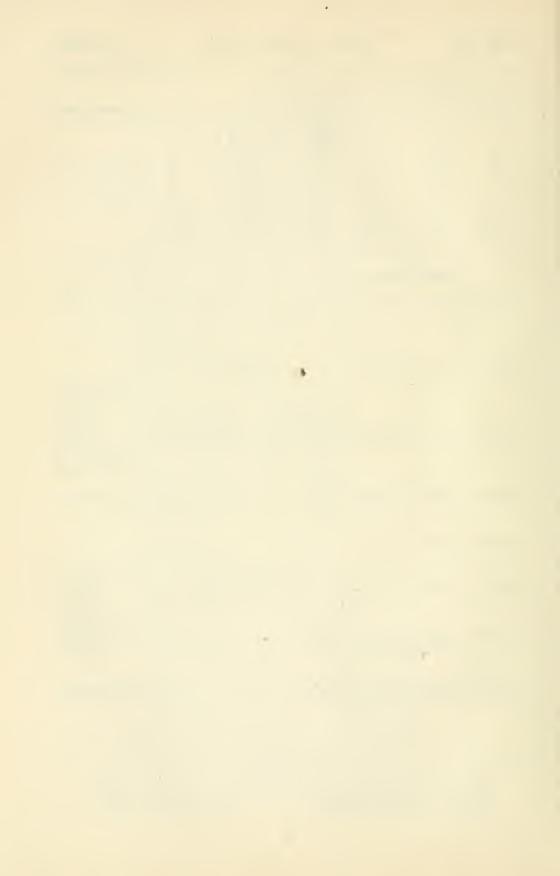
Municipal Bonuses	\$6,385,980
Railway Aid Fund: (1) Under Orders in Council	1,939,000
(2) Under 39 Vic., c. 22 (1876)	481,000

## FROM THE ONTARIO GOVERNMENT.—Concluded.

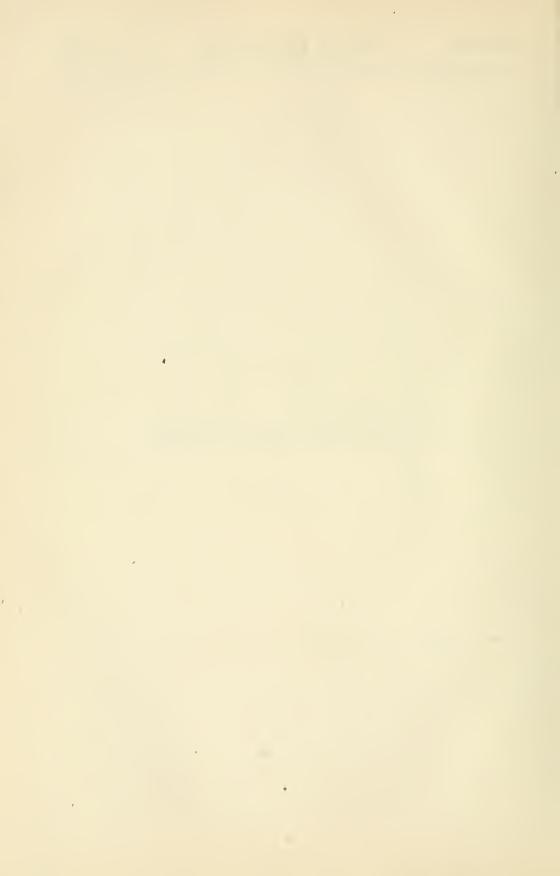
Amount of Municipal Bonuses.	Average cost per mile,	Total cost, including Rolling Stock.	Under Railway Aid Fund.	Under Railway Sub- sidy Fund.	Under Railway Aid Act, 39 Vic. c. 22.	Total amount authorized.	Amount actually paid.	Special Conditions by Order in Council.
\$35,000	\$24,862	<b>\$1,46</b> 6,381						
\$988,000	\$13,500	\$1,550,000		<b>*</b> {	\$2,000' on 25 miles	}		(Journals(1871-2)239 '' (1873) 256,
\$988,000	\$19,208	\$3,668,737	\$3,000 on 73 miles \$2,000 on 78 miles	\$97 30 on 73½ miles \$194 40 on 9 miles	}{	\$285,182 and \$8,89380 per year	\$285,182 and \$25,014 50	" (1874, 1st Session) 235. " (1874, 2nd Session) 75. All special condi- tions carried out
\$386,500	\$14,483	\$1,600,000	$\begin{cases} \$2,000\\ \text{on } 33\frac{1}{2}\\ \text{miles}\\ \$3,000\\ \text{on } 12\frac{1}{2}\\ \text{miles} \end{cases}$			\$104,860	\$104,860	before money paid. Journals (1871-2) 238.
\$30,000	\$15,000	\$18,000						
\$172,000	\$19,700	\$1,030,271	{	\$291 60 on 30 miles	\$1,000 on 33 miles	\$33,000 and \$8,748 per year	none {	Journals (1874, 1st Session) 238. " (1874, 2nd Session) 146.
\$923,276	exclusive	\$3,779,305 of Rolling ock.	\$2,000 on 120 miles	}	<b>*</b>		\$241,276	Journals (1871-2) 235.
\$97,094 93 on 20 miles, \$125,000 on extensions.	\$23 995	\$545,852 <b>0</b> 9	\$2,000 on 20 miles				\$40,000	Journals (1873) 257.

#### SUMMARY (continued).

Railway Subsidy Fund, per year	\$114,069
Municipal Loan Fund (Canada Central)	556,292
Canadian Pacific Junction miles	



## MUNICIPAL LOAN FUND.



# MUNICIPAL LOAN FUND.

# SURPLUS DISTRIBUTION.

SCHEDULES SHOWING THE OBJECTS TO WHICH THE SAID FUND HAS BEEN APPROPRIATED BY BY-LAW, AND THE PAYMENTS MADE UPON THE SAME, TO THE 1st NOVEMBER, 1876.

Leinted by Order of the Legislative Assembly.



#### Toronto:

PRINTED BY HUNTER, ROSE & ÇO., 25 WELLINGTON ST. WEST. 1877.



# To His Honour the Lieutenant-Governor of the Province of Ontario.

The undersigned has the honour to present the accompanying Tables, being a Statement of the amounts apportioned to the various Municipalities of the Province of Ontario under the Municipal Loan Fund Surplus Distribution Scheme, the Objects to which such amounts have been appropriated by By-law, and the Payments of Principal and Interest made up to the 1st of November, 1876.

ADAM CROOKS,

Treasurer.



# CONTENTS.

Municipalities in the	County of	Addington	PAGE.
66	"	Brant	
66	66	Bruce	
6.6	66	Carleton	
66	"	Dundas	
4.6	"	Elgin	10
66	66	Essex	
"	"	Frontenac	
6.6	"	Grenville	
"	66	Glengarry	
66	66	Grey	
66	"	Haldimand	
"	"	Halton	
66	4.6	Hastings	
66	66	Huron	
66	"	Kent	
66	66		
66	"	Lambton	
66	"	Leeds	
	66	Lennox	
66	"	Lincoln	
66	66	Middlesex	
66	66	Norfolk	
66	"	Ontario	
"	"	Oxford	
"	66	Peel	
66	66	Perth	
"	"	Peterborough	
"	"	Prescott	
••	• •	Prince Edward	
44	"	Russell	
**	"	Simcoe	
66	"	Stormont	
66	4.6	Victoria	
6.6	66	Waterloo	
"	"	Wellington	25
4.6	.6	Welland	25
"	66	Wentworth	. 26
"	66	York	26
			. 27
			27
			. 27
			27
	in		28
Surplus Distribution	Scheme .		29



# MUNICIPAL LOAN FUND.

SURPLUS DISTRIBUTION.

MUNICIPAL LOAN FUND,—SURPLUS DISTRIBUTION.

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nts. 0 B.1 B C T S.	cts.  11 00 \$757 50 for building schools; \$2,170 50 for making roads and bridges;  12 04 \$755 in provement of reads and bridges;  13 78 \$750, improvement of Township hall; \$1,750, making and improving roads;  15 78 \$750, improvement of Township hall; \$1,750, making and improving roads; balance, payment of Township's share of County	41 20 Repairing and improving public roads and bridges. 42 20 Improvement of roads and bridges. 43 20 Erection of a public hall, purchase of a burying ground, improvement of roads and bridges, and drainage. 43 92 and interest to gravel and improve roads. 44 52 200 to brild and complete Court House and Public Hall. 45 22,200 to build and complete Court House and Public Hall; balance and interest to be applied in payment of Township's share of County debt. 48 8 200 to build and complete Court House and Public Hall; balance and interest to be applied in payment of Township's share of County debt.		walk to Great Western Railway station; balance, cutting down hills, building bridges and making roads.
ents.	\$ cts. 661 58 Improvement of ro 3,111 00 \$757 50 for building and \$250 for pr 12,215 78 \$750, improvement ing roads; bal	68 01 02 02 03 04 73 04 73	### ##################################	-
Total Interest to date of Chain being paid off.	\$ cts. 29.58 3 631.78 12	30 68 102 01 145 92 70 53 394 47 37 88	3.3 06 3.3 06 3.47 01 3.79 70 141 25	
Amount of Claim on 1st Feb., 1874	\$ cts. 632 00 3,678 00 11,584 00		1,120 00 0,1430 00 0,192 00 0,436 00 0,5290 55 0,7290 55 0,1086 00 0,2208 00 0,512 00 0,5312 00	
. Municipality.	County of Addington Barrie Township	Clarendon & Miller Denbigh, Ashby, Abinger and Effinglam Hinchinbrooke Kaladar and Anglesen Kenebee Loughborough	Oxoron Oxoron Palmerston and Cana Pordand Sheffield Brantford Township Burford Oakland Tuscarea Oakland Dunfries, South	
County or District.	County of Addington	8	Brant County	

- P	_	Jc	70	. e	7e	og eg	<del>4</del> 3	ф.	, a	••	50	· :	J	03		<u> </u>	
\$10,000 and interest to pay off dependires issued for building bridges \$1,400 to repair Dundas and William Street bridges.	Building school-houses and paying school indebtedness.  To pay annual dischtedness for aid granted to Toronto, Grey and Denote Designed to believe to be body and the control of the contr	\$10,000 to pay gravel road indebtedness; \$4,000, improvement of	roads and orders.  Building school-houses, buying sites for schools, and paying school	mebbedness.	ror building roads and bridges. To improve roads and bridges and sink well; to build and improve	schools, and to pay year's indebtedness for and granted to Southern Extension Railway.  To redeem debentures issued and build harbour; balance to enlarge	cemetery.  To be loaned to School Trustees on debentures, and the proceeds of said debantures when nois of to be ambled in reduction of the	railway indeltedness; balance not so used to be applied in reduction of Township's share of County's debt.	Hall	roads. \$7,000, gravelling and improving certain, roads specified in By-law	paramee, fayment of gravel road and runway indepoemers.  To be divided amongst school sections for building and improving	Suchais.  Building and improving school-houses.  Construction of a Town Hall.  Payment of debentures issued to build bridges.  \$700, to pay for and granted to Wellington, Grey and Bruce Railway; \$800 to build Town Hall; balance to pay harbour deben-	tures. \$2,500 to redeem school debentures; balance to pay for public park. To pay off school debentures.	Improvement of roads and building bridges; also buying land to	make approach to bruge.  To be invested, and interest applied to educational purposes, \$2,500 to build Township a.all. Improving roads and building bridges.	\$250 to build a bridge over Edge's Creek; \$859 50 to open and improve certain roads and build oertain bridges; \$1,000 to build brick Town Hall.	
0,250 00	12,758 40 11,186 76	12,000 00	7,589 45	11,970 47	12,195 63	5,567 02	9,108 38		1,951 65 5,238 44	10,975 79	9,145 74	8,224 40 2,844 67 5,246 81 2,463 54	3,239 35 2,195 20	4,276 00	6,941 13 2,500 00 5,321 00	2,009 50	
	453 15			565 84	740 67	235 16	393 83		191 78	407 15		328 34 158 21 64 63	163 85 72 96		473 13		-
35,690 11	13,683 37 10,733 61	13,993 66	8,334 67	11,404 63	11,454 96	5,331 86	8,714 55		1,951 65 5,046 66	10,568 64	10,524 00	7,825 82 2,516 33 5,088 60 2,308 91	3,075 50 2,122 24	6,850 00	6,468 00 5,064 06 5,268 00	2,694 00	
Paris Town	Brant Township	Carrick	Greenock	Huron	Kincardine Township	Kincardine Village	Kinloss Township	A.11	Amabel	Arran	Bruce	Elderslie Paisley Village Saugeen Township Southampton Village	Walkerton Town Port Elgin Village	Fitzroy Township	Goulburn Gower, North Huntley	March	
	ce County													leton County			

Interest is only entered in the second column when the account is closed, but the payments in the third column include principal and interest,

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

OBJECTS.	130	salaries. S6,000 to take stock in the Ottawa and Nepean Gravel Road Company; balance to improve certain roads, cut down hills, and	make bridges, and plank side walk. \$650 to build a bridge over Goodwood River; balance to repair a	Problem is Marthornigh Druge. To open up, make and improve, by bridging, ditching and blasting	Building Town Hall, improving roads, building bridges and making	Macwalts.  Manual road from the Village of Metcalf to the City of	Draining the Village.	Building market house and Village Hall. Stidges and drainage in \$1,000 for improvement of roads, building bridges and drainage in each quarter of the Township; halance to build macadamized	roads.  Macadonizing and draining streets of the Village.  Purchasing gravel pit, macadamizing, gravelling and improving roads, building bridges: also \$2,000 to pay debt incurred for	road and bridge building. \$1,500 to purchase gravel pit for road improvement; \$4,950 to im-	\$1,000, gravelling roads; \$2,000 to build bridge across the Nation River; \$2,000 to pay debt for bridge built over the same River; balance, improving roads and bridges.	\$5,760 to pay annual indebtedness for aid granted to the Canada Southern Railway. Reduction of indebtedness caused by aid granted to Canada Southern. Kailway.	11,659 00 Payment of annual liability for aid granted to Canada Southern Railway.
Payments.	\$ cts. 5,058 68	8,586 73	1,029 39	1,618 25	9,991 84	9,855 48	1,240 24	1,698 30 9,100 00	2,395 48 5,400 00	7,400 00	8,623 96	5,397_00	11,659 00
Total Interest to date of Claim being paid off.	\$ cts.		55 39	116 25	421 84	721 48	48 24	136 30	83 48		443 96		:
Amount of Claim on 1st Feb., 1874.	\$ cts. 4,520 00	10,138 00	974 00	1,502 00	9,570 00	8,534 00	1,192 00	1,562 00 9,534 00	2,312 00 6,518 00	9,448 00	8,180 00	8,172 46	12,958 00
Municipality.	Marlborough	Nepean	Richmond Village	Torbolton	Gloucester	Osgoode Township	New Edinburgh Village	Iroquois Village Matilda Township	Morrisburg Village Mountain Township	Williamsburgh	Winchester	Aldborough	Southwold
County or District.	Carleton County Marlborough			£-1		10		Dundas County				Elgin County Aldborough  Dunwich	¥

								1		`		,					
\$1,733 to pay indebtedness for year 1875 for aid granted to Canada Southern; \$2,170 54 to pay debenture No. 8, issued to build	Port Burwell Plank Road.  To be invested, and the interest and part of the principal to be upplied yearly in paying indelibelness for aid granted to the	Canada Southern Railway, \$2,500 to pay debentures issued to improve Port Bruce harbour; \$550 to pay land for Agricultural	Notety grounds; S., S., Bu to improve certain roads by gravelling, &c., and to open up Silver Creek.  Completing Aubilee Hall Market House, fences, &c.  Construction of water works.  Payment of Township's share of indebtedness for aid granted to the	Canada Southern Dallway. No By-law.	Reduction of debt for aid granted to Canada Southern; balance to pay debt caused by taking stock in the Amherstlang and Talbot	Plank Road Company. \$1,381 to pay share of indebtednes for aid granted to the Canada Southern Railway; \$400 to build lock-up; balance, making	drams. \$1,000 to mild brick town hall in Village of Harrow; balance,	graveling roads. \$1,000 to buy land for public park; balance for drainage. \$800 to build a public hall; balance, building certain specified	Puriges and drams.  \$431 14 for each of fire school sections, No. 3 being a separate school.  Building bridges, cutting out and clearing roads; also, gravelling	certain roads, as specified in Ly-law. To assist in building Town Hall. \$1,200 on improvement of roads; \$400 on improvement of streets in p. n. p.	Delle layer Vilage; Dalance on Granage. Widening and despening Cranberry Marsh Water Course; gravel-	Ing the road called the Caure. \$426 83 to pay school debetures; balance to build drains and gravel	screes, as specified in Dy-law. Deepening and widening certain creeks, improving, draining and	opening certain roads.  Opening out and deepening for drainage purposes Trembley's and	Big Creeks.  Breetion of Common school-house.	To be invested, and interest applied to educational purposes.  To be invested, and the interest applied in payment of the Town-shin's share of County delit for aid granted to the Kineston and	Pembroke Railway. \$1,000 to pay indebteness for aid granted to Kingston and Pembroke Railway; \$412 to pay for Town Hall; balance for sidewalks, filling up lot, building wharf, and grading street.
4,703 54  8	3,270 00 1	70	218	:	94	22	65	45.	348	23	28	91	80	:	6,022 46	23	02
4,70	3,27	9,593	$\begin{array}{c} 2,121\\ 16,067\\ 12,177 \end{array}$		2,756	2,693	4,150	4,273	2,155	3,088	3,300	1,652	5,358		6,05	1,687 9,275	2,641
			49 38 579 01		91 93	84 64	131 07	152 00 119 62	362 24	17 75 126 33	233 30	56 98	199 80		167 87	163 04 1,073 00	
11,403 23	4,827 48	10,874 11	2,072 26 15,488 10 12,967 29	1,382 26	2,655 01	2,608 58	4,019 58	4,121 45 2,828 83	2,155 70 4,471 10	206 48 2,963 37	3,006 98	1,596 83	5,159 40	3,299 75	5,854 59	1,524 00 8,202 00	3,404 00
Bayham	Dorchester, South	Malahide	Aylmer Village St. Thomas Town Yarmouth Township.	Vienna Village	Amherstburg Town	Anderdon Township	Colchester	Gosfield	Malden	Pelèe Rochester	Sandwich, West	Sandwich Town	Sandwich, East	Tilbury, West	Windsor Town	Garden Island Kingston Township	Portsmouth Village
					Essex County			11								Frontenac County Garden Island Kingston Townsl	

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

OBJECTS.	To 1	batance to make road to root of the stand and tanding places. \$1200 to build Court House; \$500 building and improving bridges. \$200 to build Court House; \$400 building and improving bridges. be applied from time to time in paying the Township's share of County debt for Railways, County Court House, and County Grammar School.  Building gravel roads, erecting public scales, and making bridges and culverts.	23,710 21 \$4,500 to buy land and build Town Hall; to divide the balance of the principal amongst the school sections for educational purposes, as permitted by the 153rd section of the Public School Act; the interest to be applied in completing Town Hall, furnishing, feneing and improving the grounds of the same.  11,802 04 To be invested, and the interest applied to educational purposes, and the interest accuract to Dec. 1875 to be divided amongst the school sections in proportion to the salaries of teachers the sub.	To Tail Buil	
Payments.	\$ cts. 7,448 00 1,222 43	5,700 00	23,710 21	11,337 50 851 86 5,073 95 5,295 16 1,889 00	5,000 00 10,323 85 5,500 00 9,966 09
Total Interest to date of Claim being paid off.	\$ cts. 324 00 94 43	209 26	1,947 17	1,011 50 147 80 195 16 43 00	421 85
Amount of Claim on 1st Feb., 1874.	\$ cts. 7,124 00 1,128 00	5,764 00	21,763 04	10,326 00 2,046 00 4,926 15 5,100 00 1,846 00	12,662 00 9,902 00 8,830 00 9,654 00
Municipality.	Frontenac County Pittsburgh Township	Storrington	Oxford Township	Augusta	Charlottenburg Kenyon Lancaster Lochiel
COUNTY OR DISTRICT.	Frontenac County	12	Grenvill County Oxford Township Edwardsborough.		Glengarry County Charlottenburg Kenyon  Lancaster Lochiel

62 \$800 61 To 1	388	03 For 04 \$2,4;	58 81,2	Township. 7 78 To pay indebtedness caused by granting aid to the Toronto, Grey and Bruce Bailway.	80 \$500	30 Imp 34 \$300	14	828	6 51 \$5,300 in grading and gravelling certain roads; balance, building	96	8	2,576 65 To pay indebtedness caused by granting aid to the Hamilton and	68 To 1 31 \$400	63 For 35 To l	5.39 To pay indebtedness caused by granting aid to the Hamilton and	51 To b	Red
7,195 62 9,386 61	1,705 8,481	7,705	11,528	6,317	4,632	7,363 4,042	5,978 4,488	6,388	6,576	8,777	6,707	2,576	2,088	1,652 $2,183$	6,795	4,615	7,066 65
227 62	63 65 586 38	237 03 170 04	402 58	251 78	264 80	211 30 150 34	180 28 140 14	39 75	258 95	755 96	209 00	84 65	144 68 354 31	46 63 85 35	429 39	• 481 51	502 65
6,968 00	1,642 00 7,898 00	7,468 00 4,086 00	11,126 00	6,066 00	4,368 00	7,152 00 3,892 00	5,798 00 4,348 00	6,738 00	6,302 00	8,022 00	6,495 00	2,492 00	1,944 00 4,024 00	1,606 00 2,098 00	6,366 00	4,134 00	6,564 00
Artemesia Township	Durham Town Egremont Township	Glenelg	Normanby	Osprey	Proton	Collingwood Township	Euphrasia	Owen Sound Town.	Sullivan	Sydenham	Holland	Caledonia Village	Cayuga, South, Township Cayuga, North, Township	Cayuga Village Dunn Township	Oneida	Rainham	Seneca
Grey County												Haldimand County Caledonia Village					

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

	OBJECTS.	\$ cts. 7,158 600 \$2,000 to repair Hamilton and Port Dover Road : \$2,520 to new in-	stalment of indebtedness for year 1875, for aid granted to the Hamilton and Lake Eyler Railway; \$2,638 to redeem debentures due for 1876 for same indebtedness.  70 distribute the interest for 1874 and 1875 on allowance amongst	1,000 00 By-law of the United The Orlungs also to distribute the interest due up to 15th September, 1876, in a similar manner.  1,000 00 By-law of the United Townships of Moulton and Sherbrooke appropriated the whole to forming a fund for educational purposes, prated the whole to forming a fund for educational purposes.	1,600 00 \$1,600 to pay indebtedness to Moulton, as established at time of	9,636 40 Making streets; building engine-house, and paying two debentures	Issued for school purposes.  To reduce ind bredness caused by granting aid to Credit Valley and	Hamilton and North Western Railways.  1,443 93 Grading and gravelling streets, building bridges and planting shade	1,064 00 \$2,000 to pay school debentures; \$300 for two stone water tanks;	53	1,784 00 Payment of indebtedness caused by granting aid to the Credit Valley	56	ness caused by granting aid to Credit Valley Railway; 83,844 to pay indebfedness for aid granted to Hamilton and North Western Railway.	37 Erec 37 To L	8,294 92 Payment of debt incurred for building Town Hall and Market, and	Duying site for the same.  No By-law. 418 II (Gravelling the streets of the Village.
	Payments.		, 20	1,00	1,60	9,63	:	1,44	1,06	1,842	1,78	3,496		1,562 (10,867 :	8,29	41
Total Interest	to date of Claim being paid off.	& cts.		: : : : : :		300 84		53 93		60 53		128 26		62 67 813 37	193 10	36 05
	Amount of Claim on 1st Feb., 1874.	\$ cts.	6,350 18	8,610 22	3,375 90	9,355 56	10,888 00	1,390 00	2,564 00	1,782 00	5,928 00	3,368 00 7,738 00		$\begin{array}{c} 1,500\ 00 \\ 10,054\ 00 \end{array}$	8,102 49	1,119 00 382 06
	Municipality,	Walpole	Canborough	* Moulton	Sherbrooke	Dunnville Village	Esquesing	Acton Village	Georgetown Village	Milton Village	Nassagaweya	Oakville Village Nelson Township	;	Burlington VillageTrafalgar	† Belleville Town	Sidney Trenton Village
	COUNTY OR DISTRICT.	Haldimand County. Walpole		)		.4	Halton County	~_							Hastings County	<u>~~</u>

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No By-law.  Payment of debt for building Township Hall.  Construction and improvement of roads and bridges.  Erection of public school-house in the Village, Opening a permanent road between 5th and 6th Concessions in Carlow, at lots 15, 16, 17, 18 and 19.  Gravelling road leading from Bridgewater to Queensborough.  Improvement of roads and bridges.	No By-law. To be expended on improving roads, as specified in By-law. Ercelon of a Town Hall. Construction of bridges. To pay, interest on debentures issued in aid of Grand Junction	To brailway.  To be applied towards the payment of building new High and Common Schools.	Improvement of public reads.	\$15,000 for redemption of debentures issued in aid of the London, Huron and Bruce Railway: balance to be applied towards	building school-houses, and, in some cases, to be invested and form School Fund until required.  To redeem Railway and South Boundary debentures; balance, im-	\$10,000 to improve Bayfield harbour; \$1,000, gravelling side line	cessions; \$3,550 to redeem debentures issued in aid of London, Huron and Bruce Railway.  \$13,50 to extend leading roads; balance to pay gravel road debt.  To be invested and applied to educational purposes.  To pay indebtedness incurred for gravel roads and bridges; balance, redemption of debentures issued in aid of the London, Huron	and Bruce Railway.	To pyride Italians, making graver roads.  To pyridebtedness for schools, public hall, and site for the same.  Improvement of roads.  To requee indebtedness caused by granting aid to the Wellington,	To pay off debentures issued in aid of the Toronto, Grey and Bruce	To redeem debentures issued in aid of the London, Huron and Bruce	To redunway.  To redeem debentures issued in aid of the Wellington, Grey and Bruce Railway.	w divided and Sharhwades hy orbitration maging 69 975 00 mithaut interest at the Manha Manha har a - D. land
1,148 98 1,500 92 203 66 62 90 307 48 94 88	659 92 759 44 776 66 820 18	170 52	240 83	16,880 00	17,912 50	15,299 00 8	17,928 03 8 17,864 59 7 17,439 33	18,013 32	8,458 00 11,387 00 17,215 02	30,284 48	18,729 43	16,891 17	00 378 90 boni
45 78 73 72 19 86 2 28 11 15	53 92 19 36 15 24 34 64	4 80	16 39				549 93 1,023 71 1,272 33	480 40	327 29 847 65	1,258 21	1,984 16	628 41	orbitration noo
985 56 1,103 20 1,427 20 183 80 60 62 296 33 94 88	197 83 606 90 740 08 361 42 785 54	165 72	224 44	16,458 44	17,583 01	13,873 64	17,378 10 16,840 88 16,167 00	17,532 92	9,178 45 11,058 97 16,367 37	29,056 27	16,745 27	16,262 76	Shorbrooke by
Hungerford Thurlow Tyendenaga Millpoint Village Carlow and Mayo Elziver and Grinthorp Faraday and Dungannon Transport	Telefine, Monteague, Macoure, Wicklow and Bangor.  Huntingdon Madoe Maranora and Lake Rawdon	Stirling	Tudor, Wollaston, Limerick and Cashel	Goderich Township	Hay	Stanley	Stephen Tuckersmith Usborne.	Ashfield	Clinton Town Colborne Grey Township	Howick	Hullett	Morris	perbrooke are now divided and
3				Huron County		15							* Moulton and Sherbrooke are no

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\* Moulton and Sherbrooke are now divided, and Sherbrooke by arbitration received \$3,375 90, without interest, as its share. Moulton has not passed any By-law subsequent to the division of the Townships. + Belleville still to receive 67 cents. interest. + 90 cents. still due to Huntingdon.

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION,—Continued.

Amount of Claim on 1st Feb., 1874.	\$4,000 to make roads; balance to be invested and interest applied to educational purposes. \$500, grading and making sidewalks; \$150, making street; \$350 making drains; \$2,200 to build addition to the Common School. To pay debentures issued in aid of the Toronto, Grey and Bruce Railway. To appropriate \$4,850 and a sufficient sum to pay arrears of interest to buy \$5,000 of Fownship of Stanley debentures. Redemption of debentures issued in aid of Wellington, Grey and Bruce Railway. \$600 for lumber for Town Hall and street improvement; \$2,550 to pay for construction of a Town Hall and market house. Building a public school. Grading and gravelling certain streets, and putting in culvert.	\$8,272 for gravelling Chathann and Camden road; \$1,800, granted to the Village of Wallaceburg as that village's share of surplus. \$2,000 for certain road improvement; \$3,100 for drainage, and \$530 for building bridges. \$1,100 for drainage, and \$530 for building bridges. \$1,324 for street improvements in the Village of Blenheim; \$10,624, improving roads, &e. in the different wards. \$5,834 16 for road improvements; \$2,387, enlarging Raleigh plains drains. Improvement of certain specified roads. \$2,000 to build Township Hall; \$1,232 to pay road indebtedness; Relemption of drainage debentures. Improving roads. Bridding Town Hall and lock-up. Building water tanks and improving the streets of the Village. Gravelling and improving roads. \$400 to bridning for Agricultural Society; \$500 to repair Town Hall at Ridgetown; \$100 to repair Morpeth Town Hall; balance and interest to improve and protect roads.
pality, Fayl	\$ cts. 18,582 66 3,500 00 14,922 92 12,743 36 3,166 10 3,976 11	10,115 00 6,899 09 12,452 31 8,524 07 1,480 42 4,036 69 2,280 41 1,577 28 1,577 28 6,234 92 6,550 00 6,550 00
Total Interest to date of Chain being paid off.	\$ cts. 1,245 51 549 34 232 00 252 34 119 90	296 09 362 07 564 31 58 42 344 69 114 41 209 25 45 28 34 92
Amount of Claim on 1st Feb., 1874.	\$ cts. 17,337 15 6,228 24 14,573 58 12,069 51 12,511 14 2,913 76 3,856 21 1,056 73	10,072 00 6,630 00 11,948 00 8,162 00 3,692 00 2,166 00 1,532 00 1,532 00 1,532 00 6,226 00 6,226 00 6,226 00
MUNICIPALITY.	McKillop Seaforth Town Turnbury Wawanosh, East. Wawanosh, West, & Lucknow. Brussels Village Lucknow	Chatham Township  Dover  Harwich Raleigh Ronney Tilbury, East Conden and Gore Canden and Gore Dresden Village Dresden Village Orford Township Loward
COUNTY OR DISTRICT.	Huron County	Ment County

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To grant \$750 towards the erection of a foundry in the Town; \$302 to make sidewalks, drains, &c., as specified; balance to pay interest on and retire debentures issued for erection of Town Hall.	Grading and improving roads and building bridges. \$1,400 to erect Town Hall in the Village of Alvingstone; balance,	S2,000 for building bridges; 8807 for ditching and grading roads;	Dozantes, payment of coor for the form of form	Improvement works.  Improvement of certain roads.  \$2,805 18 to pay debt incurred for permanent works; balance, im-	proving certain reads and buying gravel pit.  \$2,700 to pay for right of way to open out Front street; \$1,000 to open Richard and Elizabeth streets; \$2,000 to be distributed over	the wards of the town for drainage purposes. \$2,500, building bridges; balance, gravelling and improving roads. Clearing up, and draining roads, making breakwater to project St.	\$1,694 to build Township Hall; balance to construct roads and	53,670 to pay for building a bridge over the Sydenham River, and	to build or complete the same; \$4,905 to construct a Town Hall. \$600 to make drains on Prince. King and Main streets; \$175 to sink	wen for the purposes; early to make side wake our rince, Ang and Main streets; balance to build a Railway crossing over Grand Trunk Railway. Improving street by gravelling, draining, &c. To build Town Hall and lock-up.	Interest to be divided amongst the school sections in proportion to	\$3,500 to improve roads and bridges; \$500 and interest from 1st of	This sum is deducted from North Crosby and has not yet been ap-	Construction of a road between the Village of Norton and Single-	\$1,000 to pay debt for building Town Hall; balance to be invested	In morgages, and there's appared to cancerbona purposes. Improving roads, repairing Town Hall, and building public school. To build school-houses and improve roads. Making macadamized and gravel roads. Crading and making gravel roads.	
2,167 73	8,520 21 4,901 65	2,957 41	7,722 25 1,102 97 5,191 42	8,209 67 6,644 40	5,685 55	7,389 49 6,790 22	2,050 75	4,639 05	1,250 00	1,283 94 1,018 76	708 00	2,536 00		4,426 64	2,953 09	2,591 21 6,220 05 7,897 35 4,875 25	
177 73	257 33 139 65	90 33	220 57 69 09 217 20	218 25 193 48	189 71	203 03		164 55		29 54 29 92				318 64	173 09	109 21 480 05 377 35	
1,990 00	8,262 88 4,762 20	2,867 08	7,501 68 1,033 88 4,974 22	7,991 42 6,450 92	5,495 84	7,186 46 6,374 00	2,094 00	4,484 50	1,311 51	1,256 28 988 84	7,080 00	3,754 00	200 000	4,108 00	2,780 00	2,482 00 5,740 00 7,520 00 4,726 00	
Bothwell Village	BosanquetBrooke Township	Enniskillen	Moore. Oil Springs Village Petrolia Town.	Plympton Township Sarnia Township	Sarnia Town	Warwick Sombra	Dawn	Euphemia	Forest Village	*Wyouning Village Watford Village	Bastard and Burgess	Crosby, North	Newborough Village	Grosby, South	Escott	Elmsley Kitley Lansdown and Leeds, Front Lansdown and Leeds, Rear	
	Lambton County							17			Leeds County						1 11 444 7

MUNICIPAL LOAN FUND,—SURPLUS DISTRIBUTION.—Continued.

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	OBJECTS.	No By-law. Interest of allowance to be applied to pay the salaries of the teach-	ers and to support Farmersville High School. Gravelling and improving street.	To be invested, and the interest applied to Educational purposes. Payment of Township's share of the County Debt. Reduction of indebtedness for gravel roads and permanent improve-	ments. No By-law. Reduction of indebtedness caused by building schools. Reduction of Township's share of the County Debt. Payment of Township's share of the County Debt.	\$850 00 to build Town Hall; balance to be set apart for Educa-	Society; \$400 for Beams- society; \$400 for Beams- ville Cemetery; balance to repair and macadamize roads and	build bridges and culvert. To be applied to Educational purp ses and distributed in proportion, to the cortrol solvings will to school feachers.	\$300 and interactions against a school house; \$1,500 to gravel Wolver- hampton Mountain Road; balance to improve Grimsby and	Smithville road.  \$1,567 29, and interest from 16th April, 1874, to be apportioned to Merritton; \$500 for separate school balances to be divided amonast the school sections in proportion to the actual salaries	N L N	Reduction of indebtedness caused by building gravel roads.
,	Payments.	\$ cts.	4,298 28	1,604 16 3,644 03 7,123 32	2,482 56 1,268 68 8,931 05 6,090 87	4,051 71	4,204 40	6,541 60	4,602 91			7,446 82
	Total Interest to date of Claim being paid off.	e cts.	258 28	92 16 200 03 261 32	104 56 66 68 465 05 156 87		242 75	209 60	155 66			382 25
r J	Amount of Claim on 1st Feb., 1874.	\$ cts. 3,342 00 3,582 00	4,040 00	1,512 00 3,444 00 6,862 00	2,994 00 2,378 00 1,202 00 8,466 00 5,934 00	4,332 00	3,961 65	6,032 00	4,447 25	5,595 02	2,695 70 2,980 51 1,539 39	7,064 57
Samuel Samuel Samuel	Municipality.	Yonge Xonge Kear.	Gananogue Village	Adolphustown	Fredericksburg, South Amherst Island Bath Village Earnestown Township Napanee Town	Caistor	Clinton	Gainsborough	Grimsby	Grautham	Merritton Louth Niagara Township Port Dalhousie.	Adelaide Township
	COUNTY OR DISTRICT.	Leeds County		Lennox   County	18	Lincoln County						Middlesex County Adelaide Township

12,096 00 \$10,938 41 to grade and gravel 12th side line leading into Adelaide Road and other Township roads; \$700 to improve Mincey Road: \$1,000 to grade and gravel town line between Ekfrid and Caradoc. \$2,000 building bridge; \$500 drainage; balance gravelling and im-	Payment of Township's share of County debt for public works. \$2,300 grading and gravelling Ekfrid and Mosa town line; \$3,550 grading and gravelling cross-road No. 12; \$2,000 improving town line between Ekfrid and Caradoc; balance and interest to improve Appin Road.	Pay \$2,4 Pare	Pay Chray Chray Pay Pay	To 1 % 1.32 1 % 1.32 1 % 1.32 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1	apparatus for the same. \$650 repairing and enlarging school house and public hall, and building water tanks; balance building gravel roads.	To build and repair bridges, improve roads, and cut down hills. \$1,000 to improve certain specified roads. Gravelling and repairing centre town line. \$1,200 to repairing Town Hall and Agricultural Grounds; balance improving roads. No By-law.	Redemption of debentures issued in aid of Toronto and Lake Nipissing Italiway. \$5,600 to pay indebtedness for school house; balance to erect new school house. Grading and gravelling Centre Road.
2,096 00 6,584 58	10,547 40 7,412 00	8,944 01 28,516 22 6,231 07 6,532 40 1,550 44	9,311 55 16,345 48 6,399 68 2,175 29 7,010 15	1,736 95 9,612 07 7,302 53 8,213 12	1,374 44	3,115 16 11,274 22 5,042 00	16,083 89 5,600 00 5,512 45
12,6	10,7	သည်တွင် င်	6 5 6 8 F	8,7,	1,	3, 11, 5,	16, yr yr
457 41	549 20	283 59 249 83 249 83 76 34	663 60 837 02 192 38 60 06 296 15	54 95 296 07 373 95 364 14	65 44	694 22 211 15	300 52
12,300 41   6,127 17	9,998 20 7,754 30	8,436 67 26,691 70 5,947 48 6,282 57 1,474 10	8,647 95 5,508 46 6,207 30 2,115 23 6,714 00	1,682 00 9,316 00 6,928 58 7,848 98	1,309 00	8,194 00 4,236 00 10,580 00 4,830 85 10,948 00	15,783 37 6,370 00 5,394 00
12,3	9,9	8,436 26,691 5,947 6,282 1,474	8,647 15,508 6,207 2,115 6,714	9,3 6,9 7,8	1,3	8,194 4,236 10,580 4,830 10,948	15,7 6,3 5,3
Caradoc	Dorchester, North Ekfrid	Lobo London Township Metcalf Mosa Newbury Village	Nissouri, West. Westminster Williams, West Park Hill Village Biddulph	Lucan Village McGillivray Williams, East	Wardsville Village	Charlotteville Township Houghton Walsingham Middleton Townsend	Brock Oshawa Town Mara
Middlesex County   Caradoc  Delaware .						Norfolk County	Ontario County

# MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

STATEMENT SHOWING AMOUNDS payable to each municipality, rayments made mereur, and Objects mereur.	OBJECTS.	\$7,000 to assist Pickering Harbour Company in building harbour; balance grading and gravelling certain roads and building		Com	\$3,90 for grading roads and building bridges; \$22,000 to redeem debentures issued in aid of the Midland Rallway		ImI	same; asso buying suc for building for waver works.  \$3,600 to build certain bridges; \$2,800 to pay for aid granted to the Port Perry Kallway: \$60 to gravel road.	SZ.	Pay Buil Pay	Defending Gravel Koad Company. Establishment of water works. Paymout of debentures issued to build gravel roads and in aid of	$T_{0}$	Imp \$880	
Panty, ra	Payments.	\$ cts.	1,861 71 5,440 00	3,055 89 6,768 40	26,920 89	5,963 61 11,863 29	3,473 10	5,893 00	1,830 59	3,968 35 5,525 00 9,457 56	2,742 24 7,082 02	5,399 54	3,633 12 880 00	4,385 70
each maine	Total Interest to date of Claim being paid off.	& cts.	53 71	55 89 131 71	68 066	499 61 271 38	107 64		70 59	200 75	100 24 199 85	502 44	152 59	
payable to	Amount of Claim on 1st Feb., 1874.	\$ cts.	1,808 00 10,618 00	3,000 00 6,636 69	25,930 00	5,464 00 11,591 91	3,365 46	6,440 00	6,822 00 1,760 00	3,767 60 12,004 33 9,034 00	2,642 00 6,882 17	4,897 10	3,480 53 5,261 09	8,666 48
MENT SHOWING AMOUNTS	Municipality,	Pickering	Rama TownshipReach.	Port Perry Village	Thorah	Whitby Town Uxbridge Township	Uxbridge Village	Whitby Township	Whitby, East Scugog	Blandford Township	Tilsonburg Village	Oxford, East	Oxford, North	Zorra, East
CIALED	COUNTY OR DISTRICT.	Outario County Pickering				20		-		Oxford County				

10 / 1	000110	V e	200	5510110	. 1	рого	(111	<i>J</i> . 1	,			J. 1.0	101	•
Improving roads and building bridges. Redemption of debentures issued in aid of permanent works. To pay for building a common school-house.	Redemption of debentures issued in aid of the Toronto, Grey and Bruce Railway.  Redemption of debentures issued in aid of the Toronto, Grey and	Bruce Railway.  To be invested for educational purposes.  do  do  do  do  do  do  do  do  do  d	public works.  \$230 for bridge over Credit River; \$260 for bridge over Mullett Creek; balance, redemption of debentures issued in aid of the Credit Valley Rallway.  \$1,000 to build school-house; balance, gravelling streets of the village.	\$6,500 to pay debt to County of Perth; \$4,500 to redeem debentures; \$625 to improve streets; balance, to improve schools, including	\$1,000 for separate school. Redemption of debentures issued in aid of the Wellington, Grey and Bruce Railway.	Reduction of indebtedness incurred for public works.	Buying gravel pit, building bridges and gravelling roads.  Improving certain roads; \$188 90 to buy gravel; balance, to aid in	\$1,200 to pay off school debentures; balance for extending school	\$2,650 to improve certain roads; \$1,208 and interest from 1st Feb., 1874, to be apportioned to the Village of Hastings, which sum is deducted from Asphodel; balance to build Town Hall in deflucted from Asphodel;	No By has been a not wood.  Improvement of roads.  Making gravel road improvement, building one school-house, and paying indebtedness of another; balance to assist certain schools	and repair certain roads. \$255, making side walks in the Village of Warsaw; \$100 for putting \$25, making side walks in the Yillage of Warsaw; \$750 for putting in stone foundation to Town Hall; balance, grading and im-	proving roads. \$3,000 and one year's interest for building Town Hall in Village of	\$200 for Town Hall; balance, improving roads.	To open up and repair roads and bridges,
6,862 21 7,926 00 1,029 34	14,236 24	12,996 70 12,962 70 3,537 43 4,574 52	1,342 14	19,812 37	5,597 23	$\begin{array}{c} 1,376 \ 23 \\ 2,288 \ 91 \end{array}$	2,105 00 6,524 90	2,514 62	5,608 33	3,260 64 5,368 34	3,980 85	3,899 20	1,339 00	152 46
482 87 379 64 121 15	450 81	738 70 1,014 70 419 43 394 52	108 14		142 69	132 23 80 91		120 62	429 06	110 64				10 46
6,379 34 7,546 36 908 19	13,785 43	12,258 00 11,948 00 3,118 00 4,180 00	1,234 00	18,764 55	5,454 54	1,244 00 2,208 00	2,324 00 6,336 00	2,394 00	5,179 27	1,314 73 3,150 00 5,252 00	3,902 00	7,984 00	1,300 00	192 00
Zorra, West Ingersol Town Embro Village.	Albion TownshipCaledon	Chinguacousy Toronto Township Toronto Gore Brampton Village	Streetsville VillageBolton Village	St. Mary's Town	Wallace Township	Peterborough Town Ennismore	Monaghan, North Smith	Ashburnham	Asphodel	Hastings Village Belmont and Methuen Douro	Dummer	Otonabee	Burleigh, Anstruther & Chandos	morgan
	Peel County			Perth County St. Mary's Town.	2	Peterborough County Peterborough Town								

MUNICIPAL LOAN FUND,—SURPLUS DISTRIBUTION,—Continued.

OBJECTS.	Repairing roads and opening up new roads. Repairing roads and bridges and opening up new roads. Opening up and improving roads and bridges. \$80 to buy site for public hall; \$514 to build Town Hall; balance for roads and bridges. Making and repairing roads and bridges. Opening up new roads and repairing old ones.	Improvement of certain roads and bridges.  \$4,617 for repairs and improvement of roads and bridges; \$200 for telegraph line; \$1,400 for Town Hall; \$3,500 to pay share aunally of County brildings.  \$2,200 to build High School in village of Vankleekshill; balance making roads and repairing bridges.  Payment of debt incurred for building Central School.  To gravel and macadamize certain roads.  Improvement of certain specified roads and bridges.  \$1,500 to improve main road from Caledonia Springs; balance on improvement of roads and bridges throughout the Township.	\$3,650 to build Town Hall; \$100 to fence same; \$1,372 to pay share for County buildings; \$350 to purchase gravel bed for road making.  \$574 to pay share of cost of County buildings; balance to form a School Fund.  \$1,000 to pay share of cost of County Buildings; \$500 for alteration of Court House; \$500 for roads and bridges; \$500 for building Town Hall; balance for Educational purposes.  \$1,618 to pay Township's share of cost of County Buildings; balance building and repairing school houses and supporting schools.  \$554 to pay share of cost of County Buildings; balance to be invested for Educational purposes.  \$46 to pay share of Town Hall; \$558 to pay share of cost of County Buildings for 1874; \$2,000 to be invested for Educational purposes; balance improvement of roads and bridges.
Payments.	\$ cts. 1,353 67 1,075 92 1,392 31 1,638 81 641 91	3,576 66 6,632 00 4,114 43 3,434 00 3,904 32 6,000 00 2,751 09	5,472 00 3,754 37 4,946 80 7,767 91 4,585 83 3,817 49
Total Interest to date of Claim being paid off.	. \$ cts. 44 68 33 92 52 31 44 81 21 91 29 69	182 66 160 43 92 00 234 32 167 40 189 09	274 37 498 80 659 91 305 83 229 49
Amount of Claim on 1st Feb., 1874.	\$ cts. 1,310 00 1,042 00 1,340 00 1,594 00 620 00 748 80	3,334 00 9,222 00 3,954 00 3,4670 00 6,000 00 3,162 00 2,562 00	6,608 00 3,480 00 4,448 00 7,108 00 3,588 00
Municipality.	* Dysert and others Galway and Cavendish Harvey Minden Stanhope and Sherburn Snowdon	Alfred Township.  Hawkesbury, East.  Hawkesbury, West  Longueil.  Plantagenet, North  Plantagenet, South.  Calcdonia Township.	Ameliasburg.  Athol  Hillier  Hollowell  Marysburg, South  Marysburg, North
COUNTY OR DISTRICT.	Peterborough County * Dysert and others Galway and Cavend Harvey Minden	Prescott County	Prince Edward Co Ameliasburg  Athol Hillier Hollowell Marysburg, So Marysburg, So

00 \$487 to pay share of debt for County Buildings; \$625 to pay for 76 \$1,31 85 to pay share of cost of County Buildings; balance to buy lot and build Town Hall in Demorestville.  No By-law.	Making roads, building bridges, and draining lands.  106 do do 108 io do 109	\$1,000 to build High School; balance to build a Town Hall.  10 Improvement of public roads.  11 No 18,1-law.  12 Needemption of debentures issued in aid of Hamilton and North-  13 Needemption of debentures; \$2,000, construction of bridges; \$4,260,  14 To pay two instalments of indebtedness for aid granted to the Hamilton and North-Western Railway; balance to assist schools.	17 82,1 12 Buil 36 Buil 08 45 \$3,0 20 \$500	E E8244 ZE 8	98 Improvement of roads and repairing and building bridges. 56 Making gravel roads. 77 Making and repairing uine mile road. 53 \$1,000, repairing Town Hall; balance, improving certain roads.
1,012 00	1,592 5,502 6,044 4,848	2,453 73 8,766 91 7,242 07 10,020 34	3,262 5,828 3,704 12,474 2,191	2,901 51 3,923 73 8,928 00 8,928 00 4,139 04 6,583 42 6,583 42 6,583 61 7,57 60	5,768 12,082 7,154 10,835
369 76	54 85 170 06 200 94 170 45	198 73 324 91 232 07 564 34	122 17 170 12 192 36 240 08 1,066 45 191 20	135 73 135 73 157 04 193 41 155 42 163 56 203 51 417 60	310 98 500 56 448 77 673 53
4,722 00 5,404 00 1,034 00	1,538 00 5,332 00 5,844 00 4,678 00	2,260 00 8,442 00 6,072 00 10,960 00 7,010 00	3,140 00 5,658 00 3,512 00 5,082 00 11,408 00 2,000 00	2,644 00 3,788 00 8,788 00 8,982 00 8,988 00 6,428 00 4,154 00 5,756 00	5,458 00 11,582 00 6,706 00 10,162 00
Picton Town Sophiasburgh Wellington	Cambridge Clarence Cumberland Russell	Bradford Essa Gwillimbury, West Innisfil Mulmur. Tecumseh	Tossoroutio Collingwood Town Floss Medonte Nottawasaga Stayner Village	Orillia Village  Machedash and Orillia Oro Sumnidale Tay Tiny Vespra Adjala Mono	y. Finch Osnabruck Roxborough Cornwall Township
	&Russell County	Simcoe County	23		Stormount CountyFinch

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

	च ,	भू कु त	S. S.	on on or
OBJECTS.	Repairing and improving roads and bridges. Payment for erection of railway station buildings in the village and coher permanent works.	<ul> <li>\$5,800, unproving gravet roads, as specified; \$4,200 to bind brock</li> <li>\$2,000, building Town Hall and lock-up; balance, improvement of roads.</li> <li>\$2,000 to redeem debentures issued in aid of the Toronto and Nipissing Railway; balance to be loaned to schools.</li> <li>\$1,500 on improvement of roads in Carden.</li> <li>\$1,500 on improvement of roads in Carden.</li> <li>To be apportioned to the different school sections of the Township in sums stated in By-law; balance, improvement of roads.</li> </ul>		To redeem debentures issued in aid of Credit Valley Railway.  To pay off or redeem debentures issued in aid of the Galt and Doon Railway, Credit Valley Railway, and also Town Hall and Schools.  No By-law.  Erection of a Public School.  Redemption of debentures issued in aid of Galt and Guelph Railway.  To be invested for educational purposes.  To be invested in debentures or mortgages, and the interest to be applied to pay teachers' salaries.  Improving and building gravel roads, and paying indebtedness for the same.
Payments.	6,640 75 1,191 29	2,733 70 2,733 70 2,126 84 10,689 00	3,193 23 1,083 67 4,063 19 1,076 92 1,785 15 1,044 50 6,011 05	8,238 21 13,370 24 2,059 30 22,314 95 16,517 77 12,274 88 8,280 28
Total Interest to date of Claim being paid off.	\$ cts. 210 75 40 44	205 16 125 67 72 84	134 88 53 67 285 16 34 92 449 15 34 50	396 21 53 30 60 95 841 77 854 88
Amount of Claim on 1st Feb., 1874.	\$ cts. 6,430 00 1,150 00	2,608 03 2,608 03 2,054 00 10,885 36	3,058 35 1,030 00 3,778 03 1,042 00 1,736 00 1,010 00 7,898 00	7,902 00 13,654 00 1,594 00 2,006 00 22,254 00 11,420 00 11,138 00
Municipality.		Mariposa Veralam Bexley Carden and Dalton	Laxton, Digby and Longford Lutterworth, Anson and Hindon Somerville Draper, Ryde and Oakley Macauley Stephenson Feuclon	Dumfries, North Galt Town Hespeler Village New Hamburg Village Preston Preston Waterloo, South Waterloo, North Waterloo, Worth Waterloon
COUNTY OR DISTRICT.	Victoria, County	24	,	Waterloo County

_				•				001			. upc	11.13	(210		,				7.1	10
Improving and building gravel roads, and paying indebtedness for	\$800 to pay debt on market house; \$450 to pay debt on Public School; \$52 to erect Separate School; \$1,817 37 to buy site and	build High School; \$525 to make water tanks. To buy land and build Town Hall.	\$11,	To 1		improve the same. \$8,718 to pay space of liability for aid granted to the Credit Valley	Tor	Fruce Kailway.  To reduce indebtedness caused by granting aid to the Credit Valley.	To r	Red	Pay \$3,1		Red		Bruce Railway, and to build bridges over the Conestoga River. (Reduction of indebtedness caused by granting aid to the Welling-	ton, Grey and Bruce Kailway.    Reduction of indebtedness caused by granting aid to the Welling-	\$1,350 to reduce school indebtedness	ments. Redemption of debentures issued in aid of Wellington, Grey and Bruce Railway.	To be invested, and the interest applied to educational purposes.	\$2,775 for erection of Town Hall in the Village of Ridgeway, and slate roof for the same.
7,000 00	15,176 37	3,235 94	16,065 44	9,818 42 3,807 13	7,712 23	5,377 17	5,629 36	6,760 20	5,418 20	7,844 69	5,378 30 4,663 00	06 112 0	0,011 55	3,652 10 17,990 70		24,427 65	4,558 93	20,253 43	5,395 88	2,675 00
•		47 94	418 50	790 42	196 23		115 54	504 20	260 20	188 87	212 30	06 366		108 10 427 43		5 523 83		38 16	365 88	
11,622 00	21,125 00	3,188 00	15,646 94	9,028 00 5,171 82	7,516 00	10,652 00	5,513 82	6,256 00	5,158 00	7,655 82	5,166 00 4,616 00	00 98: 8	14,002 00	3,544 00 17,563 27	20,215 71	3,688 11	5,740 00	20,215 27	5,030 00	21,925 96
Wilmot	Berlin Town	Waterloo Village	Guelph Township	Puslinch	Eramosa	Erin	Fergus Village	Garafraxa, West	Garafraxa, East	Nichol	Orangeville Village Pilkington	Amaranth	Arthur and Arthur Village	Luther Maryborough	Minto	Harristown Village	Mount Forest	Peel	Pelham Township Wainfleet	Bertie
			Wellington County. Guelph Township								<b>2</b> 5								Welland County	

Overpaid 85 cents.

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Continued.

	е		
OBJECTS.		Kep Rep	in equal portions.  \$3,000 to build Township Hall; \$2,000, improvement of roads; balance to be invested for educational purposes.  \$1,750 to build and repair certain bridges; \$1,200 to build iron bridge in the Village of Waterdown.  Building Town Hall and market.  \$4,43 25 ets. to pay Township's share of indebtedness for aid granted to Lake Sincoe Junction Railway.  \$1,520 to pay for two bridges; \$1,652 1s and \$1,048 16 to pay debertures due for 1874 and 1875 for aid granted to Lake Sincoe Junction Railway.
Payments.	8 cts. 300 00 3,370 175 2,910 75 4,061 36 5,266 56 2,083 15 6,151 36 1,260 0 1,260 0 2,287 73	5,050 00 2,025 00 4,379 20 3,600 00	7,395 02 2,946 00 2,473 65 4,143 23 3,620 34
Total Interest to date of Claim being paid off,	\$ cts. 150 41 276 75 134 32 322 56 107 15 153 36 253 72 67 73	301.20	209 65
Amount of Claim on 1st Feb., 1874.	\$ cts. 1,660 57 3,520 00 2,634 00 3,927 04 1,944 00 1,976 00 5,998 00 5,502 00 5,220 00 5,220 00	2,500 00 10,010 00 3,892 00 4,078 00 5,566 00 11,606 00	6,826 00 7,788 00 7,868 00 4,608 00
Municipality.	Chippewa Village Clifton Crowland Fort Erie Village Humberstone Port Colborne Village Stanford Thorold Town Welland Town	Willoughby Township Ancaster Barton Binbrooke Glanford Saltfleet Beverley	Flamborough, West  Flamborough, East  Aurora Village  Gwillimbury, East  Gwillimbury, North
County or District.	Welland County	Willoughl Wentworth County Ancaster Barton Binbrooke Glanford Saltfleet Beverley	York County

15. To 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18				25,713 19 Payment of debentures issued for construction of buildings for fire department; balance, construction of sewers.  146,126 00 Construction of sewers and gravel and cedar roads in the city.	No By-lnw.  do do  \$1,000 to grant bonus for a grist mill.  No By-law.  do do  do do  do do	Making and improving roads and building bridges. \$250, building schools; \$250, improving roads. Improvement of roads and bridges. Construction of a bridgel across the Kasheshibigomag River, and improvement of roads. \$300 for erection of a public hall; \$800, improving roads, filling gullies and making bridges.
1,367 16 16,132 01 2,208 05	4,042 +0	15,163 09	10,976 77 4,579 87	25,713 19	1,000 00	735 18 466 00 1,100 06 1,294 91 999 39
69 16		847 09	660 08	899 19		31 18 30 06 92 91 35 39
3,974 00 1,298 00 14,964 00 3,520 00	5,970 00	14,316 00 1,682 00 20,016 00 16,626 92	10,316 69 4,406 00	43,083 97 24,814 00 165,984 08	440 00 1,886 00 1,758 00 1,758 00 1,080	704 00 640 00 1,070 00 1,202 00 96:1 00
Georgina Holland Landing Village King New Market Village	Etobicoke	Vaughan  Richmond Hill  York Township  Markham Township  Markham Township	Scarborough Yorkville Village	Hamilton Kingston Toronto	Killarney Township Missisnga. Spanish Kiver Bruce Mines. Sault Ste. Marie Town. Batchewaning Kaministiquia Michipicoten Neepgon Pic. St. Ignace.	Humphrey Township Wood and Medora. Mouck Morrison Muskoka
			27	City of	Algoma District	Muskoka District

MUNICIPAL LOAN FUND.—SURPLUS DISTRIBUTION.—Concluded.

			ss for	tasing
0 B J E C T S.	\$ cts. 1, building and improving roads and bridges. No By-law.	777 04 Making and repairing roads and bridges.	681 01 Making roads and building bridges and paying indebtedness for schools.	No By-law.  See do Repairing roads and bridges, building schools, and purchasing public cemetery.  Haking roads and bridges.  883 30 \$500 to pay for Parry Sound cemetery, and improve the same; balance to aid school sections and open up roads.  No By-law.  do  do  do  do  do
Payments.	\$ cts.	FO 222	681 01	
Total Interest to date of Claim being paid off.	\$ cts.	63 04	67 01	27 60 11 77 25 30
Amount of Claim on 1st Feb., 1874.	\$ cts. 1,422 00 1,010 00	1,880 00 400 00 714 00	61-1 00	320 00 614 00 532 00 410 00 858 00 112 00 70 00 74 00
Munioipality.	Watt and Cardwell	Manitoulin, East Manitoulin, Centre Hwaland and North half of Sheguiandah Assiginack and South half of	Shegmiandah and South half of Bidwell	Ahmic Lake, comprising Townships of Ryerson, Chapman, Creft and Monteith Maganetawan Boley Township McKellar McKellar McDougal.  Hagernan Christie Carling Ferguson
County or District.		Manitoulin	28	Parry Sound

\* The apportionment of the Townships of this group has not yet been settled.

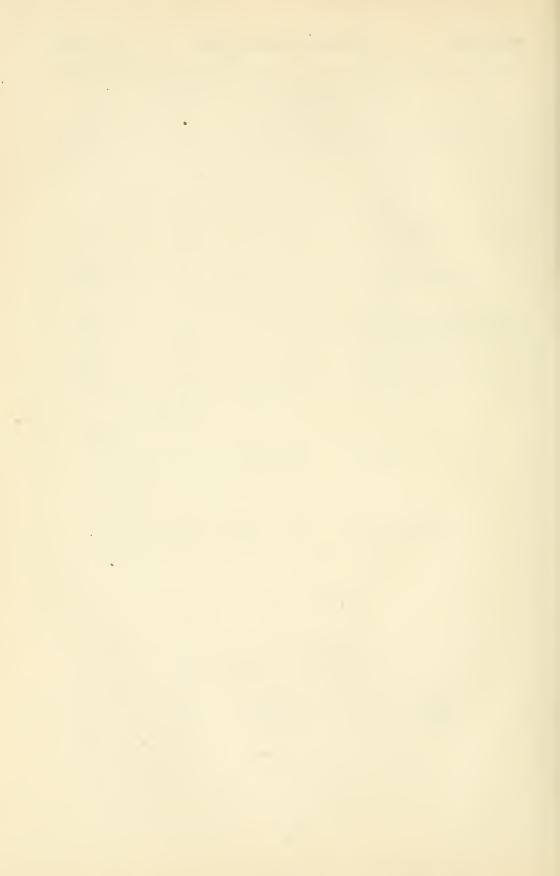
### SURPLUS DISTRIBUTION SCHEME.

Summing up of Statement of Payments, &c., to 1st November, 1876.

	\$ cts.
Total amount of Principal paid	2,604,430 62
Do Interest	123,000 00
Total payment Principal and Interest	2,727,430 62
Total amount appropriated under the Act	3,115,736 66
Less payment of principal as above.	2,604,430 62
Balance of unpaid Principal	511,306 04

W. CAYLEY,

Auditor.



# REPORT

OF THE

# Commissioner of Crown Pands

OF THE

# PROVINCE OF ONTARIO,

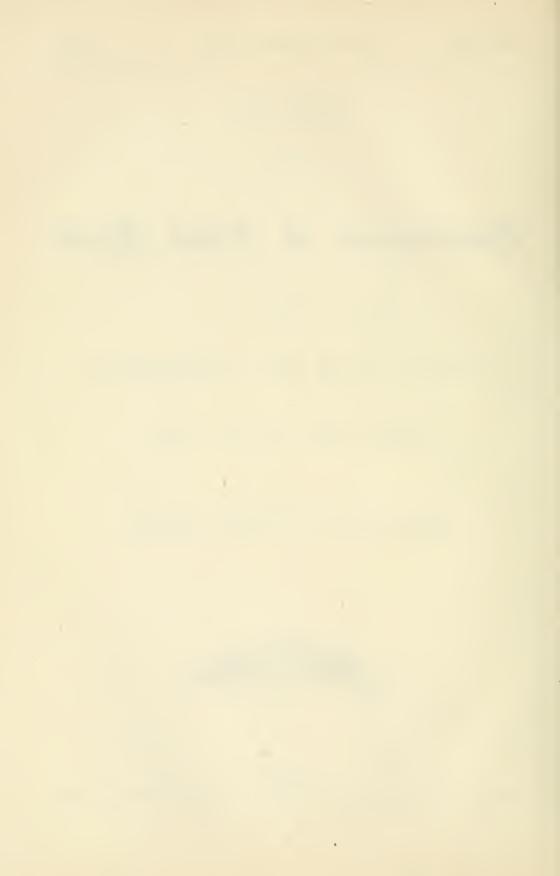
FOR THE YEAR 1876.

Brinted by Order of the Begislative Assembly.



Toronto:

PRINTED BY HUNTER, ROSE & CO., 25 WELLINGTON ST. WEST. 1877



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	" " " " " " " " " " " " " " " " " " "	
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# REPORT

OF THE

# COMMISSIONER OF CROWN LANDS

OF THE

## PROVINCE OF ONTARIO,

FOR THE YEAR ENDING 31ST DECEMBER. 1876.

To His Honour the Honourable Donald Alexander Macdonald, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR.

I have the honour to submit the following Report of the proceedings, transactions, and affairs of the Department of Crown Lands, for the months of November and December, 1875, and for the year 1876.

#### CROWN LANDS.

There were sold of the Crown Lands, during the months of November and December. 1875, 8,133 acres. The sales amount to \$6,364, and the collections to \$15,678, which, added to the operations of the preceding ten months, as previously reported, make a total for the year 1875 of 51,952 acres sold for \$49,475, and the collections to \$88,736. (See Appendix No. 7, page 39.)

There were sold during the year 1876, 51,387 acres. The sales amount to \$56,704 and the collections to \$82,254. (See Appendix No. 8, page 39.)

#### CLERGY LANDS.

There were sold of the Clergy Lands during the months of November and December, 1875, 1,350 acres. The sales amount to \$4,010, and the collections to \$10,479, which, added to the operations of the preceding ten months, as previously reported, make a total for the year 1875, of **6**,434 acres sold for \$14,237, and the collections to \$45,166. (See Appendix No. 7, page 39.)

There were sold during the year 1876, 7,255 acres. The sales amount to \$14,370, and the collections to \$41,934. (See Appendix No. 8, page 39.)

#### COMMON SCHOOL LANDS.

There were sold of the Common School Lands during the months of November and Debember, 1875, 349 acres. The sales amount to \$5,048, and the collections to \$10,076, which, added to the preceding ten months, as previously reported, make a total of 1,945 acres, sold for \$10,091, and the collections to \$56.282. (See Appendix No. 7, page 39.)

There were sold during the year 1876, 2.039 acres. The sales amounted to \$6,797, and the collections to \$63,635. (See Appendix No. 8, page 39.)

## GRAMMAR SCHOOL LANDS.

There were sold of the Grammar School Lands during the months of November and December, 1875, 282 acres. The sales amount to \$250, and the collections to \$880, which, added to the operations of the preceding ten months as previously reported, make a total for the year 1875 of 4,622 acres, sold for \$6,157, and of collections \$8,936. (See Appendix No. 7, page 39.)

There were sold during the year 1876, 3,511 acres. The sales amount to \$5,134, and the collections to \$10,586. (See Appendix No. 8, page 39.)

#### COLLECTIONS AND REVENUE.

The total collections in the Department during the months of November and December, 1875, amount to \$69,420, which, added to the collections during the preceding ten months as previously reported, make the total collections for the year 1875 amount to \$494,004. (See Appendix No. 5, page 38.)

The total collections in the Department during the year 1876 amount to \$637,370, of which \$521,214 may be considered as revenue. (See Appendix No. 6, page 38.)

#### DISBURSEMENTS.

The gross disbursements of the Department for the year 1876 amount to \$179,855. (See Appendix No. 14, pages 45, 46, and 47.)

#### CROWN PATENTS.

The number of Crown Patents issued during the months of November and December, 1875, is 332, which, added to those of the preceding ten months, as previously reported, make a total for the year 1875 of 2,128. The number issued during the year 1876 is 2,535.

#### FREE GRANTS.

On the 31st October, 1875, the date of my last report, there were open for location under the Free Grants and Homestead Act of 1868, eighty-eight Townships, and during the year 1876 the Township of McMurrich was added, thereby making a total of eighty-nine Townships now open for location. The Townships of Franklin, Monteith, and Nipissing have been appropriated under the Act, but are not yet open for location.

During the year 1875, 1387 locations were made on 186,807 acres of land, and 3,896 acres were sold to 89 locatees. During this period 381 locations, made in former years, were cancelled for non-performance of the settlement duties, and 570 patents were issued to free

grant settlers and purchasers in Free Grant Townships, who were entitled to a remission of the arrears due on their lots. (See Appendix No. 15, pages 48, 49, and 50.)

During the year 1876, 1,463 locations were made on 192.858 acres of land, and 2,261 acres were sold to 110 locatees; 462 locations made in former years were cancelled, and 546 patents were issued. (See Appendix No. 16, pages 51, 52, and 53.)

# WOODS AND FORESTS!

The accrual for timber dues, ground-rents, &c., during the year 1876, is \$362,398 06. (See Appendix No. 20, Page 59.)

The amount collected as timber dues, ground-rents, &c., during the year is \$437,998 77. (See Appendix No. 18, Page 55.)

The great depression in the timber and sawn lumber trade which prevailed in 1873, 1874 and 1875, but which I ventured, in my last Report, to hope would shew at least a partial revival in 1876, still continued throughout the year just closed, the only article in the trade in the Canadian market which exhibited signs of vitality being board pine timber for Europe, of large average and superior quality, for which fair prices were obtained at Quebec

Canadian lumber during the year has not only suffered from the effects of unremunerative prices in the American market, but had to contend against low freights by water and rail from Michigan, which enabled producers in that State, at comparatively small cost, not only to supply the leading centres of distribution and keep up stocks, but also from the unprecedented circumstance of cheap railway transit (a means of forwarding lumber for the first time within their reach at paying rates), the Michigan producers were in a position to lay down the article at points throughout the States which had formerly been supplied from the centres of distribution, thereby lessening the demand at the usual markets of supply where alone the Canadian producers could look for purchasers.

It is currently reported that operations in the woods in the lumber producing States of the neighbouring country, and also in Canada, are to be carried on to an equal, if not greater extent than last year; this, it a fact, is much to be regretted in the present state of the trade, as it can only result in the weeding-out of the valuable pine from our forests without realizing an adequate return. The only sound policy would seem to be a curtailment of operations until a strong, healthy demand for the produce of our saw-mills has been established.

With the experience of the past few years, and under the circumstances just mentioned, together with the present unsettled condition of public matters in the United States, there is little to warrant the anticipation of any marked improvement in the sawn lumber trade during he season of 1877.

### COLONIZATION ROADS.

The total expenditure on the Colonization Roads, during the year 1876, is \$56,264, the particulars of which will be found in the Superintendent's Report in Appendix, pages 21 to 32 inclusive.

### CROWN SURVEYS.

No Instructions were issued during the months of November and December, 1875.

The Reserve at Southampton was the only survey completed and closed during the mouths of November and December, 1875.

The surveys for which Instructions were issued during the year 1876, are the Townships of Himsworth, Harrison, Burton, Patterson, McClintock, Sinclair, Burpee, Livingston, Shawanega, part of Bedford, the residue of Oakley, north boundary of Methuen, and the second concession of Chandos. All the above mentioned surveys have been completed and closed except those of Shawanega and part of Bedford.

### MUNICIPAL SURVEYS.

The municipal surveys for which Instructions issued during the months of November and December, 1875, were two—this number added to 25 issued during the ten months ending 31st October, 1875 (as shown by my report of 1875, page 38) make 27 instructions issued during the whole year 1875.

The municipal surveys for which Instructions were issued during the year ending 31st December, 1876, are 23, and the municipal surveys confirmed during the same period, 21.

These surveys were performed under the authority of the Act 22nd Victoria, chap. 92, of the Consolidated Statutes of Upper Canada, and are enumerated on pages 63, 64, 70 and 71.

### MINERAL SURVEYS.

There were sold on the north shores of Lakes Superior and Huron, in the Districts of Thunder Bay and Algoma, in the months of November and December, 1875, 94 \frac{96}{100} acres, which added to the quantity sold during the preceding ten months, as previously reported, make a total of 6,139 acres sold during the year 1875.

The quantity of mineral lands sold on the north shores of Lakes Superior and Huron during the year ending 31st December, 1876, amounts to 3,542 acres, the applicants furnishing plans, field notes and descriptions of each location by a Provincial Land Surveyor in accordance with the provisions of the Act relative to mining, 32nd Vio, cap. 34, sec. 9, and sub-sections 1 and 2, and sections 10 and 11. (See pages 65 and 72.)

Respectfully submitted,

T. B. PARDEE,

Commissioner of Crown Lands.

DEPARTMENT OF CROWN LANDS, Toronto, 30th Dec., 1876.

# EXTRACTS

FROM

# SURVEYORS' REPORTS.

### LOUNT.

Situate in the district of Parry Sound, surveyed into farm lots in 1874, by Provincial Land Surveyor Hermon, contains 49, 232 acres, including water and road allowances.

The following is an extract from Mr. Hermon's report:-

The surface of the Township, in common with the entire geological formation to which it belongs, is rough, rocky and uneven. It must be viewed as a part of the low mountain range, extending along the entire length of the Province, and beyond.

The rock is of the trap variety. It is everywhere distorted and broken by subterranean forces. There are numerous quartz seams, many of which may yet yield rich rewards to the practical miner. Magnetic iron ore is abundant, sometimes being found in immense deposits, as at Pickerel Lake. I did not discern any other ores of importance.

The rocky ridges tend in a north-westerly and south-easterly direction, and usually present but little soil. The valleys, however, have heavy deposits of loam. Brooks and streams of good water meander through nearly all the valleys. These often open out into extensive sheets or lakes of great natural beauty, nestling among the hills. Fish of all the usual lake kinds abound in these waters.

The timber consists of maple, beech, birch, balsam, spruce, pine, &c., as indicated in the accompanying timber plan. The pine about Lake of many Islands is of value, and may be got out via Deep Water river and the Maganetawan.

About fifty per cent. of the Township is fit for settlement. Near Spring and Deer Lakes, some very desirable locations may be found. The climate is salubrious and plea-

The annoyance caused by the myriads of mosquitoes and flies during the months of June and July, will no doubt deter some weak people from an early settlement. This annoyance, of course, passes away as settlements advance.

The Flora and Fauna of this entire country are so well known that it would, per-

haps, be superfluous to dwell lengthily on the subject here.

The country is capable of supporting a very considerable population. It will, I fancy, be found well adapted to the purposes of the dairyman and the stock-grower; the waters are good, all kinds of root crops thrive well, while in the production of cereals, the capabilities are not to be under estimated.

Samples of wheat, oats, barley, potatoes, turnips and hay, which I saw in the Maganetawan settlement, compare favourably with similar products from other parts of the Province.

The great want is felt to be good roads.

A first-class road from Rosseau to Nipissing would secure the immediate settlement of the entire country, by the young active sons of our Canadian farmers. In a few years, when lines of railways shall penetrate to Lake Nipissing and beyond, one can well see how the ready market afforded by railway access to Toronto, together with the healthfulness and productiveness of the country, as well as the numerous water privileges for manufacturing purposes, must attract a large and industrious class of immigrants and settlers.

The construction of first-class roads is the best and surest means of developing the resources of the country.

### PERRY.

Situate in the district of Parry Sound, surveyed into farm lots in 1874 by Provincial Land Surveyor, C. F. Chapman, contains 48,908 acres, including water and road allowances.

The following is an extract from Mr. Chapman's Report:—

The Township of Perry is mostly composed of the watershed or divide of land between the Maganetawan river and the streams &c., which run into the Muskoka River. The Fall towards the north or Maganetawan being comparatively short, renders all the streams in this Township running in that direction swift and broken, while the southerly streams have generally a slow winding course, passing through many swamps, &c. The principal creeks are Ragged creek, and the one ruuning out of Bay Lake. On Ragged creek a good mill site on lot 17, in the 9th concession, occurs; also another on a small creek on lot 3, in the 12th concession. The Maganetawan river in its course through this Township is mostly very swift and much broken by rapids. Some good mill sites may also be ultimately used on this river.

Few lakes occur in the Township; the principal ones being Clear Lake, Bay Lake, and Loon Lake, the latter in fact only an expansion of the Maganetawan river. The water in

all is clear and good, and in most cases deep.

The Township is for the most part heavily timbered with hardwood, maple, birch, beech, and balsam, occurring on the ridge, while in the lowlands, cedar, hemlock, tamarac, and spruce abound, pine only appearing in limited quantity, principally along the valley of Ragged creek, on Loon Lake, Clear Lake, and Long Lake, but in no place, either abundant or of good quality. Only one windfall occurs in the Township, and it appears to be of very old date, overgrown now with a second growth of cherry, soft maple, and balsam, and has not been overrun with fire. It extends in a N. E. direction from lot 3, in the 6th concession, to lot 18, in the 9th concession.

The soil is chiefly a light sandy loam, in many places stony. Towards the N. W. corner some very fair land occurs, the ridges not being so abrupt as in the south and southeast corner, while the swamps are more dry and open: a good bottom of elay exists in the

Ragged creek valley, but not to any great extent.

Masses of rock appear in many places on the north and east sides of the ridges, especially on the hills about the Maganetawan river; they consist principally of granite, intervened with current.

Some of the swamps on the head waters of the streams running south, are large and wet, generally lightly timbered, and many of them being capable of drainage at some future

time for cultivation.

The Township appears best adapted for stock-raising, and I have no doubt it will be ultimately used for that purpose. What crops have been raised proved abundant and good;

hay, turnips, oats, and the coarser cereals thriving well.

Several settlers arrived in the Township during the fall of 1874. The Government road from Huntsville proving of great benefit, and which I should suggest being extended to the Maganetawan River, as it would materially promote the settlement of the Township.

I consider at least two-thirds of the Township fit for settlement.

#### MACHAR.

Situate in the district of Parry Sound, surveyed into farm lots in 1875, by Provincial Land Surveyor Elihu Stewart, contains 49,857 acres, including water and road allowances.

The following is an extract from Mr. Stewart's report:—

With regard to the Physical Features of this Township, it may be divided into two parts, viz.: that drained by streams flowing into Lake Nipissing, and those flowing into the Maganetawan river, the water-shed being in the form of a curve, commencing about the centre of the south boundary and extending northerly and westerly to near the west boundary, thence southerly dividing Deer Lake, in the Township of Lount, from Eagle Lake, and embracing the latter in the semicircle.

The principal streams are the Distress and South rivers, the former being the outlet of a very beautiful sheet of water surrounded by high, hardwood land and above referred to as Eagle Lake, the river flows only a short distance through this Township to Lount, and thence south-westerly to join the Maganetawan. South River enters the Township near the south-east angle and flows in a northerly direction through the Township. This river averages about twelve feet in depth, by about one chain in width, there are falls, unfortunately, to obstruct navigation, else this would be a good means of communication by crafts of considerable size to territory east of the Nipissing road. The land along its banks is perhaps the best to be found in the whole Township, being a rich vegetable deposit and sandy loam. This river drains all the eastern part of the Township, and receives the waters of Bray Lake to the west, by a stream shown on the plan. It flows in a northerly direction, and finally empties into Lake Nipissing.

The whole Township is well timbered—the swamps with spruce, cedar and tamarac; on low but not swampy land are found, hemlock and birch, with ridges of pine,—on the higher land, maple, birch and balsam, and on the hilltops, maple and beech. In the east and south-east are some very good lots of pine, but nowhere in this Township are

any large districts of this timber to be found.

The rock formation is similar to that in all this district, consisting of granite or gneissoid rocks. I found several well-defined quartz veins, but with no show of mineral whatever, and appearances of iron in some parts of the Township, and in several places the needle was very much disturbed by local attraction, principally near the centre of the

Township.

On the high land the soil is generally a light sand and in many places stony, the best for farming purposes being in the lower land which is frequently a good sandy loam. No settlers have as yet located in this Township, owing, no doubt, to its distance from the settled districts, and the absence of roads leading to it. Should communication be opened, with the Nipissing or other travelled roads, I have no doubt that this Township would attract at least its share of pioneer settlers; and I feel confident in saying that it possesses certain districts quite equal to many of the prosperous farming districts in the older settled parts of Ontario.

#### ARMOUR.

Situate in the district of Parry Sound, surveyed into farm lots in 1875, by Provincial Land Surveyor W. Beatty, contains 45,248 acres including water and road allowances.

The following is an extract from Mr. Beatty's Report:-

The Township of Armour will compare favourably with the adjoining townships in quality of soil, the greater part of the high lands being sandy loam, well wooded with maple, birch, beech and balsam, interspersed in places with pine of good quality.

The valley of the Maganetawan is from thirty to sixty chains in width, the soil a rich clay loam, the timber yellow and black birch, balsam and spruce, with occasional small ash

and cedar swamps.

A block of very good pine lies along the north boundary of the Township, and a narrow belt of the same timber extends along the north branch of the Maganetawan from the "Forks" to Pickerel Lake.

The undersigned considers that the most suitable locality for a town-plot is in lot no. four, in the ninth concession, at which point is found one of the finest water-powers in the district, the river falling about thirty feet in a distance of eight chains, emptying into a basin about six chains wide by ten chains long.

From this point to "Miller's Falls" on the Nipissing road, a distance of some twenty-

five miles by the river, the navigation is unbroken. To facilitate settlement, the road leading northward through the Townships of Chaffey and Perry should be continued through Armour, crossing the outlet of Doe Lake and thence down the west side of the Maganetawan, crossing the same at the projected town-plot.

### PRINGLE.

Situate in the district of Parry Sound, surveyed into farm lots in 1875, by Provincial Land Surveyor Fitzgerald, contains 50,690 acres, including water and road allowances.

The following is an extract from Mr. Fitzgerald's Report:—

The tract comprised in the south-west part of the Township may be described as

generally rugged and broken.

It is traversed in various directions by high rock ridges and deep ravines. Some bold and broken rock patches are also met with occasionally, interspersed with marshes and low swamp land. Scattered over this tract is a sprinkling of white pine of fair quality, but not in sufficient quantity to be called a pine country.

Where the soil attains to any depth, black birch of excellent quality grows to a large size, as also maple, hemlock, &c., but for the rest, the timber is light, and almost valueless,

being composed of spruce, balsam, small tamarac and cedar.

The head waters of Pickerel River, which flow into Georgian Bay by the Key, have their source here and in the north part of Lount, and no doubt to this circumstance and to the high summit level of the locality is attributable, in a great measure, the rugged character of the country.

Singularly enough, the first exploring line for the Georgian Bay branch of the Canada Pacific Railway has been generally run along the course of this stream and through this part of Pringle, but as might have been anticipated by anyone acquainted with the character of the country between Maganetawan and Lake Nipissing, the route was found wholly impracticable for a line of railway.

Having completed this part of the survey west of the Nipissing road, I moved to the south-east corner of the Township, and surveyed north the east boundary through

the concessions A and B to meet concession lines 8 and 9.

This part of the Township is, on the whole, very fair, and may be considered as fit for settlement, including the road lots. It is an upland, rolling country generally, somewhat stony in places. It is covered with scattered pine of good size, also large birch and a fair growth of maple, hemlock, beech, and a variety of other timber.

There are a few open meadows in this part, on which grow a heavy crop of coarse

hay, suitable for fodder, &c.

Some lots have been taken up here by intending settlers, but no improvements have as yet been made.

#### GURD.

Situated in the district of Parry Sound, surveyed into farm lots in 1875 by Provincial Land Surveyor Fitzgerald, contains 37,814 acres, including water and road allowances.

The following is an extract from Mr. Fitzgerald's Report :-

Except for the first five lots in concessions 1 and 2, the land in these concessions is low and swampy, rocky in places and covered with balsam, spruce, hemlock and pine. The tract as a whole, however, attains a high elevation, and the district immediately surrounding gives rise to numerous streams.

Approaching the South river, the land descends rapidly and a fine view of its valley is

had from the hardwood ridges on the west side.

On these ridges some good land is met with, but so much rough country is close by, that

its time for actual settlement must be remote.

For the remainder of this Township, embracing 80 per cent. of the whole, it may be described at once, as a very good farming country, some of it indeed very good. Almost every lot is fit

for settlement. It is generally a rolling upland country, containing many blocks of beautiful land, some heavily timbered with maple, birch, beech, basswood, with an occassional pine

and the usual varieties of other timber.

The soil is a fertile clay-loam, ranging in depth from six inches to two feet and upwards, and is comparatively free of stone. The substratum is generally composed of compact clay or marl, in places forming, with coarse gravel, a stiff conglomerate. In the valleys the bottom is mostly a fine sand covered with a good depth of vegetable mould and fatty loam. The elevated position of the country offers every facility for drainage, and the streams are all clear

On the first two concessions and towards the east boundary, pine is thinly scattered. A portion of it is of fair size and quality, but much is inferior and dead, unfit for commerce,

The South river, which flows into the southerly bay of Lake Nipissing, passes through the south-east corner of this Township. It is a fine stream here, about 60 feet wide and eight feet deep at low water, with clay banks from four to eight feet high and mud bottom.

It flows with a steady smooth current. Only a very small proportion of the Township is

covered by water, the greater part of which is tributary to South river.

The westerly side of the Township is chiefly drained by Commanda creek, which I

have referred to in the Report on Pringle.

Before closing this Report I may call attention to the enormous quantity of magnificent black birch scattered over all this country. Trunks three to four feet thick for a height of thirty and forty feet, are quite common, and the timber is of a fine quality and colour, and shows when cleaved a beautiful grain.

In time no doubt it will become an important article of commerce.

# NIPISSING (Part of).

Situate in the district of Parry Sound, surveyed into farm lots in 1874, by Provincial Land Surveror H. Lillie, contains 34,806 acres, including water and road allowanees.

The following is an extract from Mr. Lillie's Report:-

The general aspect of the Township is undulating and hilly. The south-eastern portion, in the vicinity of South river, is comparatively level, interspersed with a few swamps and ridges of sandy loam. Much of this portion may be termed bottom land. The south-western portion is rough and broken by rocks, with small swamps in the vicinity of the lakes. The central and westerly parts are high table-land, timbered chiefly with fine hardwood, a few swamps of tamarack, spruce, and cedar. In the north-west corner, in cons. 11 and 12, the land is poor and broken, mostly timbered with pine, hemlock, and balsam. That portion lying north of South river is a dreary waste, being almost an entire brule. Some years since a heavy fire swept over the entire country on the north side of the river, for many miles in extent, and completely destroyed the timber and burned off the surface soil. It was originally timbered with white and red pine, with occasional cedar and tamarack swamps. There is a belt of choice land along the valley of Beatty's Creek and the south branch of the same stream, varying from 20 to 50 chains in width, and extending from the third concession to its mouth, in the eleventh concession. There are beaver meadows of considerable extent, which yield a heavy growth of excellent wild hay, most of it fine blue-joint grass.

The soil is chiefly a sandy loam on the elevated portions. Where not rocky, it is frequently a dark rich loam of the finest quality. In the more level portions—bottom-land—it is mostly a clay loam of a whitish texture. On the north side of South river, after leaving

its banks, the soil is principally sandy or sandy gravel.

This Township on the whole is well timbered. In the central and westerly portions there are large tracts of fine hardwood, consisting of maple, birch, beech, and ironwood, s me basswood, with a mixture of hemlock, where the land becomes broken. In many places there are some of the finest sugar maples I have ever seen. The maple in this Township unlike most of the Muskoka district, grows to a good size. I frequently met with most beautiful specimens of bird eye maple. This, with an unlimited quantity of birch, would, with facilities for transportation, become a valuable article of export. Birch is the prevailing timber, and abounds in every section of the Township, on high as well as low land. It is generally large, and frequently found from three to four feet in diameter. With railway facilities the

birch timber alone would be a source of considerable wealth to the intending settler There are comparatively few pines, chiefly found along the valley of South river and in the northwest corner of the Township, but not of sufficient importance for lumbering purposes.

This Township is well-watered. South river with its tributaries, and several small lakes, contribute largely to its water system in the different sections of the Township. This river crosses the south-east corner of the Township, and flows in a north-easterly direction for a considerable distance, and then winds again to the west and crosses the eastern boundary in the 8th concession, whence it flows north-westerly obliquely through the Township, and empties into south bay of Lake Nipissing. It is a fine meandering stream, varying from 1 to 4 chains in width. The waters are rather dark and muddy, caused chiefly by the wash

drainage of so large a tract of burnt land to the north of the river.

It is said, and I think, it is sufficiently deep to render it navigable for steamers and other vessels, from its mouth to the first Chute or falls on lot no. 13, near the front of the 11th concession. The falls here are from 6 to 8 feet in low water. There are several excellent falls in this stream, which afford abundant water power and admirable facilities for extensive mills and manufactories. The most important of these are at Shaw's Mills, on lot no. 6, con. 9, and lot no. 5 in the same concession, about half-a-mile above the former. Ruth, Wolf, and McQuaby are the principal lakes; the two former in the southern part of the Township, and the latter situated on the western boundary, and mostly in the 5th and 6th concessions. The shores of these are generally bold, though the banks are not high. Only occasional portions of the beach are sandy. The waters are generally deep. The land in general rises but gradually from the shores. The waters of Ruth, Wolf, and Turtle Lakes, flow through the central part of the Township by the south branch, and empty into Beatty's Creek, thence into South River. McQuaby and Duncan Lakes are the principal feeders of North Creek, which forms a junction with the south branch on lot No. 14, in the 9th concession. On these streams there are two or three good mill sites, one of about 12 feet on the south branch, on lot no. 21, concession 4, near the outlet of Wolf Lake. There are fine falls on North Creek, on side line 15 and 16, concession 9.

The geological features of the Township exhibit but little worthy of notice. The rocks are chiefly of the Laurentian formation, and consist mostly of gneiss, approaching

in many places nearly the common granite.

I met with no limestone, though it is said it is found in a crystallized form near the mouth of South River. I made frequent search, but met with no indication of mineral ore. I am satisfied that there are no iron deposits, as I found no attraction of the needle worthy of mention through the entire Township,

Deer are quite plenty in the southern and south-western parts. The wolves are also numerous, and make great havoc with the deer. Duck and partridge are common, and contribute much to the comfort of the Indians and settlers. Other game is scarce. Mink

martin, beaver and otter are only found in limited numbers.

The-fur bearing animals have been hunted and trapped by the Indians and others

for many years.

I met with a few beaver dams only recently constructed. Fish abound in Lake Nipissing and South River. In the former they consist of pike, white fish, salmon and sturgeon. South River and some of the smaller streams afford that beautiful fish the speckled trout. I did not ascertain what kinds the lakes contain, but from observation, I have no doubt they abound with numerous fish.

There is a small settlement scattered along South River for a distance of about four miles. It contains, at present, nine families. They have taken up some of the best land in the Township. The most of them seem to be doing well, and are getting stock and other things around them, which bespeak comfort and prosperity. The land produces

well, and most of them grow heavy crops of hay, oats, and cereals.

This Township, from its contiguity to Lake Nipissing, and with the Rosseau and Nipissing colonization road now completed, and being for the most part well adapted for agricultural purposes, affords many inducements to the prospective settler. The large block of hardwood to be found in most sections, with more than an average share of good land and water, with its many natural advantages, render the Township inviting, and in my humble opinion, is destined to be rapidly settled.

In the event of a railway being built from the Upper Ottawa to some point on the

Georgian Bay, it is but reasonable to infer that it will touch at or near the south shore of Lake Nipissing, and so traverse this Township. With a leading road now constructed from Rosseau and also from Parry Sound to South River in this Township, it will afford easy access at all seasons. The prospect that, within a year or two at most, a steamer will ply on Lake Nipissing, and other advantages which I have enumerated, with its geographical position and agricultural adaptation, afford many inducements for settlement, seldom equalled in any new parts of our country. The beautiful crops raised by the settlers find a ready market with the lumbermen, who are operating not very far from the settlement. These bring extremely high prices—Hay, \$40 per ton; oats, from \$1 to \$1 25 per bushel. Potatoes and vegetables in proportion. The Township already possesses a small grist-mill, with a saw-mill attached, furnished by a circular saw,—these are owned by John Shaw, Esquire, of Lake Doré, in the Township of Wilberforce.

In conclusion, I have to remark that a very eligible site for a town plot may be had on both sides of South River, on lots No. 13 and 14, front of the 11th concession. The banks of the river rise to a height of from 15 to 20 feet, which affords ample facilities for drainage. The land is there quite level, and the soil being a deep clay loam, it is admirably adapted for building sites and gardening purposes. It is situated at the terminus of the Rosseau and Nipissing Colonization Roads as now built, and at the head of Navigation on South River, at a point where there is a fine water power, which renders it a desirable and com-

modious place of business.

I consider that about 70 per cent, of the area of the Township is adapted for agriculture and suitable for settlement.

#### STRONG.

Situate in the district of Parry Sound, surveyed by Provincial Land Surveyor W. Beatty, contains 45,543 acres, including water and road allowances.

The following is an extract from Mr. Beatty's report:

About one-ninth of the area of the Township is occupied by a lake lying near the centre, a belt of hard wood land along the west side of the lake gradually rises to the height of about one hundred feet above the water, and on or about side road 15 and 16, extending northward into the 12th concession, where it becomes mixed more or less with scattered pine and hemlock with occasional patches of birch and balsam; east and north of the lake the land is rolling, covered with hardwood and scattered pine and small patches of balsam and spruce swamp.

In the south-east corner of the Township there is a considerable block of good mixed pine and hardwood; south and south-west of the lake is timbered with hardwood and pine of inferior quality; much of the north-western part of the Township is covered with spruce swamp.

Lake Bernard is one of the finest bodies of water I have seen in this country, being about five miles in length and having an average width of nearly two miles, unbroken by islands or

promontories.

Except in a few places where the shore is rocky in low water, a dry sandy beach from six to eight chains in width, extends nearly the whole lake. The stream which forms the outlet of this lake is navigable for canoes from the lake to where it is crossed by the line between the 2nd and 3rd concessions. The readiest means of access into the Township at the present time is by portage, from Shesheeb Lake to Horn Lake in the Township of Chapman, and from thence to this point.

The general character of the soil is a sandy loam in the flats, not swampy, rich and strong,

but on the hills and in some of the swamps too coarse.

There is but little exposed rock in the Township, the underlying formation is the usual

gneissoid rock of this region.

There are but two good water-powers in the Township, one on No. 9, in the 4th concession, and the other on lots five and six in the 1st Concession. At both there is very fair speckled trout fishing.

The best way to open up the Township for settlement would be by extending the road which I had the honour to recommend for the Township of Armour, northward to the outlet of Lake Bernard; thence north-easterly along the shore of the lake to side road 15 and 16; thence north along 15 and 16 to the northern boundary of the Township.

### BURNS.

Situate in the District of Nipissing, surveyed into Farm Lots in 1874 by Provincial Land Surveyor T. O. Bolger, contains 49,984 acres, including water and road allowances.

The following is an extract from Mr. Bolger's report.

The southern portion of this Township is tolerably level, and is covered chiefly with occasional small patches of hardwood land. In the south-west corner of the Township, there is a tract of 3000 acres, where the timber is completely destroyed by fire. Near the centre of the Township there is a hardwool tract of about 3,000 acres in extent, the surface here is high and rolling, and the soil is rich sandy loam, but inclined to be stony. I would call this very fair farming land. Towards the north-west quarter of the Township there are some fine, high, hardwood ridges alternating with pine ridges and swamps, the quality of the soil on some of these hardwood ridges is excellent, and some nice farms could be picked up through this section. The northern portion of the Township may be described as mountainous, especially along the Bonnechere river. Along the south side of this stream a very high ridge extends from the eastern to the northern boundary of Burns, and forms a very striking feature in the country. Along the northern slope of this mountain range, the timber has been destroyed by fire, which gives the landscape a very wild appearance, this burnt tract extends some distance north of the Bonnechere.

There is a very fairtravelled road leading through the Township, along the margin of the Bonnechere, used by the lumbermen in transporting supplies into the interior. There is one settler, (Francis Currier) living in the Township on lot 8, Con. 11, who keeps a hotel or stopping-place, and who has a very good house and out-buildings. There is an immense amount

of travel along this road, during the winter months.

As this road is even now passable both summer and winter it is the most probable channel by which settlers will reach the lands fit for settlement in Burns, and I have no doubt that in time the suitable lots will be taken up as the lumber operations will afford an excellent market for all farm produce.

On the whole, the Township may be considered chiefly adapted for lumbering, but I

consider that 25 per cent. of the area is passably fit for settlement.

I saw no indications of valuable minerals, the Geological formation is the usual Lauren-

tian prevailing in this region, the rock chiefly Feldtspar and Gneiss.

Paugh Lake is the largest sheet of water in the Township, this empties into the little Madawaska river, a tributary of Bonnechere. The Bonnechere itself is a good-sized stream, and abounds in salmon trout; it is the only considerable stream in the Township. Deer appear to be very scarce, but I believe in summer are more numerous. There are but very few fur-bearing animals.

### PLUMMER AND PLUMMER ADDITIONAL.

Situate on the north shore of Lake Huron, in the District of Algoma, surveyed into lots of 320 acres each in 1873, by Provincial Land Surveyor Quintin Johnstone, contains 39,804 acres, including water and patented mining locations.

The following is an extract from Mr. Johnstone's Report:

I found the country north of Ottertail Lake and east of Rock Lake to be rough, broken and rocky as a general thing, with several high ridges interspersed.

The timber in most abundance is maple, birch and hemlock. Very few pines in the

Township and not a single beech tree to be seen.

Some good tracts of hardwood timber land on the west and south-west sides of Rock Lake.

The land on both sides of the Thessalon River, within the Township, is good; the tim-

ber is principally softwood, cedar, ash, &c.

There is a rocky obstruction in the river, a short distance east of this Township, which causes the water to overflow the adjacent lands for a much longer period in the spring than is desirable, eausing damage in several places to the soil on the south side of Ottertail

Lake. I think that it would be advisable to remove the impediment, or deviate the stream a few feet to the south of the present course into a ravine; this could be accomplished at a much less expense.

I found about two-thirds of the land lying between the south boundary of Plummer

and Lake Huron to be fit for settlement.

The lands on both sides of P. L. S. Salter's road, in this Township are good, and J am informed that they continue to be so to Sault Ste. Marie. The timber is of a miscellaneous character.

Settlers are very much needed along this road from Ottertail Lake to the Sault to keep it in good repair in summer and open in winter, thereby saving the Government the necessary outlay for such work.

# DAWSON ROAD LOTS.

Situate in the district of Thunder Bay, Lake Superior, surveyed into Farm Lots in 1874, by Provincial Land Surveyor C. C. Forneri, contain 25,587 acres, including water. roads, mining locations, and Government reserves, as returned by the surveyor.

The following is an extract from Mr. Forneri's Report:-

The general appearance of lands embraced in the present survey which are fit for agricultural settlers, is rolling; the others, on the contrary, are rough, rocky, and hilly.

It is a fact worthy of notice that the lands embraced in the present survey are almost entirely destitute of swamps, while in the Township of Oliver the reverse was the case.

The country is well watered by rivers, creeks, and springs, which intersect it in every direction. The timber is spruce, balsam, tamarac, poplar, and birch; and which, when green, is of good average size—The same general description of the timber will apply, with hardly any variation, to all lands lying about the pawson Road, as far as my knowledge extends, which embraces a very extensive portion of it.

Being deeply interested in this section of the country, and having been a strong advocate for the introduction of the free grant system into this district, I have great pleasure, on the completion of the survey, in being able to make so favourable a report of the large extent of agricultural land embraced in the present survey, as will be seen by the agricultural plan which I have prepared, to enable you at a glance to distinguish those lands which are arable

from those which are the reverse.

The soil is either a sandy loam or a clay; the clay having an intermixture of more or less sand, thus making it mellow and readily worked. All that portion of land which surrounds Sunshine Creek is of this nature, indeed the greater portion of the arable land is the same, the sandy loam forming more the exception than the rule.

These lands are beautifully watered by streams, creeks, and springs, which will be invalu-

able to the settler in stock-raising, etc.

I cannot conclude my remarks upon this portion of my Report without stating that this survey has been watched with deep interest by the inhabitants of Prince Arthur's Landing. whose future must to some extent depend on having an agricultural community around them; and that a general inspection of the lands of the Township of O!iver and those of the present survey has been made by them during the present summer, resulting in the general conviction, in which I cordially agree, from experience of the products of the cultivated lands around us, that vegetation of all kinds grows most luxuriantly and of superior quality, that spring grains, such at wheat, oats, barley, etc., can be cultivated with success: and that all kinds of grasses seem, from the height to which they grow, to be well adapted to the country.

The lands of the present survey being adjacent to the Dawson Road, afford every facility for immediate settlement. I found a great many of them already taken up for that purpose, while people were looking over and inspecting the large tract of agricultural land which lies to the north of the present survey, and between the Kaministiquia River and Brown's Lane.

Notwithstanding the fires that at different periods have swept over this section of country, there still remains sufficient timber on each lot for agricultural and domestic purposes.

# MOSS.

Situate in the District of Thunder Bay, Lake Superior, surveyed into lots of 320 acres in 1875, by Provincial Land Surveyor Hugh Wilson, contains 51,200 acres, including water and mining locations.

The following is an extract from Mr. Wilson's Report:-

Waverly River, which runs south-westerly through the Township, deserves particular notice.

Its source is in three lakes, at the east of the Township, namely, Round Lake, a lake about four miles long, and partly in the survey; Twin Lake to the east of the survey, and and about forty rods south of Round Lake, and Fountain Lake, in lots 1 and 2, concessions 3 and 4. These lakes are about three-quarters of a mile west of the water-shed, separating the waters running east from those running west.

Twin Lake is about 50 feet lower than Round Lake, its outlet is navigable for small

canoes, having been used by the Indians for many years.

In lot 1, concession 4, it is joined by the outlet of Fountain Lake, and together they flow in a north-westerly, but exceedingly serpentine course, through a marshy valley, about three-quarters of a mile wide, and grown up with grass, rushes, and alder, and unite with the outlet of Round Lake, a large rapid stream averaging 50 links in width, full of rapids and chutes, at the southern extremity of a small lake in lot 2, concession 5.

After the union of these three branches, the river flows in a south-westerly, but exceedingly serpentine course, continuing to pass through the marshy valley, until reaching Grass

Lake, where it is joined by the outlet of Jack-fish Lake.

By raising the water of Jack-fish Lake a few feet, an excellent water power could be obtained, and also another where the river leaves Grass Lake. After leaving Grass Lake, the course is much straighter, the banks higher, and rocky in places, until reaching concession 1, where it again assumes its winding course, flowing through a marshy valley about three-quarters of a mile wide, until leaving the Township at the south-westerly angle of lot 12, concession 1. Two other streams to the north of Jack-fish Lake, flow in a south-westerly direction through the survey, following the general strike of the rock of the country, but in no place did I find them navigable. A large rapid stream crossing the general strike of the rock, enters the survey in lot 20, concession 2, and uniting with the other two streams, again leaves in lot 19, concession 1.

A mineral band enters the Township at the north-east angle, and continuing in a south-west course, again leaves at the south-west angle. This band divides the survey into two separate geological surfaces. That part on the east being intersected by frequent sand ridges, with timber composed of poplar, white and red birch, spruce, and larch, with a thick growth of hardwood underbrush, whereas to the west the country is generally a succession of low rock ridges with swamp intervening. The timber on the ridges is generally larch from three to four inches in diameter, and evidently of recent growth, although there are white birch, and poplar of large growth. The swamps are covered with moss from one to two feet deep, with spruce timber generally small, but in places, large enough for building purposes.

Lots 1 and 2, in concession 1, are rolling, with low sand hills and rock ridges about two-

thirds good land, rich red sand soil, and larch, spruce, birch, and poplar timber.

Lots 3 to 8 are broken and rocky, with swamp intervening, chiefly spruce and larch timber, and in lot 8, is met the marsh valley of Waverly River, which continues to lot 13, with good land to the north, but rising and rocky to the south, with birch, poplar, and larch timber, and hardwood underbrush.

Lots 13 to 18 are broken and rocky to the south, with birch and poplar timber, whilst to north, they become swampy, with spruce and tamarac timber, some of large growth.

Lots 18, 19 and 20 are chiefly swamp, broken by low rock ridges, and small larch and

spruce timber, soil sand.

In concession 2, the lots 1 to 7 are broken by a magnetic trap dyke, with sand ridges, on the rock ridges the timber is small spruce and larch, while on the sand ridges we have poplar and birch, with hardwood underbrush. Lots 10 to 14 are chiefly swamp, broken by

low talcose slate ridges. The timber on the ridges being small larch, that in the swamps spruce.

Lots 17 to and including 20, are chiefly swamp, very wet, and with deep moss, timber

spruce, in places of large growth.

In concession 3, lot 1 is broken by the magnetic trap dyke which passes around the south side of Fountain Lake; soil sandy, about two-thirds good land, birch and poplar timber.

Lots 3 and 4 are chiefly swamp, with low ridges and small spruce timber, while in lot 5, is met the ridge which forms the southerly boundary of the Waverly River valley. Crossing the river, on lot 7, the country continues broken and rocky. In lot 8, is met the band of mineral locations taken up along the mineral deposit. These continue to lot 13, where the country becomes low and swampy with intervening rock ridges covered with small larch timber, the timber in the swamps being spruce, some of it of large growth.

In concession 4, that portion of lots 1 and 2 not covered by Fountain Lake, are low and swampy; lot 3 is also swampy, but broken by the rock ridge forming the southerly boundary

of Waverly River valley.

Lots 4 and 5 are low and swampy, and in lot six we meet the granite ridge, which passes around the north-east side of Jack-fish Lake, and which continues through lots seven and eight; about one-third of these lots is good land with some white pine on the granite ridge; remainder of timber, birch, poplar and larch.

Lot 13 is about one-third good land with low rock ridges and swamp intervening.

and lots 14 to 18 are nearly all swamp, with spruce timber.

Lots 18, 18 and 20, are broken by silicious slate ridges, with swamp intervening; timber, chiefly spruce and birch, some of large growth.

In concession 5, lots 1 to 5 are about two-thirds good land, with sand soil, and

broken by low granite ridges; spruce, larch, birch and poplar timber.

Lots 5 to, and including 8, are broken by granite ridges with spruce and larch timber.

Lots 11 to 19 are chiefly swamp with low rock ridges. Timber on ridges, small larch, in swamps; spruce and tamarac, generally small.

Lots 19 and 20 are higher, with less swamp.

In concession 6, lots 1, 2, and 3, are broken by lakes and granite ridges, with birch, poplar and larch timber; along the west side of Round Lake there is some good

white pine.

Lots 4, 5 and 6 are lower and swampy; 9 and 10 are broken and rocky, 11 and 12 are chiefly swamp, 13 and 14 are higher, with hills of sand being two-thirds good land. Timber, chiefly larch on ridges, and spruce in swamps generally small. Lots 15 and 16 are chiefly swamp with low rock ridges. Spruce and larch timber. Lots 17 and 18 are higher, with patches of good land; timber of large growth and in the northern part of lot 17 some very fine cedar is found.

Lots 19 and 20 are broken by rock ridges, with small swamps intervening; larch,

and birch, poplar timber, with spruce in swamps.

Concession 7, lots 1 and 2 are about two-thirds good land; soil sandy, timber chiefly birch and poplar of large growth.

Lots 3 and 4 are broken and rocky, and lots 7, 8 and 9 are about one-half good land,

with some cedar and tamarac in the swamps.

Lots 10 to 13 are higher and rocky; about one-third good land, with sandy soil, timber is spruce and larch, with some good white birch and poplar.

Lots 15 and 16 are broken by small swamps.

Lots 17 and 18 are about one-half good land. The timber is nearly all down, except-

ing a few large white pine, evidently remnants of old forest growth.

Lot 20 is broken by low ridges, with swamp intervening; about one-third good land. Soil, sand—timber, birch, and poplar on ridges; spruce and tamarac in swamps, some of it large enough for building purposes.

Lot 1, concession 8, is chiefly good land, with sand and rock ridges, broken by a lake at north end, and by another occupying the greater part of the south-east quarter;

timber, chiefly white birch and poplar.

Lot 5 is rolling and rocky, with sandy soil, about one-half good land; spruce, birch, poplar, and larch timber.

Lots 6 and 7 are low and swampy; timber chiefly small spruce and tamarac, although along north, end of lot 7, there is some spruce and tamarac of large growth.

Lots 8 to 14 are high and rolling, with rock ridges; timber, chiefly birch, spruce,

and larch.

Lots 14 to 19 are chiefly swamp, but the north part of 17 and 18 is high and rolling, with remnants of old forest growth still standing.

Lots 19 and 20 are chiefly good land, but the north end is broken by a swamp with

small spruce timber; on remainder of lot, birch, poplar, and larch.

As soon as the mineral resources of the country become developed, the farming lands will at once become valuable, as the cereals could be raised to advantage; and the swamps,

which are nearly all of sand bottom, would, if cleared, raise excellent hay.

A Company is now operating on Jack-fish Lake Mine, on location HI, which is situated in the centre of the Township. Their party, this summer, under the superintendence of Captain Plummer, met with excellent success, and succeeded in tracing the vein a considerable distance to the north and to the south, so that probably, ere long, a high market could be obtained for everything the settler could raise.

A road has been chopped and cleared from the mine to the head of Lake Shebandowan, which would require very little expense to make passable for waggons; thence by Steamer to Shebandowan, and by Dawson Road to Thunder Bay—direct and easy communication

could be had with the latter place.

# EFFINGHAM.

Situate in the County of Addington, surveyed into farm lots in 1872, by Provincia Land Surveyor, Quintin Johnstone, contains 55,602 acres, including water and road allowances, as returned by the surveyor.

The following is an abstract from Mr. Johnstone's report :-

The surface of the Township is broken, rough and rocky; no mountains, and but few hills. The streams small and shallow, rocks chiefly granite; no indications of useful minerals.

The timber at the south and easterly portions of the Township is chiefly pine and hemlock, partially culled. The best of the pine timber in that section east of Great Weslemcoon Lake, and those portions adjacent to it on the south, has been removed.

The timber map will show where the most extensive burnings have taken place, and the field notes those of less note. The timber map also shows the most extensive tracts of hardwood land, the field notes those of less dimensions, also those of the mixed timber and the

numerous swamps, marshes, &c.

The hardwood land though stony and rocky, as a general thing, could, perhaps, be made available for agricultural purposes, however, I am of the opinion that the Township is better adapted for lumbering purposes than for anything else.

### RESIDUE OF MACGREGOR.

Situate in the district of Thunder Bay, Lake Superior, surveyed into sections and quarter sections in 1872, by Provincial Land Surveyor C. C. Forneri, contains 36,276 acres, including water.

The following is an extract from Mr. Forneri's report:-

There is no agricultural land in this Township, it being either bare rock or so little soil on the surface as to make it almost amount to the same.

The rock on the northern boundary of concession 3, as far easterly as sec. 15. is trap, having many veins of quartz and spar cutting through it; indeed, I might place this portion of the Township entirely in the Silurian formation.

In the southern portion of this part of the Township the Gneiss rock is prevalent, but there is one great peculiarity, viz., that wherever high bluffs or hills appear, I have invariably

found trap underneath.

The timber is chiefly spruce and birch in the easterly and southerly portion surveyed.

In the west, birch, poplar and spruce is prevalent. I found a few pine trees scattered through the sections but of very poor quality and of small diameter.

No pine limits can be found in this portion of Macgregor.

Fire has run through the whole of the southern portion and nearly the whole of the western part of this surveyed section, and in this burnt section, spruce and balsam are the prevalent timber.

No settlement can be formed in this survey, except for mineral purposes.

The road line now being surveyed from Prince Arthur's Landing to Black Bay, will, if opened out, be of incalculable advantage to the mineral section through which it runs, and also to all the lands lying to the north and east of it. Without roads mineral lands are of little value, as experience teaches: let roads, no matter how rough, be cut out, and the back lands which are now of little value, will at once be as valuable as those which are now on the lake shore.

SINCLAIR.

Situate in the District of Nipissing; surveyed into farm lots in 1876 by Provincial Land Surveyor, John McAree, contains 45,006 acres, including water and road allowances. as returned by the surveyor.

The following is an extract from Mr. McAree's Report :-

As regards agricultural capabilities, Sinclair is rather an inferior township, even for Muskeka, the soil throughout generally being filled with boulders, and other fragments of gneissoid rock, to such an extent as to preclude the larger portion of the land from ever becoming arable, except at a great expense in first gathering out the stones. This description applies especially to the northerly and easterly portions of the Township, the south west quarter being of a better class, that is - there are fewer stones, for there are very few lots that could be described as not stony, the exceptions being the clay land around Peninsula Lake, some of the swamps, and two or three other areas of small extent, where the subsoil is a fine, white sand. The boulders seem to occur at every elevation, being found in the beds of many swamps, as well as on the highest hills; in many places the gneiss, which underlies the whole of the surface, is covered with but a thin coating of soil, this being, as is well known, a salient feature of Muskoka topography generally. There is not, however, in Sinclair much bare rock, although in many places the soil is merely a thin carpeting of vegetable mould, with its network of interlacing rootlets. Owing to this stony character of the soil, not one-half of the land surface of the Township will be suitable for plow land. There is not a great area, however, that would not make good grazing land, the soil being generally a good sandy loam, which, were it not for the boulders, would be fit for all the general purposes of the farmer. There are very few swamps of great extent, although there are many depressions in which the soil is sufficiently damp to produce swamp-growing timber, but of land that would be permanently swampy there is very little in the Township. In different parts of the East River valley there is a considerable amount of very good pine, the trees being of moderate size. Isolated trees also occur scattered among the hardwood, but not in such quantity as to be of any interest to the lumberman. The other kinds of timber enumerated in the order of their relative abundance are maple. black-birch, hemlock, balsam, beech, cedar, ironwood, yellow birch, basswood, black ash, spruce, soft maple, tamarac, soft elm, some black cherry of small size, and a few white ash. There are many groves of fine sugar maples, and the black-birch generally attains a large size. In many places the timber is moderately tall, forming fine open woods of maple, birch, and beech. The township is very well watered by numerous small streams, and there are a great many lakes of various sizes; two of respectable dimensions are Rebecca and Bella Lakes, the latter flowing into the former by a stream scarcely a 100 feet in length, the lakes being so near each other at this point that the whole body of water might be described as one lake. The northern shores of Bella Lake are sandy, as are also the eastern shores of Rebecca Lake; the other shores of both lakes are strewn with boulders and angular blocks of gneiss. Along a portion of the eastern shore of Bella Lake the gneiss comes to the surface, forming perpendicular ledges and a jagged coast line generally. Clear Lake is a pretty sheet of water in the south-east part of the

Township. East River is a stream of brownish-coloured water, with an average width of forty yards at low water. It is for the most part a rapidly-flowing stream, and its fall in crossing the Township must be very considerable; its bed is generally stones or gravel. On lots Nos. 14 and 15, in the eleventh concession, the flow of the stream is broken by falls. At one point there is quite a cascade; here the river is narrow, and flows over the naked gneiss. On lot No. 11. in the eleventh concession, other falls occur, where in like manner the bed is gneiss: there is not, however, more than fifteen or twenty feet fall at either of these places. Rapids occur at various places, and altogether this river affords many fine mill sites.

The land in the Township is best described by the term rolling, gently in some places, abruptly in others. In the south-eastern part there is a good deal of rough, broken land,

few of the hills being of very great height, however.

It may be said that about one third of the land area would make arable land; of the remainder, three-fourths is calculated to make pasture land, while one-sixth of the whole is rocky or encumbered with boulders to such an extent as to be comparatively worthless.

There are already a few settlers in the Township, and I am informed that, since the completion of the survey, others have selected land with a view of becoming settlers, the Township being comparatively at the front, being intersected by a colonization road from Huntsville, having a good grist-mill and a school, with a new store opening out, possesses advantages which will, in the estimation of many, outweigh the disadvantages arising from the impracticable nature of the soil.

#### PATTERSON.

Situate in the District of Parry Sound, surveyed into farm lots in 1876, by Provincial Land Surveyor James W. Fitzgerald; contains 50,125 acres, including water and road allowances, as returned by the Surveyor.

The following is an extract from Mr. Fitzgerald's Report:—

The Township is cut almost diagonally in a north-westerly direction by a chain of waters of somewhat limited extent, yet of considerable local importance; these waters have their source in the Townships of Machar, Gurd, and Pringle, and flow into French River, about twelve or fifteen miles below the outflow of that river from Lake Nipissing.

For the most part the land in the south half of the Township is above the average met with in the district, a large portion of it being very good, presenting a deep fertile clay soil, occasionally mixed with loam; it rests generally on a subsoil of clay and coarse gravel, but sometimes on rock bottom, it is mostly, however, of sufficient depth to admit of thorough cultivation.

There is a considerable proportion of swamp land containing deep alluvial soil, which, in time, will, by clearing, draining, &c., become highly productive and valuable as meadow

and pasture land.

Much of the swamp timber in this part of the country is spruce, which has, during

late years, been more or less destroyed by fire.

The prevailing upland timber is a mixed growth of maple, birch, and hemlock, with a fair scattering of pine in places, and other varieties of green wood, all of a good average size.

In a commercial point of view the birch timber itself in this section of the country is

exceedingly valuable.

The north half of the Township, as a whole, is not so well adapted for farming, although it contains several blocks of good land, similar in character to that already described.

A rather extensive area of this part has been burnt over, and the timber, of a mixed character, rendered useless, except what may serve for local purposes. Scattered over this half are isolated tracts of low lands, or "balsam flats," yielding a fat loamy soil, which from the character of the timber, can be readily and easily cleared and cultivated.

On the north shore of Commanda Lake there are two pioneer settlers of eight or

nine years standing, having grown-up families. One of them has some 70 acres chopped and about 35 acres cleared and annually under crop, the other has some 13 acres cleared and under cultivation.

Recently the sons of these old settlers, five or six in number, have taken lots adjoining and made improvements on them, and a large number from other parts have also taken up lots and made improvements. Since my return from the Township I hear that a great many have gone and selected lots in the Township with the intention of moving in during this fall or next spring.

It is hardly necessary to state that the prevailing rock is the granite of the old Lau-

rentian formation, exhibiting many of its usual characteristics.

Of the lakes in the Township, it may with truth be said that they are really beautiful and useful,—the finest south of Lake Nipissing. Restoul Lake, especially, is exceedingly fine, just affording, through a pretty cluster of islands near the centre, an unbroken vista seven or eight miles long of singular beauty. The shores on either side, although not bold, yet from their gradually ascending character, at first sight appear so, and, with the exception of a burnt patch at the east end, living foliage of varied tints comes down to the water's edge, giving to the landscape and surrounding scenery a romantic and picturesque effect.

At a few points along the shores the granite rock crops out, but more generally the

shores are lined with closely packed stone, as in a carefully laid pavement.

The water is clear and deep, and is abundantly stocked with maskinonge, bass, pickerel, and, I am told, white fish. We have caught maskinonge weighing twenty pounds, and bass from two to four pounds; large pickerel also.

Viewing the Township as a whole, I consider it a good one, and from its position

and natural advantages, destined to become a leading one in that locality.

### BURTON.

Situate in the district of Parry Sound, surveyed into farm lots in 1876 by Provincial Land Surveyor Thomas O. Bolger, contains 57,735 acres, including water and road allowances, as returned by the Surveyor.

The following is an extract from Mr. Bolger's report: —

This Township may be considered chiefly valuable for the pine timber which abounds almost everywhere, and which, in some localities, is of very fine quality; in fact it may be considered as a pine country almost exclusively, as that is the prevailing timber to be met with, and the land is generally of a poor quality, and offers but little inducement for settling. The only part of the Township where any land exists which could be utilized for farming purposes, is that portion lying adjacent to the Township of McKenzie, and especially towards the south-east corner, where there are some lots of fair land, and where the timber is composed, to a large extent, of hardwood with a mixture of pine and hemlock; south of Miskokway Lake there is a small tract of hardwood land also, where the soil is rather good, but generally the land is very much broken by rocky ledges, and the soil is too light for farming.

There is one large tract lying about the centre of the Township and extending in some places to the north boundary, which has been over-run by fire some years ago, and on this tract the timber is almost entirely destroyed; throughout this section the surface is nearly all bare rock, occasionally covered with brushwood, and intersected with tamarac swamps and innumerable small ponds and lakes. Even through this barren tract, there is a great deal of pine timber still green, growing in ravines where a little soil still remains. To the north-west corner of the Township and extending south along side line 30 and 31 to Miskokway Lake there is a large quantity of good white pine, also around Miskokway Lake, and Bolger Lake; further south through concessions four, five, and six pine is also very plentiful. In fact, all over this Township it is more or less abundant, and generally of a fair marketable quality.

There are no settlers in the Township, nor are they any lumbering operations going on at present; a few logs have been cut for the Maganetawan Mills in former years in parts

of the Township.

The numerous lakes abound in fish, chiefly bass and pickerel. We found speckled trout in Miskokway Lake, of very fair size.

Deer appeared to be very scarce in this section of the country, and fur-bearing animals

are not very plentiful.

Immense quantities of cranberries grow in the low marshes which abound all over the the Township, these, if gathered in the proper season, command a fair price anywhere on the Georgian Bay.

The geological features of the Township are similar to those of the Township of Brown, the prevailing rock being gneiss, which, in many places, is traversed by broad

veins of white quartz, and in some places by trap dykes.

I saw no indications of valuable minerals although such may exist unobserved by me.

### HARRISON.

Situate in the District of Parry Sound, surveyed into farm lots in 1876, by Provincial Land Surveyor Thomas Byrne, con .s 64,000 acres, including water and road allowances.

The followin is an extract from Mr. Byrne's report:—

In order to describe the land, timber and capabilities of the Township, I have divided it into two sections; the first is a small tract in the south eastern part of the Township, containing about four thousand acres, generally rocky, but containing some good land, about one half being suitable for agricultural purposes, the soil being sandy loam overlying gravel; the timber is principally pine, hemlock, balsam, birch, &c., the pine being of excellent quality and abundant. The second section, comprising the balance of the Township, I am sorry to report as being wholly unfit for settlement, being composed of burnt land, rocks, swamps, and lakes.

About eight or ten years ago this part of the Township was overrun by fire, which destroyed all the timber; since then a dense growth of small poplar, birch, pine and balsam has sprung up in many places. There are a number of small lakes, all abounding in excellent

fish, viz: whitefish, trout, bass, &c.

There is a good mill site on lot twenty-seven, in the eleventh concession, at the outlet of

Nescodaong Lake.

The rock exposures in this Township are wholly within the Laurentian formation. I did not find any indication of a higher formation, nor did I discover anything resembling ore.

I found no settlers in the Township, nor did I find any place which I thought suitable for a town plot.

#### HIMSWORTH.

Situate in the District of Parry Sound, surveyed into farm lots in 1876, by Provincial Land Surveyor, C. F. Chapman, contains 59,805 acres, including water and road allowances as returned by the Surveyor.

The following is an extract from Mr. Chapman's Report:

The Township of Himsworth is part of the easterly watershed of South River, a small area on the northerly end being drained directly by streams into Lake Nipissing; a greater portion of the remainder is traversed by three main streams, branches of South River, which seem to take their rise a comparatively short distance east of the eastern boundary. These streams are generally very crooked, with stretches of slow running water, succeeded by rapids and falls, in some places of great depth, and running through deep gorges in the cliffs. One in particular, on Lot No. 3, in the second and third concessions, runs through a gorge of overhanging gneiss rock, 200 feet high.

South river, through the whole extent of this Township, is much broken by rapids and falls; the only long extent of dead water occurring between Lot No. 23 in the sixteenth concession and Lot No. 22 in the thirteenth concession. It is very crooked, and its banks, in many places, have fallen away, narrowing and obstructing the stream. Many good mill sites

can be obtained on the river.

No lakes of any extent occur in the Township. The northern portion of the Township

has been formerly overrun by fire, and much valuable timber destroyed. A small quantity of green pine in some places being all that is left standing in the Brulé, which is overgrown with a second growth of poplar, birch, alder, hazel, and willow; the remainder of the country is timbered on the high lands with maple, birch, beech, oak, ironwood, basswood, hemlock, cherry, &c., while along the valleys of South River and the streams running into it, cedar,

pine, balsam, and spruce, predominate.

The soil varies much in character; along South River and some of its tributaries, clay soil of good quality is found; while on the ridges it is mostly sandy loam, generally stony. Large tracts of good land exist, and in larger blocks than I have hitherto observed in this portion of the Laurentian formation; few exposures of rock are to be seen in the green bush, although in many parts of the Brulé large areas of gneiss are laid bare. The only swamp of any extent is in the third and fourth concessions, timbered with spruce and balsam, and is

A trial line of the Georgian Bay branch of the Canada Pacific Railway passes northerly of this swamp. The Township is best adapted for raising the coarser grains, such as oats, and barley, with hay grown in the lowlnads, and the hills as good pasture lands for cattle.

As yet there are no settlers in the Township, and I would suggest that, with a view to settlement, a road be constructed from some point on the Nipissing Road, to enter the Township between the ninth and tenth concessions, following this line some two miles, and thence running southerly, which would open up the best land north and south of it. I consider onehalf of the total area fit for settlement.

Extract from report of progress, by Provincial Land Surveyor J. W. Fitzgerald, of the survey of the Townships of Pringle and Gurd, in the District of Parry Sound, performed

during the year 1875, with remarks on the surrounding country.

It will be observed as a marked feature in the configuration of this part of the country. that the courses of the Maganetawan River and French River, and south shore of Lake Nipissing, run parallel for a distance of about 70 or 80 miles, and at an average distance apart of perhaps 30 miles.

Along this belt must run the future railway, and from personal observations and knowledge of the country, I would say that its location will be along the Nipissing slope, and at

no great distance from its waters.

It has been commonly assumed that, with the exception of a limited area at Henvey Inlet, and the Key on Georgian Bay, that the interior of this belt was drained by the Maganetawan and French Rivers. But this is not the case. Parallel with, and between these waters and almost equi-distant from them, runs an entirely independent stream, called Pickerel River, having its head waters in Pringle and north part of Lount, and emptying them through the Key into Georgian Bay.

The water-shed of this stream hardly exceeds, at its widest point, eight miles, and its

head waters, in the Townships referred to, occupy the highest summit level between the

Maganetawan and French River, and Lake Nipissing.

Throughout its course, a distance of some 60 miles, the country is comparatively broken and barren, and is in many places cut up by rocky ridges, swamp valleys, and ravines.

The soil where it exists, is necessarily light and inferior, as is also the timber; al-

though white pine of fair size and quality is thinly scattered over it.

Almost wholly within the limits of this water-shed, and for its length, has the first exploring line for the railway been made; but as might be inferred from the descriptions here given, as indeed from what might suggest itself to anyone carefully studying the configuration of the ground on the map, the route has been abandoned, as impracticable and impossible.

The water-shed of Pickerel River and the exploring line referred to, I have approxi-

mately defined on the map in light red colour.

Failing to get a line within the limits laid down, Mr. Murdoch, the indefatigable engineer in charge has commenced the survey of another line further north. This will pass through the north half of the Township of Nipissing, about two to four miles south of a young settlement at South River, then westerly between Commanda and Restoul Lakes, thence westerly, as approximately shown.

I have no doubt but a good practicable line, affording good working grades, will be found on this slope, and I am certain that the best country north of the Magnetawan River—probably north of the Rosseau—is to be found along this course.

The south half of Pringle is poor, and generally unfit for settlement.

half is considerably better, and will yield a large percentage of good land.

The timber is of a mixed character, and, with the exception of a sprinkling of pine in places, and a large quantity of heavy black birch, is of little commercial value.

generally a sort of clay loam, in places partaking of a sharp sandy character.

Commanda Creek, a rather pretty winding stream, takes rise in the Township of Machar, and after flowing north-easterly a short distance, into Gurd, turns north-westerly into Commanda, and out by Restoul Lake to French River, forming a rather important water chain. These lakes abound in white fish, bass, pickerell, &c., and in other respects are extremely picturesque.

The Township of Gurd is, on the whole, among the best I have met with in the

Huron and Ottawa Territory. The south-east corner, along the valley of South River, is somewhat low and swampy, but contains a large quantity of excellent pine.

An extensive pine tract of fifteen to twenty square miles is in this vicinity, for the most part lying east of the river. The river here flows through a rich alluvial soil. It is 80 feet wide, and 8 to 10 feet deep, with a steady, strong current.

The balance of the Township, at least three-fourths, is composed of rolling land, covered generally with a heavy growth of birch, maple, hemlock, beech, spruce, balsam, pine, etc., in

the order mentioned.

The soil is for the most part good clay loam, and forms of the Township, I should say,

75 per cent, of the whole.

There are three resident settlers in this Township, at Commanda Creek; but a number of lots have recently been taken up along the road and in the interior, and no doubt settlement will rapidly set in during the coming year.

The country lying north of Pringle and the west part of Gurd, in the direction of Lake Nipissing, is very good. Through this part of the country, and across the narrows connecting

Commanda and Restoul Lakes, must pass the railway.

The ultimate extension of the Parry Sound colonization road, to connect with the South River and Lake Nipissing settlements, must pass here also. The link connecting these lakes

is half-a-mile long, 40 feet wide, and falls 45 feet. It can easily be bridged over.

On the east bank are two settlers and their families, of some ten years' residence. One is a family of father and mother and four young men, sons. Good buildings are erected, and 40 acres are cleared and in good cultivation; and for all their produce up to the present time, a good market was had in the lumber shanties east of Lake Nipissing.

The other settler has about 10 acres cleared, in good cultivation, and suitable buildings on. It is hardly necessary to observe that for all the produce that can be raised here for

years to come, a good and ready market will be found at hand.

Tempted by the favourable and improving appearance of the country in this place, and being convinced of its important and commanding position in connection with the railway and other projects, as well as to define the lots so long occupied by the settlers referred to, I surveyed five concessions north of Pringle and Gurd, to where I have marked a dotted line.

During the last season the road between Rosseau and Magnetewan has been much improved under the superintendence of Mr. Cunningham; and from the Magnetewan northwards, to nearly the south boundary of Pringle, has also undergone important improvement. But to make a thorough permanent road at once, -a road well crowned, drained, and bridged, etc., a larger grant must be expended some one year on it, so as to bring it once up to a standard of a first-class common road. This once done, settlement would rapidly follow, municipalities would be formed, and the burden of repairs, etc., would devolve on them.

From a point about two miles south of Pringle the road deviates more easterly than originally surveyed, and at a few points it requires, in the vicinity of Commanda Creek, some further changes to be made. I have surveyed this altered road line, and laid out the road

lots fronting it, without changing the numbers or bearings.

The clearings along the road produced good crops last season, and the settlers generally appear comfortable and happy.

A general desire to settle up in that quarter is fast growing throughout the country, and

I am every day here asked for information on the subject.

At present I do not know any place in Ontario presenting so much good land; and, coupled with the important public works initiated, and no doubt soon to be put into practice, that offers so good a field for labour and industry.

Extract from Report of exploration survey of the country lying along the branches of

the French River, by Thomas O. Bolger, P.L.S., in the year 1875:-

I first examined all the country lying within a day's journey from the Town Plot, that is in the vicinity of the central branch of the French River. This country is all composed of low rocky ridges, alternating with steep rugged ravines. The country is covered with a

growth of stunted timber, and there is scarcely any soil whatever.

The proposed line of the Georgian Bay branch of the Canada Pacific Railroad passes through a similar country to this for 25 miles eastward of the Town Plot of Coponaning. After this the country begins to improve, and immediately south of the Indian Reserves there is a considerable quantity of good arable land. All of the good land will be embraced in the Township of Mowat and the Township lying north of it. I did not explore it as far south as the Township of Mowat, but I travelled a good deal through the Township north, as shown on the accompanying sketch. Through here there are a good many high rocky pine ledges traversing the country, and on them the land is poor, but between them the land is very fair; and I met some very fine tracts of hardwood land. On the whole, this Township would compare well with the general run of Townships which are settled in the back country. Of course there is a large quantity of the land which is rocky and broken, but in all back country Townships this is the case.

There is a large quantity of pine in this Township, of good size, but as a general thing it is poor in quality. Still there is a great deal of good among the bad, and for local purposes there is an endless supply. From what I could learn from parties connected with the U.P.R., engaged up there, I believe an effort is being made to get the terminus of the road located somewhere in the Township, and not at the mouth of the river where it first was in-There are two places in the Township which are well adapted for the terminus, one is on the Bay on the Indian Reserves, south side of the river; the other is where the line of the Great Northern Road crosses the Pickerel River. Both of these points are marked by a red asterisk on accompanying sketch. The Bay on the Indian Reserves would be a beautiful location for a town, the Bay forming an excellent and commodious harbour, and the land around it on the south side is very level. The soil is a light fertile loam, entirely free from stone. The other place, about five miles further east, is also a fine location for a town. There are a great many rock ledges, but a great deal of good land. A plot laid out where the Northern Road crosses, would be very nicely situated. Of course, until the location of the terminus is finally settled, it would be impossible to recommend any place for a plot; but that either of the above places will be chosen for a terminus, if the point at the mouth is abandoned, I am fully persuaded. I was, with Mr. Bell, the engineer, sent from Ottawa to see if the river could be rendered navigable up to this point, and he found no difficulty in finding 14 feet of water up to the above-mentioned points. There is one rapid near the mouth,

within the limit of the Town Plot of Coponaning, where the lock will have to be placed, and one or two places where blasting and dredging will have to be done, and then the river will be rendered navigable for large vessels up to where the Great Northern Road crosses Pickerel River, or South Channel. The land along this channel, until you come to the Indian Reserves, is rough and broken in the extreme, and is unfit for any purpose whatever. I also went to the north shore of Lac du Bœuf, and examined the country for five miles up to the Wahnapitaé River. On the large islands lying west of the head of Lac du Bœuf, and south of the mouth of the Wahnapitaé River, there are some small tracts of good land, especially a white oak flat along the river leading from the Lac du Bœuf to the Wahnapitaé, but this flat does not contain over 200 acres, and is all surrounded by rocky ridges. The other tracts I mention are very small.

Up the Wahnapitaé the country is one burnt, rocky wilderness as far as the eye can reach, north, east, and west. I then examined the country lying between the Wahnapitaé and where the Great Northern Road crosses the Grand Recollet, or main channel, and found the land so rough and broken up as to be utterly unfit for settlement. The timber through

this section has been almost entirely destroyed by fire, and what remains is small dwarf pine and birch.

On the large islands formed by the several branches of the river, the land is of the poorest possible description—all either rock or swamp, with occasional little patches of fair land of an acre or two in extent. On these little patches or valleys there are generally some good red pine trees. On the whole, I would beg to report that the Township north of Mowat may be considered a fair average back-country township, containing much good land and a quantity of fair pine timber; but all the country lying west of the above Township is too rough, rocky, and broken to be good for any purpose whatever.

Department of Crown Lands, Toronto, 31st December, 1876.

THOMAS DEVINE, D.-S.-General.

\$43 73

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# REPORT

ON

# COLONIZATION ROADS WORKS

IN

# ONTARIO.

For the Months of November and December of 1875, and also for the Year ending 31st December, 1876.

Supplementary Report on Colonization Roads & Bridges for the Year 1875.

HON. T. B. PARDEE,

Commissioner of Crown Lands.

SIR,—I have the honour to report to you the remainder of the expenditure upon Colonization Roads and Bridges during the months of November and December, in the year 1875, not contained in your last Report, in order to complete the same for the above year.

### WEST DIVISION.

1.	Christie	Road.		\$100	00
	Parry Sound	66		150	00
3.	Rosseau and Nipissing	44	No. 1	124	65
4.	Northern	66		76	76
	Baysville	"		29	04
6.	Muskoka	"		200	00
	Lake Joseph	"	,	49	30
	East River	46		100	10
	Ryde	"		150	00
	Rosseau and Nipissing	6.6	No. 2	500	00
	Distress River	"		52	96
	Dalton and Washago	"		300	00
	Muskoka	"		574	20
	Macaulay	Bridges.		1143	87
	East River	"	***********	1122	50
16.	Stephenson	"		200	00
	Brunel	46	***** ****	99	06
18.	Wilson's	"		100	00
			\$	5,072	44
	East Divisio	N.			

Road.

1. Pembroke and Matawan .....

4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	Frontenac Addington. Hastings Monek Burleigh Bobcaygeon Peterson Eganville and Foy Eganville and Opeongo Carlow Carden Peterson Lavalle, short cut. Monek Cameron Opeongo Bobcaygeon  "" RECAPITULATIO	Ö	West Repairs	74 300 200 1535 52 47 101 128 462 274 350 252 434 181 400	54 00 00 41 26 51 52 19 28 15 61 90 97 11 00 85 23
20.	"	Ö		. 125	
]	West Division East " Inspection			5431 2	12 4
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# APPENDIX NO. —.

HON. T. B. PARDEE,

Commissioner of Crown Lands.

SIR,—I have the honour to report to you the operations and expenditure of the Colonization Roads Branch of your Department during the year ending 31st December, 1876.

#### I.—NORTH DIVISION.

### 1. BASE LINE ROAD.

Some alteration has taken place during the past season in the location of a part of this road. It appears that the part referred to runs over land so low that it is covered during a considerable period of the early summer with water, and that to continue the road upon this line would necessitate the building of a large amount of high crossway, or very expensive embankment. The Municipality had, therefore, determined to open up, as a continuation of the road, the next section line, one mile to the north, where the land is dry and favourable in other respects for travel.

The Municipality contributed a certain amount of labour towards the opening of the above line, and through their joint operations in connection with the overseer appointed by this Department, about four and one quarter miles of road have been completed, reaching as far as the north-west corner of section 35 in the Township of Prince. Expenditure by De-

partment, \$400.41.

### 2. GREAT NORTHERN ROAD.

General repairs have been effected upon this road from the foot of Otter Tail Lake to Garden River, some twenty-three miles, consisting of crossway repairs, renewal of broken culverts, and additional new ones, brushing, and crown grading.

Some timber and lumber have also been prepared and conveyed to the site of the Garden River Bridge, for the purpose of renewing the same, as the old bridge is completely worn out.

Expenditure, \$1,716.31.

### 3. Korah Road.

This road has been prolonged northward to the south boundary of the Township of Pennefather, to meet the line laid out by the Indian Department through its adjacent lands. The distance made this season is five miles of good winter road. Expenditure, \$1,145.

### 4. Oliver Township.

Some cheap lines of road have been opened along the section boundaries in this Township. The work has been done under small contracts, under the supervision of the Crown Lands Agent at Prince Arthur. Expenditure, \$1,500.

### 5. Rose and Lefroy Roads.

This is a new settlement road, commencing at a point on the Bruce Mine Road, and proceeding in a south-easterly direction through the above-named Townships of Rose and Lefroy. About four and one-quarter miles have been opened and constructed as a winter road. Expenditure, \$1,513.99.

# 6. SAINT JOSEPH ISLAND ROADS.

Five hundred dollars were appropriated to assist in opening some short roads on this island. Two and a quarter miles were constructed from the Town plot of Hilton, in a westerly direction across the island. Expenditure \$500.00.

### WEST DIVISION.

# 1. PARRY SOUND ROAD (Permanent Works).

The work on this road was resumed from the termination of last year's operations at the distance of ten miles and a quarter from the Village of Parry Sound, and continued towards the village of Rousseau a further distance of five miles. The works are of the same character as those of former years, and are pronounced by the Inspector as substantial and satisfactory. Expenditure \$4,846.42.

# 2. PARRY SOUND ROAD (Skeleton Hill deviation).

A part of this line (the whole length thereof being two miles), some fifty-six chains, has been constructed entirely new, the remainder of the distance has been worked over and completed from last year's operations. Expenditure \$1,036.67.

# 3. PARRY SOUND (Rousseau's Hill deviation).

This improvement consists of the opening an easier route to ascend a very long and difficult hill. Expenditure \$450.00.

# 4. MACDOUGALL ROAD.

The Macdougall Road leading from the Parry Sound Village to the intersection of the Junction Road No. 2, in a north easterly direction, has been prolonged five and a half miles. The work was let by contract under Specification No. 2. Expenditure \$984.50.

## 5. MAGANETEWAN ROAD.

A new settlement road running from the Rousseau and Nipissing, through the Sixth Concession of Chapman, in a south-easterly direction, parallel to the Maganetewan River, five miles. The work is reported by the Inspector to be well done, although not entirely finished

with regard to some high crossway built over some periodically flooded land. Five miles of the line was let under contract.

An amount has been retained from the contract price until the whole distance shall have been satisfactorily completed. Expenditure, \$1,000.05.

### 6. ROUSSEAU AND NIPISSING.

Eleven miles of this road, from the ninth mile-post from the Ashdown Junction to the twentieth mile post inclusive, were let by contract, under Departmental Specification No. 1, at

the rate of \$550 per mile.

The Inspector reports the work satisfactorily completed. The whole distance now, from Rosseau Village to the terminus of the above contract, is in an excellent condition for travel, and only about thirteen miles remain to be improved to reach the Maganetewan River and Village, the residence of the Crown Lands Agent, and the centre of a very interesting and thriving agricultural settlement.

The point just alluded to is equidistant from Rousseau and Nipissing Lakes.

The upper section of the road crosses the Georgian Bay branch of the Canadian Pacific Railway. Expenditure, \$6,050.

# 7. ROUSSEAU AND NIPISSING (Repairs).

Three miles of this road, south of the nine mile post, left in an almost impassable cont dition last year, were thoroughly repaired, making the whole route to the end of the contractor work of this season of an equal quality throughout. Expenditure, \$321.42.

#### 8. NORTHERN ROAD.

The entire portion on this line lying between the terminus of the contract work of 1873 and the intersection of the Rousseau and Nipissing Road,—all of which portion has been this year located—was let by contract, under Specification No. 2. The work has been satisfactorily finished throughout, a distance of nineteen miles and a quarter.

The special advantage afforded by this line to settlers at Lake Nipissing and its vicinity

is, the choice of two routes to Toronto--

1st. By Parry Sound and Collingwood.

2nd. By Rousseau and Gravenhurst. Expenditure on account, \$4,000.

### 9. NORTH-WEST.

This road has been prolonged five miles further through the Township of Carling. The work has been performed by contract, under Specification No. 2, as a cheap winter road for settlement purposes. Expenditure, \$950.

### 10. Broadbent's Road.

A short road leading from Broadbent's Mill, in McKellar, towards Junction) Road No. 2, about two miles. The work was done under an overseer. Expenditure, \$453.50.

### 11. JUNCTION ROAD No. 1.

Some repairs were made on this road, from the Northern Road intersection eastward over a distance of about ten miles. The road is reported now to be in a passable condition over this distance. Expenditure, \$920.95.

# 12. LAKE JOSEPH ROAD (North).

This short road, lying between the Lake Joseph Steamboat Landing at Port Cockburn and the Parry Sound Road, has been carefully repaired. The road is two miles in length, and now in a good condition for travel. Expenditure, \$562.50.

### 13. PROWSES LANDING BRIDGE.

A stout high bridge has been built over the channel separating what is popularly known as "Dane's Island," from the main land, affording a safe connection with and transit from the township roads in the vicinity, to the wharf and boat landing on the western side of the island. Besides the construction of this abutment bridge (which is about 300 feet in length), some repairs have been made on the road crossing the island to the wharf. Expenditure, \$450.

# 14. Muskoka Road (New).

Five miles of extension work on this road were let by contract and completed this season. This part of the line passes through the upper portion of Perry, and the southerly part of Armour. The road is constructed as a cheap winter road, under Specification No. 2. Expenditure, \$900.

# 15. Muskoka Road (North of Huntsville.)

The road from Huntsville Village, northward, has been repaired over a distance of five miles, the road was in a singularly bad condition before work was commenced upon it, having been much abraded and channelled by the flooding of the East River in the spring. The crossings were generally displaced, and in many instances carried away. Five miles of the road were worked over and improved by renewing the crossways and regrading the surface. Expenditure, \$1,054.84

# 16. BRUNEL ROAD.

Three miles and a half of this road have been repaired. Commencing at the Brunel Bridge, and extending eastward. An important deviation of new work has been made to avoid a very bad hill. Expenditure, \$1,043.98.

# 17. BAYSVILLE ROAD.

This road has been extended this season towards the Village of Huntsville, seven and a half miles, or to the point where the Department of Public Works intend constructing a bridge across the lock works at the falls, below Fairy Lake. This point is distant about three and a half miles from the Village of Huntsville. Expenditure, \$2,042.75.

# 18. MACAULAY ROAD (South).

That part of this road west of Oakley Bridge has been completed. The repairs consist of the construction of a long crossway over the swamplying on the last two miles west of the bridge, and the grubbing and grading of that part of the road. Expenditure, \$407.75.

### 19. MACAULAY ROAD.

The improvements upon this road have been completed to Baysville, and the whole distance now, from Piper's Half-way House to the above village, is in an excellent state of repair for travel. Expenditure, \$2,239.

# 20. Muskoka Road (South of Huntsville).

This road has been pretty thoroughly repaired between Fetterley's and Huntsville—one of the worst sections of the road. Distance about three miles. Expenditure, \$539.48.

### 21. Muskoka Road (Bracebridge Deviation.)

This important deviation has been thoroughly completed. Several hills have been well graded down, and the whole road from Bracebridge to junction with the old road has been well turnpiked throughout. Expenditure, \$1,164.24.

### 22. Peterson Road.

About ten miles of the westerly end of this road, from its connection with the Muskoka road eastward, have been generally repaired. The worn-out crossways have been removed or cut down, and covered with brush and earth. The road-bed has been stoned and graded to the centre. Expenditure, \$972.

### 23. Stephenson Town-line.

This is a new road opened from the intersection of Muskoka road eastward to the new Stephenson Bridge crossing the north branch of the Muskoka River. A large amount of work has been done on this line, including the grading of the high and long hill near the river. An excellent improvement has been effected here. The road has been well graded throughout the entire length named. Expenditure, \$1,109,33.

### 24. WATT TOWN-LINE.

A part of this line, connecting a settlement in Watt with the Muskoka Road by the above line, has been constructed. The distance wrought over is two miles and a half. Expenditure, \$496.71.

### 25. CARDWELL ROAD.

A contract was let upon this line for the construction of one mile and thirty-eight and a half chains of the road in extension, and also for the building of a high crossway for \$90. Total expenditure, \$381.81.

# 26. Hood's Road.

This is a new road opened for the purpose of affording access to Hood's Mills in Stisted. The road is opened from the Stisted Road, on the line generally between the 8th and 9th concession eastward, a distance of five and three-quarter miles, as a winter road.

The work is reported as being completed in accordance with Specification No. 2. Ex-

penditure, \$1,127.68.

### 27. Long-point Road.

A new settlement road, running from Long-point settlement, on the Muskoka Lake, in the Township of Wood, southward to the intersection of the Musquosh Road. The work has been done under contract. Seven miles of the line are reported as completed. Expenditure, \$1,395.90.

### 28. DALTON AND WASHAGO.

This road has been extended under contract eight miles further eastward, viz., from the Severn River to the Watson settlement in Dalton. The work is reported as being satisfactorily completed over the above distance. Expenditure, \$1,549.75.

# 29. OLD LAKE JOSEPH ROAD.

A crossway was constructed by contract on this road, in the Township of Monck, about eighty rods in length. Expenditure, \$200.

### 30. RYDE ROAD.

A contract was let for the further extension of this road into the Township of Ryde The road has been completed over a distance of five and an eighth miles. Expenditure, \$1,000.50.

### 31. STISTED ROAD.

Eight miles of this road have been constructed this season under contract. The work was commenced from the terminus of last year's contract on the line between the eighth and ninth concessions of Stisted, thence northward. Expenditure on account, \$1,900.

# 32. THREE-MILE LAKE ROAD.

This road has been completed under contract as far as to its intersection with the Parry Sound road, a distance of three miles. Expenditure, \$540.31.

# 33. DALTON AND WASHAGO ROAD (Repairs).

Additional improvements were made upon the uncompleted part of this road, partially worked over last year and lying between the Muskoka Road and the Severn River, about two miles. Expenditure on account, \$310.00.

### EAST DIVISION.

#### 1. Addington Road.

Repairs were effected upon this road from Massanoga Lake northward over a distance of nine miles, embracing a hilly and otherwise difficult part of the line of road. Expenditure, \$1.005.52.

### 2. Bobcaygeon Road.

General repairs on this road were commenced on the north-west side of Gull River, and have been extended to the intersection of the Peterson road, nine miles. Some considerable portion of the distance where the land is low and subject to inundation during spring freshets, has been raised with brush and earth, and off-take drains supplied to carry off the water. Expenditure, \$1,434.73.

# 3. CARLOW ROAD.

The improvements made on this road this year have extended between York River and the Village of Combernere, on the Peterson road, a distance of twelve miles; several deviations have been made also, to avoid the worst hills. Expenditure, \$1,050.00.

### 4. EGANVILLE AND FOY ROAD.

This road has been repaired in its worst parts, and made passable over a distance of thirteen miles, the whole length of the line from Eganville to the intersection of Opeongo road north of Clear Lake. Expenditure, \$544.66.

### 5. EGANVILLE AND OPEONGO ROAD.

This road is eleven miles in length. It runs southward from Eganville to the front of the ninth Concession of Grattan, and thence west to the Opeongo road. It has been repaired in its worst parts throughout the whole distance. Expenditure \$508.04.

### 6. FRONTENAC ROAD.

Repairs were made over a very rough and rocky part of this road embracing a distance of three miles lying south of Gull Creek. This portion of the road required an unusual amount of labour and expense. Seven miles more of the road northward were examined and repaired in the worst places. Expenditure, \$1,020.57.

# 7. HAGARTY ROAD.

A new road in the Township of Hagarty, running from lot 3, in the third concession, to lot No. 9, in the same concession. It is about two miles in length, and crosses Brennan's Creek, over which a log pier bridge has been built, about 100 feet long. Expenditure, \$1,094.20.

### 8. HASTINGS ROAD.

Fifteen miles of this road have been put under general repairs,—the first three miles being thoroughly formed and graded. The improvements commence at Peterson Road and end three miles north of McKenzie's Lake. The road, formerly upgrown with heavy brush wood, has been cut out and cleared. A bridge, 235 feet long, built of round timbers, has been constructed across McKenzie's River. Expenditure, \$1.525.82.

### 9. METHUEN ROAD.

Three and a half miles of this line of road were let by contract, under Specification No. 2. and completed accordingly, The distance reaches from near Sandy Lake to lot No. 5, in concession 4. Expenditure, \$647.50.

### 10. MINDEN ROAD.

This road runs from the Haliburton Road, near the Village of Minden, in a north-east-erly direction, to lot No. 10, in the seventh concession of Minden Township. About three and three-quarter miles of the line have been well graded and turnpiked for travel. Expenditure, \$1,125.69.

### 11. MISSISSIPPI ROAD.

This road has been repaired in two sections—first, easterly, from the intersection of the Frontenac Road, nine miles, and second, easterly from the Addington Road intersection, three and a half miles—twelve and a half miles in all. The road has been generally improved by repairs of broken and burned crossways, removal of boulders, and general grading. Expenditure, \$1,000.

# 12. OPEONGO ROAD.

The repairs on this road were commenced in the Township of Sherwood, on lot 202, and were produced as far as to lot No. 90, in the Township of Robinson, fifteen miles. A great many log bridges and crossways were renewed over this distance, as most of the old road works, constructed some fifteen years ago, were rotted or burned. Expenditure, \$2,087.83.

### 13. PEMBROKE AND MATTAWA.

Repairs on this road were commenced near to the boundary between the Townships of Petewawa and Rolph, and were carried, in a general way, over a distance of 25 miles. Of course, for the small amount expended on this road this season, it cannot be expected that very great repairs have been effected over the whole of the above distance, but all the notably bad portions have been improved, and the crossways, bridges, and culverts replaced and mended, and a large amount of work done. Expenditure, \$1,179.28.

### 14. VICTORIA ROAD.

Nine and one-fourth miles of this road have been improved this season, commencing where the repairs were ended last year. Expenditure, \$1,379.18.

# 15. WILBERFORCE ROAD.

Two miles and a quarter of this road from the east boundary line along the road between the eleventh and twelfth concessions have been thoroughly repaired. The road here passes through low, swampy land, requiring heavy side ditching, brushing, and off-take drains, all of which have been earefully done. Expenditure, \$478.35.

### 16. MISSISSIPPI AND FRONTENAC ROAD.

This read leads from the Mississippi Road to the Frontenae Road. It commences on the former road a little east of Trout Lake, in the Township of Palmerston, and passing in a

south-west direction, unites with the Frontenac Road close by the line between lots 25 and 26, in the fourth concession of Clarendon.

It affords the settlers in the part of Palmerston referred to, access to the Frontenac Road, and thence to Kingston by a route sixteen miles shorter than that which at present they are compelled to travel.

The work has been let by contract as a winter road. The road is seven miles long.

Expenditure, \$1,746.

# 17. MISSISSIPPI ROAD (Burnt Crossways).

A number of the small bridges and crossways having been burned last year on this road, rendering it impassable in some places, an appropriation of \$250 was made for their renewal. This work has been done for the amount named, and extends from a point 6 miles east of Hastings road, a further distance eastward of six miles.

A little repair was also effected in York River hill within the above distance. Expendi-

ture, \$250.

# BRIDGES.

### 1. Draper Bridge.

This is a large and excellent structure. It is a Queen post truss bridge of 100 feet span, with diagonally braced roadway chords, screw-bolted in every intersection, and key-scarfed. It spans the south branch of the Muskoka River in the Eighth Concession of the Township of Draper. Cost \$2,866.85.

2. OAKLEY BRIDGE.

This bridge, formerly built in the year 1873, was destroyed by timber drives last year and had to be rebuilt this season.

The bridge is now a much more substantial structure than that which preceded it, and is raised six feet higher in the water way. Cost \$910.75.

#### 3. Seguin Bridge.

A plain truss bridge on Junction road No. 2, destroyed in the high freshet of 1875. Cost \$608.83.

4. BRUNEL BRIDGE.

Repairs on east abutment. Cost, \$96.86.

5. EAST RIVER BRIDGE.

Repairs in process. Advanced on account, \$200.

6. STEPHENSON BRIDGE.

Wing, wall and repairs to east abutment in process. Advanced on account, \$200.

7. MUD LAKES' BRIDGE.

This is a truss bridge, between the first and second Mud Lakes, in the Township of Carden. Cost, \$1,000.

8. CLARE RIVER BRIDGE.

Repairs to truss span. Advanced on account, \$160.

# 9. AXE RIVER BRIDGE.

On the Stisted Road, nearly 300 feet long. Log [piers and log covering, adzed. Advanced on account, \$335.

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SUMMARY of Expenditure on Colonization Roads and Bridges, from 1st January to 31st December, 1876.

# I. NORTH DIVISION.

	1. NORTH DIVIS	10N.			
1	Base Line	Road.	*,	\$400	4.1
		moau.			
	Great Northern	"			31
	Korah	"			00
4.	Kaministiquia			-	00
	Rose and Lefroy	66	************	1513	99
6.	St. Joseph Island	66		<b>5</b> 00	00
			-		
			\$	6,775	71
	II. West Divis	ION.		•	
1.	Parry Sound(permanent)	Road.		84846	42
2.	(	66	No. 2		
3.	66	46	No. 3	450	
	McDougall	66	110. 0 ,1	984	
	Meannatawan	66		1000	
5.	Waganetewan	66	No. 1		
6.	Rousseau and Nipissing	6.0			
7.	"	"	No. 2	321	42
8.	Northern			4000	00
	North-west	66		950	00
10.	Broadbent's	"		<b>4</b> 53	00
11.	Junction	"	No. 1	920	95
12.	Lake Joseph	66	North	-562	50
13.	Prowse's Landing	66		450	00
14.	Muskoka	66	New	900	00
15.	66	66	North	1054	84
16.	46	66	South	539	48
17.	"(Bracebridge Deviation).	66		1164	24
		66		1043	98
	Brunel	"			
19.	Baysville	66		2042	45
20.	Macaulay		· · · · · · · · · · · · · · · · · · ·		00
21.	(6	66	South	407	75
22.	Peterson	66		972	00
23.	Stephenson Town Line	46		1109	33
24.	Watt Town Line	66	**************	496	71
<b>2</b> 5.	Cardwell	"		450	00
26.	Hood's	66		1127	68
27.		66		1395	90
		66	***************	1549	75
29.	"	6.6	Repairs	310	
30.	Old Lake Joseph	66		200	
31.	Ryde	66			50
	Stisted	4.6		1900	
		"	•••••••		
33.	Three Mile Lake	••		<b>54</b> 0	51
				10.10	0. 60
	TTT 13 70		8	42,409	9 83
	III. EAST DIVIS	SION.			
1.	Addington	Road.		-	
2.	Bobcaygeon	66		1434	73
	Carlow	"		1050	0.0
4.	Eganville and Foy	66		544	66
5.	Eganville and Opeongo	66		508	
6.	Frontenac	44			
٠.	30			2020	,
	90				

7 11	T) 1		37001	
7. Hagarty				
8. Hastings	66		1525	82
9. Methuen	66		647	50
10. Minden	66		1125	69
11. Mississippi			1000	00
12. Opeongo				83
13. Pembroke and Mattawa	66			
14 Wisheria	"			28
14. Victoria			1379	18
15. Wilberforce	"		478	35
16. Mississippi and Frontenac Junction	66		1746	00
17. Mississippi	Repairs.		250	00
		Ф-	10 197	97
IV Damen		φ.	18,137	51
IV. Bridge	S.			
1. Draper	Bridge.	*********	\$2866	85
2. Oakley	"		910	75
3. Seguin	"		608	
4. Brunel	66			
	66		96	
5. East River	66	**********	200	
6. Stephensen			200	00
7. Mud Lake	"		1000	00
8. Clare River	"		160	00
9. Axe River	"		335	00
		***************************************	000	00
			0.070	00
T D	40==	3	\$6,378	29
V. Balances of	1875.			
I. Inspection			\$336	96
2. Locations			60	
3. Hastings	Road.		86	
4. Mississippi	"			
	۲,		91	
5. Northern		************	79	
6. Wilson's	Bridge.	*****************	694	58
7. Rousseau and Nipissing	Road No. :	2	755	47
8. Monteith and Perry	46		200	13
9. Doe Lake	66		570	89
10. Opeongo.	6.6		189	66
11. Muskoka	66		28	
12. Skeleton River.	Bridge.			
12. Skeleton Mivel				00
19 D-4 D:		••••		
13. East River	"	••••••	90	
14. Stisted				98
14. Stisted	"		90	98
14. Stisted	Road.		90 70 75	98 05 11
14. Stisted	Road.		90 70 75 55	98 05 11 50
14. Stisted	Road.		90 70 75 55 26	98 05 11 50 06
14. Stisted	Road Bridge. Bridges.		90 70 75 55 26 117	98 05 11 50 06 95
14. Stisted	Road Bridge. Bridges.		90 70 75 55 26 117 131	98 05 11 50 06 95 74
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       1         20. Ryde	Road.  Bridge. Bridges.  Road No. 1		90 70 75 55 26 117 131 180	98 05 11 50 06 95 74
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       1         20. Ryde.         21. Mississippi	Road.  Bridge. Bridges.  Road No. 1		90 70 75 55 26 117 131	98 05 11 50 06 95 74
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde         21. Mississippi         22. Monck	Road.  Bridge. Bridges.  Road No. 1		90 70 75 55 26 117 131 180	98 05 11 50 06 95 74 19
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde         21. Mississippi         22. Monck         23. Dalton and Washago.	Road.  Bridge. Bridges.  Road No. 1  R. Repairs Road.		90 70 75 55 26 117 131 180 38 62	98 05 11 50 06 95 74 19 94 48
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde         21. Mississippi         22. Monck         23. Dalton and Washago.	Road.  Bridge. Bridges.  Road No. 1  R. Repairs Road.		90 70 75 55 26 117 131 180 38 62 114	98 05 11 50 06 95 74 19 94 48 06
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde.         21. Mississippi         22. Monek         23. Dalton and Washago.         24. Rousseau and Nipissing       I	Road.  Bridge. Bridges.  Road No. 1  R. Repairs Road.  Road No. 3	3	90 70 75 55 26 117 131 180 38 62 114 86	98 05 11 50 06 95 74 19 94 48 06 29
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde         21. Mississippi         22. Monck         23. Dalton and Washago.         24. Rousseau and Nipissing       I         25. Parry Sound       I	Road.  Bridge. Bridges.  Road No. 1  R. Repairs Road.  Road No. 3  Road No. 3		90 70 75 55 26 117 131 180 38 62 114 86 2	98 05 11 50 06 95 74 19 94 48 06 29 71
14. Stisted.         15. Oso and Olden         16. Egan Creek         17. Macaulay Road.         18. Brunel         19. Junction       I         20. Ryde.         21. Mississippi         22. Monek         23. Dalton and Washago.         24. Rousseau and Nipissing       I	Road.  Bridge. Bridges.  Road No. 1  R. Repairs Road.  Road No. 3  Road No. 3	3	90 70 75 55 26 117 131 180 38 62 114 86	98 05 11 50 06 95 74 19 94 48 06 29 71

# INSPECTION AND LOCATIONS.

C. F. Aylsworth	\$1600	00
D. M. Card	1750	
J. A. McDonald	514	
	100	
J. W. Bridgland		40
Wm. Hewitt & Co		
Charles Potter		50
Hart and Rawlinson	_	00
Thos. Holliday	30	64
		-
	\$4,001	11
ITEMS NOT CHARGEABLE AT PRESENT TO ANY PARTICULAR	Work	•
Thos, Myers	\$12	00
Thos, Myers G. H. Frost	11	00
D.d % Dinor		00
Petley & Dineen		
J. & A. Clark		70
Wm. Ford, Accountant, for current works and balances of unset-		
tled accounts	2305	
Supplies on hand	1223	00
	<u></u>	2.0
f)	\$3,896	20
RECAPITULATION.		
4 37 .1 70	00775	71
1. North Division		
2. West "		
3. East "	. 18137	
4. Bridges	6378	29
5. Inspection and Locations	4001	11
6. Balances of 1875		26
7. Items not chargeable at present to any particular work		
7. Items not chargeable at present to any particular work		
Total expenditure	\$86,264	77
Colonization Roads Fund.		
Legislative Grant \$85800	00	
	30	
J. Cunningham "Rous. & Nip. Rd		
	00	
J. Morrow "Hyde Chute 90		
J. Dilett Caldwell ittl	19	
W. F. Halles Bluskoka Rd 34	65	
E. Nicholson "Stephenson T. L		
A. G. Judd " Parry Sd. Rd	39—\$8	6,264 77
Summary of Works.		
DUMBIANT OF WORLD.		

Miles of new roads made	156
" roads repaired	221

Respectfully submitted,

By your obedient Servant,

J. W. BRIDGLAND, Supt. of Col. Roads.

Department of Crown Lands, Toronto, 31st December, 1876.

APPENDIX No. 1.

RETURN of Officers and Clerks in the Department of Crown Lands, for the year 1876.

	Remarks.					
	Salary per Amum.	\$ cts. 4,500 00 2,800 00 1,600 00 1,000 00	2,000 00 1,700 00 1,250 00 1,000 00 850 00	2,000 00 1,250 00 1,350 00 1,380 00 1,100 00 1,800 00 1,000 00	2,000 00 1,200 00 850 00 700 00	2,000 00 1,250 00 1,250 00 850 00
	When Appointed.	1873, December 4 1869, Angust 21 1872, February 1	1841, June 1	1846, July 11 1866, January 30 1871, October 2 1857, September 28 1872, October 1 1848, November 1 1856, January 22 1872, September 1	1857, October 14 1872, December 20 1868, August 1 1869, August 1	1852, April 10 1861, April 15 1862, May 14 1872, October 1
	Designation.	Commissioner 1873, December 4 Assistant do 1869, August 21 Law Clerk 1872, February 1 Short-hand Writer and Clerk 1872, August 1	John C. Tarbutt         Chief Clerk         1841, June 1.           J. M. Kirkwood         1854, Maxch 21.           J. M. Grant         do         1854, Maxch 21.           J. Murphy         do         1872, May 12.           P. Alma         1871, August 1.	B. Kirkpatrick   Deputy Surveyor-General   1846, July 11   Revell   Surveyor and Draughtsman   1876, January 30   Revell   Draughtsman   1871, October 2   Fox   Chief Clerk, Patents   1857, September 28.   1872, October 1   Imas   1872, October 1   Colonization Roads   1866, January 22   Clerk   Clerk   1872, September 1   1872, September 1	f Clerk	William Ford       Accountant       1852, April 10         D. G. B. Ross       Book-keeper       1861, April 15         R. H. Browne       Chief Clerk in charge of Agents       1862, May 14         F. Stow       Clerk       Clerk
	Name.	Hon. T. B. Pardee Thos. H. Johnson George Kennedy H. A. Ford	John C. Tarbutt A. Kirkwood J. M. Graut J. Murphy P. Alma	Thomas Devine G. B. Kirkpatrick W. Revell B. Fox J. Taylor J. Innes J. W. Bridgland	G. B. Cowper	William Ford D. G. B. Ross R. H. Browne F. Stow
	Sranch.		Free Grants and Sales	Surveys, Patents and Roads	Woods and Forests	Accounts

APPENDIX No. 1.—Continued.

RETURN of Officers and Clerks in the Department of Crown Lands, for the year 1876.

O)	ria.	Sessionai .
	Remarks.	
The second secon	Salary per Annum.	\$ cts. 1,600 00 500 00 500 00
	When Appointed.	1851, June 8
	Designation.	Morphy       Registrar         Bradshaw       Office-keeper         McDonald       Nossenger     1864, November 3
	Name.	Morphy
	Branch.	Registry

THOS. H. JOHNSON,

Assistant Commissioner.

CROW'N LANDS DEPARTMENT, TORONTO, 30th December, 1876

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Accountant.

WILLIAM FORD,

Assistant Commissioner.

THOS. H. JOHNSON,

### APPENDIX No. 2.

List of Crown Land Agents for the Sale of Lands, 1876.

	Sobsidite: 1
Remarks,	
Commission.	\$ cts. 203 00 183 75 424 87 402 84 773 76 5 10 106 60 111 53 105 65
Date of Appointment.   Commission.	1870, August 6 1872, Ordober 23 1873, Ordober 23 1854, November 3 1851, April 29 1856, March 27 1870, November 24 1871, July 19
District or County.	na District enac and Addington in enac
Name,	A. S. Cadenhead Wellington .  John F. Day Part of Algor Hugh Hamilton Grey Grey Alex McNabb. Bruce E. Perry .  J. McKibbon do Victo & Sharman Perth Front J. Sharman Perth Perth S. Sharman Perth .

William Ford, Accountant.

RD, ountunt.

List of Crown Land Agents for the Disposal of Free Grants, 1876.

TORONTO, 30th December, 1876. DEPARTMENT OF CROWN LANDS,

## APPENDIX No. 4.

List of Crown Timber Agents in the Province of Ontario, their Assistants, Names of Territories, Residences, dates of Appointments, and Salary allowed to each for his Services, during the year ending 30th December, 1876.

ī	nd of of	m s's	at at
Remarks.	(The Crown Timher Office, Ottawa, acts for the Provinces of Ontario and Quebec, and also for the Dominion of Canada, in the collection of side dues; the proportion of salaries chargeable to each Province and the Dominion not yet determined.	Additional to his salary of \$535 per annum from the Department of Public Works, Ottawa.  During season of navigation.	The remarks in connection with the Crown Timber Office, at Ottawa, respecting salaries, apply to the Collector's Office at Quebec.
Salary per annun from 1st	\$ cts. 2,600 00 1,800 00 1,400 00 1,200 00 1,000 00 300 00	85 00 *  89 per diem \$2 per diem do do	1,440 00 500 00 2,000 00 1,200 00 1,000 00
Salary per annum up to 1st July, 1873.	\$ cts. 2,000 00 1,400 00 1,000 00 700 00 650 00 300 00	85 00 \$2 per diem do	1,440 00 500 00 2,000 00 1,200 00 1,000 00
Date of Appointment.	Ottawa City	1846, May 8 1861, May 27 1872, March 1	1854, May 6
Residences.	Ottawa City do do do do	op op op	Delleville   1854, May 6   1867, December 1.   1867, December 1.   1864, September 2.   1864, June 1   1864,
Names of Territories. Names of Agents and Assistants.	Upper Ottawa	J. McDonald, Deputy Slide-master and Chief Timber-counter James Steen, Timber-counter John Redmond, Assistand and Boatman	Belleville Agency   Joseph F. Way, Agent
Names of Territories.	Upper Ottawa	37	Belleville Agency

\* The Local Governments of Ontario and Quebec to pay Deputy Slide-master \$150 each, in addition to amount paid by Public Works.

G. B. Cowper, In Charge.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS,
WOODS AND FORESTS BRANCH,
TORONTO, 30th December, 1876.

### APPENDIX No. 5.

STATEMENT of the Gross Collections of the Department of Crown Lands for the year ending 31st December, 1875.

SERVICE.	November and December.	Receipts to 31st October, 1875, as per previous Report.	Total.
Crown Lands Clergy Lands Common School Lands Grammar School Lands Woods and Forests Mines Casual Fees Surveyors' Fee Fund. Gain on Scrip	10,479 37 10,076 42 879 80 32,243 11	\$ cts. 73,057 45 34,692 57 46,205 88 8,056 52 257,051 19 4,995 46 266 49 258 43	\$ cts. 88,735 46 45,171 94 56,282 30 8,936 32 289,294 30 4,995 46 328 19 258 43 1 65
Total	69,420 06	424,583 99	494,004 05

### APPENDIX No. 6.

STATEMENT of the Gross Collections of the Department of Crown Lands for the year 1876.

SERVICE.	
Cwaym Londa	\$ cts. 82,254 49
Crown Lands	41,933 89 63,635 31
Grammar School Lands Woods and Forests Casual Fees.	10,586 52 437,998 77
Casual Fees. Surveyors' Fee Fund.	635 13 326 02
Total	637,370 13

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

### APPENDIX No. 7.

STATEMENT of Acres of Land sold, Amount of Sales, and Amount of Collections for the year ending 31st December, 1875.

[SERVICE.	Acres sold.	Amount of Sales.	Amount of Collections.
Crown Lands, November and December, 1875 Clergy Lands Common School Lands Grammar School Lands	$\begin{array}{c} 8,133\frac{1}{2} \\ 1,350 \\ 348\frac{1}{2} \\ 281\frac{3}{4} \end{array}$	\$ cts. 6,364 57 4,010 30 5,048 50 251 00	\$ cts. 15,678 01 10,479 37 10,076 42 879 80
Amount for the ten months ending 31st October, 1875, as previously reported	10,113\frac{3}{4} 54,838\frac{1}{2}	15,674 37 64,286 94	37,113 60 162,006 42
Total	64,9521	79,961 31	199,120 02

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

DEPARTMENT OF CROWN LANDS, TORONTO, 31st December, 1875.

### APPENDIX No. 8.

STATEMENT of Acres of Land sold, Amount of Sales, and Amount of Collections for the year 1876.

SERVICE.	Acres sold.	Amount of Sales.	Amount of Collections.
Crown Lands Clergy Lands Common School Lands Grammar School Lands Total	$51,387$ $7,254\frac{3}{4}$ $2,039\frac{1}{2}$ $3,511\frac{1}{2}$ $64,192\frac{3}{4}$	\$ cts. 56,704 09 14,370 08 6,797 69 5,134 51 83,006 37	\$ cts. 82,254 49 41,933 89 63,635 31 10,586 52 198,410 21

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

### APPENDIX No. 9.

STATEMENT of the Receipts of the Department of Crown Lands for the year 1875, which are considered as Special Funds.

SERVICE.	Receipts to 31st October, 1875, as previously reported.	November and December.	Total.	Grand Total.
Clergy Lands; Principal Interest Rent	9,834 94	\$ ets. 8,043 63 2,434 74 1 00	\$ cts. 32,895 26 12,269 68 7 00	\$ cts.
Common School Lands: Principal Interest Grammar School Lands:	27,014 59 19,191 29	7,767 04 2,309 38	34,781 63 21,500 67	56,282 30
PrincipalInterest		578 55 301 25	7,053 58 1,882 74	8,936 32 110,390 56
Refunds on above Services : Clergy Lands Common School Lands Grammar School Lands	518 30		110 00 518 30 18 20	646 50

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

40 Victoria.

### APPENDIX No. 10.

Statement of the Receipts of the Department of Crown Lands for the year 1876, which are considered as Special Funds.

SERVICE.	\$ cts.	\$ cts.
Clergy Lands: Principal Interest Rent	29,577 90 12,348 99 7 00	44 000 00
Common School Lands: Principal	36,969 18 26,666 13	41,933 89 63,635 31
Grammar School Lands: Principal Interest	7,950 63 2,635 89	10,586 52
Total Collections	_	116,155 72
Refunds on above Services: Clergy Lands Common School Lands	325 30 584 30	909 60

WILLIAM FORD, Accountant. THOS. H. JOHNSON, Assistant Commissioner.

### APPENDIX No. 11.

STATEMENT of the Receipts of the Department of Crown Lands for the year 1875, which are considered as Revenue.

SERVICE.	Receipts to 31st October, 1875, as per previous Report.	November and December.	Total.
Woods and Forests Crown Lands Mines Casual Fees Surveyors' Fee Fund Total	\$ cts. 257,051 19 73,057 45 4,995 46 266 49 258 43	\$ cts, 32,243 11 15,678 01 61 70 47,982 82	8 cts. 289,294 30 88,735 46 4,995 46 328 19 258 43

WILLIAM FORD,
Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

DEPARTMENT OF CROWN LANDS, TORONTO, 31st December, 1875.

### APPENDIX No. 12.

STATEMENT of the Receipts of the Department of Crown Lands for the year 1876, which are considered as Revenue.

SERVICE.	\$ ets.
Crown Lands	82,254 49
Woods and Forests	437,998 77 635 13
Surveyors' Fee Fund	326 02
Total	521,214 41

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

Department of Crown Lands, Toronto, 30th December, 1876.

### APPENDIX No. 13.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1875.

SERVICE.	November and December.		
Salaries of Agents.	\$ ets.	\$ cts.	\$ cts.
C. P. Brown J. Reeves J. R. Tait D. Anderson A. A. Campbell C. W. Lount E. Playfair A. Kennedy M. Reid J. Bowker S. G. Best J. Mahon A. Wright Thomas McMurray J. W. Fitzgerald J. Graham J. A. McInnes J. B. McWilliams J. F. Way J. A. G. Crozier	125 00 125 00 125 00 125 00 250 00 250 00 125 00 127 00 128 00 129 00 129 00 120 00 120 00 120 00 125 00 12		
J. McDonald  Salaries of Agents for the previous ten months to 31st October, 1875, already reported	25 00	3,010 39 10,165 31	
Agents' Postage.		10,100 01	13,175 70
J. R. Tait  Agents' postage for the previous ten months to 31st October, already reported.	6 43	6 43 227 93	234-36
Miseellandous.			
George Bick, inspecting J. A. McInnes, board J. Kennedy, inspecting W. Russell, do Amount of miscellaneous items for the previous ten months,	11 75 36 00 100 00 105 00	252 75	
already reported		1,964 63	2,217 38
Commissions previously reported			2,515 65
Wood Ranging.			
Thos. E. Johnson W. Russell P. W. Freeman	675 75 586 96 39 84	1,302 55	
Wood ranging for previous ten months ending 31st October, 1875, already reported		13,600 11	14,902 66
Expenses of Inspectors Valuing Lands.			
A. Shaw  Expenses for the previous ten months ending 31st October, already reported	742 50	742 50 660 00	
			1,402 50
Carried forward			

### APPENDIX No. 13.—Continued.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1875.

SERVICE.	November and December.		
Brought forward	S ets.	\$ cts.	\$ ets.
Colonization Roads	10.844 20	87,455 80	-
Refunds	1,731 76	11,030 25	98,300 00
Surveys	4,921 72	22,076 07	12,762 01
Advertising do	29 60	1,215 36	26,997 79
Subscriptions.	18 00	158 65	1,244 96
Do do	76 25		176 65
Do do		763 25	839 50
Office postage, already reported.		250 00	250 00
Two per cent. of duties collected on timber cut on road allow- ances, paid to municipalities	******		982 70
Board of Examiners of Provincial Land Surveyors			410 00
Local Saw Mill Inspections			184 25
Scrip issued, as per previous Report, to 31st October, 1875			2,991 33
Total	•		179,587 44

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

Department of Crown Lands, Toronto, 31st December, 1875.

### APPENDIX No. 14.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1876.

Commission.				
J. Sharman	SERVICE.	\$ cts.	S ets.	\$ ets.
D. Anderson	J. Sharman A. S. Cadenhead J. F. Day H. Hamilton R. Maopherson Wm. Jackson J. McKibbon A. McNabb	203 00 183 75 424 87 111 53 402 84 106 60 773 76	2,317 10	
Agents' Postage.         J. W. Fitzgerald       8 45         S. G. Best       8 35         D. Anderson       12 70         J. Bowker       8 30         C. P. Brown       20 33         A. S. Cadenhead       7 20         H. Hamilton       23 18         Adam Kennedy       9 51         C. W. Lount       65 80         R. Macpherson       6 24         J. Mahon       2 17         T. McMurray       33 05         A. McNabb       56 60         M. Reed       10 00         W. Jackson       23 80         J. F. Day       5 05         J. Graham       5 30         Jos. Wilson       27 28	D. Anderson. S. G. Best J. Bowker. C. P. Brown A. A. Campbell J. W. Fitzgerald. Adam Kennedy C. W. Lount J. Mahon Thomas McMurray M. Reed James Reeves J. R. Tait Amos Wright C. E. Belle J. Graham J. F. Way. J. A. G. Crozier J. A. MacInnes J. B. McWilliams J. M. Coonald	500 00   500 00   500 00   500 00   500 00   1,000 00   125 00   500 00   1,25 00   1,440 00   500 00   1,440 00   1,500 00   1,000 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500 00   1,500		
	Agents' Postage.  J. W. Fitzgerald. S. G. Best D. Anderson J. Bowker C. P. Brown A. S. Cadenhead. H. Hamilton Adam Kennedy C. W. Lount R. Macpherson J. Mahon T. McMurray A. McNabb M. Reed W. Jackson J. F. Day J. Graham	8 45 8 35 12 70 8 30 20 33 7 20 23 18 9 51 65 80 6 24 2 17 33 05 56 60 10 00 23 80 5 05 5 30		
Carried forward	Carried forward			

### APPENDIX No. 14.—Continued.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1876.

	SERVICE.	\$ ets.	\$ cts.	\$ cts.
Broug	tht forward			
	Miscellaneous.	20.00		
Vm. Jackson, seizing	bursements do do ervices timber do ng expenses do do do	20 00 8 00 9 00 1 00 29 70 3 00 2 00 2 65 257 80 51 90 746 00 235 00 16 00 12 00 135 00 18 00 40 00 75 00	1,662 05	
A. Gunn B. Turgeon C. W. Lee Shaw George Bick C. W. Boland P. W. Freeman J. Kennedy W. McKay S. M. Johnson Wm. Russell S. L. Soper D. Rose E. P. Johnson A. Starkey C. Richardson C. F. McDonald	Wood Ranging.  Serip Issued.	746 00 80 00 410 89 14 85 18 20 46 80	12,882 27	
P. Knight		182 26   460 00 800 00 200 00	1 040 00	
			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Surveys			37,700 00	
			85,800 00	

### APPENDIX No. 14.—Continued.

STATEMENT of the Gross Disbursements of the Department of Crown Lands for the year 1876.

SERVICE.	\$ cts.	\$ ets.	\$ ets.
Brought forward	1,398 22 1,512 06 3,040 00 547 50 456 25 797 28 842 92 377 53 213 60 1,586 28	10,771 64 1,955 78	
Board of Surveyors  Agents Receipts.  Being moneys paid to them, but not returned to the Department		390 00	179,855 75

WILLIAM FORD,

Accountant.

THOS. H. JOHNSON,

Assistant Commissioner.

Department of Crown Lands, Toronto, 30th December, 1876.

### APPENDIX No. 15.

of which the locations have been cancelled, under "the Free Grants and Homestead Act of 1868;" and also of the number of patents issued under the said Act, and the Acts remitting the arrears due the Crown by settlers in the Free Grant Town-RETURN of the numbers of locatees and of acres located, the numbers of purchasers and of acres sold, and the number of lots ships, from the 1st November to 31st December, 1875.

_				
	Number of Patents issued.	0140U 45 4 H		w 0 w 4 21
	Number of Lots of which the locations have been cancelled.	88711 D80 111681		410 1001
	Number of Acres sold,	9.2g	10	. 10 . 10
	Yumber of Purchasers.	HID	П	-
	Number of Acres located.	270 9888 8938 8938 8938 100 100 100 100 100 100 100 100 100 10	501	254 499 200 200 175 109 103
	Number of Persons located.	x a r x 4 m x 2 r r 4 c 1 e 3 m	m	00000000000000000000000000000000000000
	AGENT.	C. W. Lount, Bracebridge		Thos. McMurray, Parry Sound
	DISTRICT OR COUNTY,	- Muskoka,	Muskoka	Parry Sound
	TOWNSHIP.	Brunel Chaffey Chaffey Drapher Macasulay Monck Morrison Neckora Muskoka Muskoka McLean Oakley Ridout Ridout Ryde Steptenson Stisted Watt	Cardwell	Carling Christic Fergusson Folgy Holey Magerman Humphry McDongall

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To victoria. Sessional Lapors (10. 11.)							
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63							
2,214 295 257	2,644 1,044 392	301 200 1,530 1,089 896 767	386 400 668	100 200 199	81 292 300 551	100 400 236	
200	48886	1 12 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0144 O	1 1 2	⊣ೞೞ 4	H 20 20 H	
S. G. Best, Maganetawan	D Anderwon, Apsley	J. W. Fitzgerald, Minden	J. R. Tait, L'Amable	A. Kennedy, Pembroke	James Reeves, Eganville	John Mahon, Vanbrugh	
Parry Sound	Peterborongh Do. Haliburton Do,	Haliburton	Hastings	Renfrew	$\left.\begin{array}{ll} \text{Renfrew} \\ \text{Nipissing} \end{array}\right.$	Renfrew	
Chapman Croft Spenee	Anstruther Chandos Cardiff	Anson Glanorgan Hindon Luterworth Minden Snowdon Stanbope	Bangor Carlow Dinganion Faraday Herschel Mayo Monteagle MotClure Wicklow	Alice Buchanan Fraser Hend Petewawa Rolph Wylie	Algona, South Grattan Wilberforce Hagarty	Brougham Bradenell Griffith Lyndoch Ragian Radeliffe Sebastopol	

APPENDIX No. 15.—Continued.

RETURN of the numbers of locatees and acres located, &c.

Number of Patents issued.			1		11.2	93	570	
Number of Lots, the locations of which have been cancelled.			1			91	381	
Number of Acres			: :			3,791	3,896	SON,
Митрет of Ригоразега.						1277	68	JOHN
Number of Acres located.		320	946	1,286		36,910 149,897	186,807	THOS. H. JOHNSON
Number of Persons located.		2	6	<b>c4</b> ∞		276 1,111	1,387	T
AGENT.		C. P. Brown, Sault Ste. Marie	John Bowker, Bruce Mines	Amos Wright, Prince Arthur's Landing		Totalas per last report		
DISTRICT OR COUNTY.		\ Algoma	oma	Thunder Bay	Addington Frontenac	Totalst January to 1st Novemler' 1875, as per last report	Total for 1875	
TOWNSHIP.	Brought forward	Prince Korah Awères	OPlummer Alsond Island Island	Dawson Road	Denbigh Addington Clarendon Frontenac Miller	Total numbers from 1st J		

THOS. H. JOHNSON,
Assistant Commissioner.

## APPENDIX No. 16.

9222 RETURN of the numbers of locatees and of acres located, the numbers of purchasers and of acres sold to locatees, and the number of lots of which the locations have been cancelled, under "The Free Grants and Homestead Act of 1868"; and 58814888 also of the number of patents issued under the said Act, and the Acts remitting arrears due to the Crown by settlers in Patents issued. Namber of which have been cancelled. 237120421 1683822 യപ്രായയ്ല്പെല്യ Number of lots, the locations of 85 80 80 80 80 80 Number of acres sold. :818 132 83 114 107 26 16000 G1chasers. Number of Pur-2,609 2,788 2,788 2,710 2,710 3,418 1,650 3,545 3,545 1,221 1,122 1,122 1,122 1,223 1,223 1,223 1,223 1,235 1,235 1,235 1,117 1,117 1,117 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1,235 1, located. Number of acres persons located. Number of Thos. McMurray, Parry Sound C. W. Lount, Bracebridge .. AGENT the Free Grant Townships during the year 1876. Parry Sound.... Muskoka ..... DISTRICT OR COUNTY Parry Sound Muskoka Oakley Ridout Ryde ..... Fergusson Hagerman.... McKellar ..... © Macaulay ⊢Medora McLean Stephenson Stisted Watt Shaffey ..... Mouk.... Morrison .... TOWNSHIP. Carling ..... McMurrich Humphrey McDougal Christie ... Muskoka Cardwell Brunel Draper Wood

APPENDIX No. 16.—Continued.

RETURN of the numbers of locatees and of acres located, &c.

Number of Patents issued.		4-1031	PH 610100	たい ひこう ひこう 4 た と い
Number of lots, the locations of which have been cancelled.	63.10	0.80 4.80	80 10 10 4	<b>ジェキキ</b> なアン
Number of acres sold.	15 62 101	100	112 113 33 1 122 122	1 9 1 1
Number of Pur-	400		1621413	H 20HH
Number of acres	4,622 5,820 6,604	1,340 4,568 1,904 1,982	846 4,103 1,404 2,215 2,215 5,765 5,054	567 543 1,400 1,349 1,276 1,655 1,665 465 500
Number of persons located.	33.34	01 8 4 1 1 4 1	∞8081144	4 4 11 0 1 4 8 P
AGENT.	S. G. Best, Magametawan	)D. Anderson, Apsley	J. W. Fitzgerald, Minden	J. R. Tait, L'Amable
DISTRICT OR COUNTY.	Parry Sound	Peterborough do Haliburton do	Haliburton	Hastings
TOWNSHIP,	Chapman Croft Spence	&Anstruther Chandos Cacliff Monmouth	Anson Glanorgan Hindon Lutterworth Minden Snowdon Stanhope	Bangor Carlow Carlow Paraday Herschel Mayo Monteagle Wicklure

THOS. H. JOHNSON,
Assistant Commissioner.

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ᆏᆏ	27 - 17 27	67	AH	Q.F.	OTT
990 834 834 2,521 557 384	370 280 1,339 300 2,565 1,380	557 888 848 548 300 1,109 690	1,281 2,656 14,359 5,800 14,427 1,854	959 365 109 658	192,858
222	22 11 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	@F70314370	8 103 38 38 14	3 3 3	1,405
A. Kennedy, Penbroke	James Reeves, Eganville	John Mahon, Vanbrugh	C. P. Brovn, Sault Ste, Marie. John Bowker, Bruce Mines Amos Wright, Prince Arthur's Landing	0	
Renfrew	$\left. \left. \left$	Renfrew	$iggl\{ Algoma iggl\} Algoma iggl\} Thunder Bay$	$\left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \left. \left. \right. \left. \right. \left.	
Alice Buchanan Fraser Head Petewawa Rolph Wylie McKay-	Algona, South Algona, North Grattan Wilberforce Hagarty Kichards Sherwood	Brougham. Brudenell Griffith Lyndoch Radeliff Raglan Raglan Cy Sebastopol	Aweres Korah Prince St. Joseph's Island Plummer Oliver. Dawson Road	Abinger Denbigh Clarendon Miller Palmerston	

DEPARTMENT OF CROWN LANDS, TORONTO, December 30th, 1876.

### APPENDIX No. 17.

WOODS AND FORESTS.

COMPLETE STATEMENT of Revenue collected during the year ending 31st December, 1875.

	\$	\$ cts.
Amount of Ottawa Collections, by A. J. Russell.  Do do McL. Stewart	122,833 44 71,414 98	194,248 42
Amount of Belleville Collections, by Jos. F. Way Do do McL. Stewart		54,976 50
Amount of Western Timber District Collections at Department  Do by McL. Stewart	35,919 05 4,150 33	40,069 38

G. B. COWPER,

Chief Clerk in Charge.

THOS. H. JOHNSON,

Assistant Commissioner.

### APPENDIX No. 18.

### WOODS AND FORESTS.

STATEMENT of Revenue collected during the year ending 30th December, 1876.

	\$ cts.	\$ cts.
Amount of Ottawa Collections, by A. J. Russell	146,591 76 115,465 17	262,056 93
Amount of Belleville Collections, by Jos. F. Way  Do do McLean Stewart	71,666 34 1,152 58	72,818 92
Amount of Western Timber Collections at Department	94,722 02 8,400 90	103,122 92
		437,998 77

G. B. COWPER,

Chief Clerk in Charge.

THOS. H. JOHNSON,

Assistant Commissioner.

### APPENDIX

WOODS AND

STATEMENT of Timber and Amounts accrued from Timber Dues, Ground

### QUANTITIES AND DESCRIP

TERRITORIES AND A un Lice		Saw Logs.  White Pine. Other.			Oar Logs.	White Pine.		
NAMES OF AGENTS.	Square miles.	Pieces.	Stand- ards.	Pieces.	Stand- ards.	Pieces.	Pieces.	Feet.
Ottawa Territory. A. J. Russell, Agent	7 106	909442	777770	1136	517	5777	100092	5333393
Belleville Agency.  Jos. F. Way, Agent	2022	700456	517008	5775	2280		1800	123300
Western Timber District	7621	409225	335229	700	609		3941	214798
Total	17049	2019123	1630007	7611	3406	5777	105833	5671491

### GENERAL STATEMENT

### QUANTITIES AND DESCRIP

TFRRITORIES AND NAMES OF AGENTS.		Birch, Hemlock and Spruce.		Basswood.		Maple and Butternut.		Posts.
	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Feet.	Pieces.	Cords.
Ottawa Territory.  A. J. Russell, Agent  Belleville Agency.  Jos. F. Way, Agent	H. 96	4299	147	6484	M. 1 But. 6	200	467	30
Western Timber District			215	9481	м. 1	34		
Total	S. 20 H. 96		363	15996	M. 2 But. 6	75 200	467	30

G. B. COWPER,

Chief Clerk in Charge.

DEPARTMENT OF CROWN LANDS,

TORONTO, 31st December, 1875.

No. 19.

FORESTS.

Rent and Bonuses, during the year ending 31st December, 1875.

### TIONS OF TIMBER.

Red	Pine.	Boom and Dimension Timber.		Elm and		Elm and Ash. Oak.		Oak. Cedar. 16 feet.		Round Cedar.	Tar	narac.	
Pieces	Feet.	Pieces	Stand- ards.	Pi	eces.	Feet.	Pieces	Feet.	Pieces	Inches.	Feet.	Pieces	Feet.
29085	1085605	44984	64241	A. E.	489 29	17337 992	47	1018	3780	35759		304	10107
8	349	5819	7043	A. E.	170 355	5264 8651	59	1612	33166	252612	23704	64	2131
87	3879	3017	4840	A. E.	341 3611	1 <b>3</b> 960 86262	756	23465	 			9	384
29180	1089833	53820	76124	A. E.	1000 3995	36561 95905	862	26275	36946	288371	23704	377	12622

### OF TIMBER, &c.—Continued.

### TIONS OF TIMBER.

Bolts.	Cord '	Wood.	Other	Wood.	Amounts Accrued.						
Cords.	Hard. Cords.	Soft. Cords.	Pieces.	Feet.	Trespass,	Timber Dues.	Ground Rent.	Bonus.	Total.		
.,	150	526	Spars 15 Cedar 40	1037 120	\$ ets. 532 21	\$ ets. 208594 21	\$ ets. 15016 19	\$ ets. 16 00	\$ cts. 224158 61		
59					1742 69	69706 87	4358 00	14 00	75821 56		
		70	Ch'y &c. 154	6423	5901 78	59891 58	13296 08	382 00	79471 44		
59	150	596	Spars 15 Cedar 40 Ch'y &c. 154	1037 120 6423	8176 68	338192 66	32670 27	412 00	379451 61		

THOS. H. JOHNSON,

Assistant Commissioner.

### APPENDIX

WOODS AND

### STATEMENT of Timber and Amounts accrued from Timber Dues, Ground

					QUAN	TITIES	AND D	ESCRIP
TERRITORIES AND	Area under License. White Pine. Other.					Oar Logs.	Boom and Dimension Timber.	
	Square miles.	Pieces.	Stand- ards.	Piesea.	Stand- ards.	Pieces.	Pieces.	Stand. ards.
Ottawa Territory. A. J. Russell, Agent	7342	420906	376955	408	184	8580	25893	28141
Belleville Agency. Jos. F. Way, Agent	1344	452991	269905	6659	1957		4224	4862
Western Timber District	6295	722045	495693	1463	1240		6168	11349
Total	14981	1595942	1142553	8530	3381	8580	36285	44352

### GENERAL STATEMENT

						QUAN	TITII	ES AN	D DES	SCRIP
TERRITORIES AND NAMES OF AGENTS.	Mapl Butte		Cec 16 f	dar. eet.	Round Cedar.	R. R. Ties.	Cedar Posts.	Bolts.	Cord '	Wood.
	Pieces.	Feet.	Pieces	In.	Feet.	Pieces	Cords.	Cords.	Hard. Cords.	
Ottawa District. A. J. Russell, Agent	M. 6	203				2498	56		20	1730
Jos. F. Way, Agent			10407	166512	6128	8	948	334		
Western Timber District	M. 1	37				5410		105	81	
Total	M. 7	242	10407	166512	6128	7916	1004	439	101	1730
			The state of the s							

G. B. Cowper, Chief Clerk in Charge.

No. 20.

FORESTS.

Rent and Bonuses, during the year ending 30th December, 1876.

TIONS	S OF TI	MBER												
Whit	te Pine.	Red	Pine.	Elm an	d Ash.	Οε	ık.	Tam	arac.	Bassy	wood.			emlock,
Pieces	Feet.	Pieces	Feet.	Pieces.	Feet.	Pieces	Feet.	Pieces	Feet.	Pieces	Feet.	Pi	eces.	Feet.
148561	8256909	32038	1148511	E. 75 A. 185			27	87	3002	96		В. Н.	20 161	486 4703
1543	90108	2	70	E. 17 A. 7	460 283		481	13	503	7	232	н.	242	7281
3899	204032			E. 199 A. 23			3198	1	37	3	164			
154003	8551049	32040	1148581	E. 291 A. 215			3706	101	3542	106	4446	В. Н.	20 403	486 11984

### OF TIMBER, &c.—Continued.

TT'	LOV	NTC	AT	TITA	IRER	

Other Wood.		Amounts Accrued.								
Pieces.	Feet.	Trespass, &c.	Timber Dues.	Ground Rent.	Benus.	Total.				
Beech 3	54	\$ cts. 2377 17	\$ cts. 180496 19	\$ cts. 14860 14	& cts.	\$ cts. 197733 50				
Wharf timber	1926	673 39	43742 95	4098 00	4 00	48518 34				
73 ship knees 19041 W. O.W. I. staves 1159 std. staves Hickory 70	1820	5028 83	92287 31	13228 00	5602 08	116146 22				
Beech 3	54 1926 1820		316526 45	32186 14	5606 08	362398 06				

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 21,

STATEMENT shewing the Number of Letters, &c., Received and Registered for the year 1875.

t address.	Returned; not called for a	128	143
	Orders in Council.	33.	333
	Enclosures.	27,000	31,000
	Names Indexed.	3,000	23,000
	Лвдо.Т	15,000	18,004
*stnemtr	RTSILET OF DEPTIEUR T	43	53
	.ebsoH noitarinolo	1,195	1,304
σå	Woods and Forests.	1,708	1,927
BRANCHES.	Smrveyor's.	720	1,009
B	Accountant's.	1,900	2,245
	Sales and Free Grants.	9,434	11,466
		©10 months to 31st October	Totals

THOS. H. JOHNSON,
Assistant Commissioner.

John Morphy, Registrar. December 6th, 1875.

APPENDIX No. 22.

DEPARTMENT OF CROWN LANDS.

STATEMENT shewing the number of Letters Registered in 1876 and 1875.

t address.	Returned—not called for a	77
	Orders in Council.	33 25
	Enclosures.	35,000
	Names indexed.	23,300 23,000
	JATOT	18,280
rements.	Transferred to other Depa	84 <b>E</b>
	Colonization Roads.	1,328
	Woods and Forests.	1,968
BRANCHES.	Surveyor's.	893
	Accountant's.	2,146
	Sales and Free Grants.	11,897
	V ears.	1876

THOS. H. JOHNSON,
Assistant Commissioner.

John Morphy, Registrar. Toronto, January 2, 1877.

## APPENDIX No. 23.

COMPLETE STATEMENT of Crown Land Surveys in progress in the year 1875, and amounts advanced thereon during the year, shewing the amounts advanced during the months of November and December, as distinguished from the amount advanced during the 10 months ending 31st October, 1875.

AMOUNT PAID.	\$ cts. 9,300 00	74 62	20 00	300 00	2,400 00	290 00	1,500 00	7 10	14,221 72
DESCRIPTION OF SURVEY.	Crown Land Surveys and amount advanced, up to the 31st October, 1875, as shown by the Commissioner's Report, issued in 1875, page 35 Amounts advanced during the months of November and December, 1875:	Reserve, Southampton	Town-plot of Coponaning at mouth French River	Exploration at French River	. Township of Moss	" "Strong	" Pringle and Gurd	November 19th, 1875, paid Thomas Mann, 8 Map Frames	Total
SURVEYOR.		John St. V. Caddy	Thomas O. Bolger	Thomas O. Bolger	II. Wilson	Walter Beatty	J. W. Fitzgerald		
Date of Instruction.		10th May, 1875	14th August, 1875,	20th Angust, 1875	11th June, 1875	20th August, 1875	6 28th May, 1875, and 26th July, 1875		
No.		-	Q1	33	4 62	10	9		

Note. — The Reserve at Southampton was the only Survey completed and closed during the months of November and December, 1875.

Thomas Devine, Deputy Surveyor General.

THOS. H. JOHNSON,
Assistant Commissioner.

## APPENDIX No. 24.

COMPLETE STATEMENT of Municipal Surveys for which Instructions were issued during the year 1875.

Date when Confirmed.			7th April, 1876.		
No. of Date Surveys.	53		1 7th	-	27
No Surv		wember	:	gh and	
SURVEY.	No. of Municipal Instructions issued during the 10 months ending 31st October, 1875, as shown by Commissioner's Report issued in 1875, p. 38	No. of Municipal Instructions issued during the months of November and December, 1875	1st December, 1875 Survey of Lot 10, in the 8th Con., E. Whitby	18th December, 1875 Survey of Boundary Line between Cambridge and Roxborough and S. W. Angle of South Plantagenet	Total
No. and Date of Instructions.					
			. 414	415	
SURVEYOR.			John Shier	C. E. Wolff	
No.			-6	63	

Thos. Devine,
Deputy Surveyor-General.

THOS. H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CHOWN LANDS, TORONTO, 30th December, 1876.

# APPENDIX No. 25.

Statement of Municipal Surveys confirmed during the year 1875.

No. of Survey. Date when confirmed.			11th November, 1875.	11th November, 1875.	
No. of Survey.	759		Н	-	27
SURVEY.	Number of Surveys confirmed during the ten montns ending 31st October, 1875, as shown by Commissioner's Report, issued in 1875, page 40	Number of Municipal Surveys confirmed during the months of November and December, 1875:—	27th August, 1875 Survey of part of the line between Rama and Mara	5th October, 1875 Survey of Lots 18 and 19 in the 5th Concession, Darlington	Total
No. and Date of Instruction.		ı	467 27th August, 1875	408 5th October, 1875	
SURVEYOR			John Shier	C. G. Hanning	
N <sub>o</sub> .			64	63	

Thomas Devine,

Deputy Surveyor-General.

THOS. H. JOHNSON,
Assistant Commissioner.

## APPENDIX No. 26.

COMPLETE STATEMENT of Mineral Lands which have been patented in unsurveyed territory on the North Shores of Lake<sup>8</sup> Superior and Huron, in the Districts of Thunder Bay and Algonia, during the year 1875.

No. Description. PATENTEE.		DESRIPTION OF MINING TRACT.	Acres.	& cts.	\$ cts. Date of Patent.
(No. of acres patent shown by the C	No. of acres patent shown by the C	No. of acres patented during the 10 months ending 31st October, 1875, as shown by the Commissioner's Report, issued in 1875, page 42		6,044:31 6,011:31	
William Collins Location No. 1, X	Location No. 1, X	Location No. 1, X. L., North Shore of Kashabowie Lake	. 94.66		94 66 29th Nov., 1875.
		Total		\$6,138 97	
-					
		FULL CENTRE CENTRE CONTRACTOR CON		<u> </u>	

THOMAS H. JOHNSON,
Assistant Commissioner.

DEPARTMENT OF CROWN LANDS, TORONTO, 30th December, 1876.

Thos. Devine,
Deputy Surveyor-General.

### APPENDIX No. 27.

Statement showing the number of Crown Patents issued by the Patent Branch during the year 1875.

	300	
Number of Patents issued during the two months ending 31st December, 1875	332	
Number of Patents issued during the ten months ending 31st October, 1875, as		
previously reported	1796	
		0100
		2128

THOS. H. JOHNSON,
Assistant Commissioner.

THOMAS DEVINE,

Deputy Surveyor-General.

### APPENDIX No. 28.

COMPLETE STATEMENT of Work performed in the Survey Branch during the year 1875.

		For work performed in the Survey Branch during the ten months ending 31st October, 1875, see the Commissioner's Report, issued in 1875, page 44.
		Work performed during the months of November and December, 1875:
1 2 3	3 2 2	Reports to Council relative to Municipal Surveys drawn up and entered. Instructions for Municipal Surveys prepared and entered. Municipal Surveys examined and confirmed.
4 5	11 81	Plans of Private Surveys examined. Plans compiled and copied, besides Plans of Townships reduced and added to the engraved maps.
6	38	Letters relative to Surveys prepared, written and entered.
7	6	Mining Letters prepared, written and entered.
8	480	Pages of Field Notes copied,
9	6	Railway Plans and Books of Reference examined and certified.

Note.—The foregoing statement does not account for the time spent in furnishing information to parties applying personally at the Surveyor's Branch, who are unable to gain the information they require without the assistance of the head of this Branch, and then much careful research into the old correspondence, plans, field-notes, and other documents is necessary in order to insure reliability in the information given, which is frequently used as legal evidence in courts of law in disputed cases.

Note.—The number of Patents issued under the superintendence of the Survey Branch during the last two months of the year was 332; making a total of 2,128 for the year 1875.

THOS. H. JOHNSON,
Assistant Commissioner.

THOMAS DEVINE,

Deputy Surveyor-General.

THOS. H. JOHNSON,
Assistant Commissioner.

APPENDIX No. 29.

STATEMENT of Crown Land Surveys, completed and closed during the year 1876.

No. of Acres Surveyed.	45,248 56,960 37,814 45,543 45,805 64,000 77,735 50,125 45,006 49,600 49,600 49,600 49,600 40,715 11,580	
Amount paid.	1,557 36 295 28 76 25 87 20 40 00 50 00 50 00 1,438 90 4,186 39 4,186 39 4,041 45 3,508 75 3,150 42 3,472 90 2,850 00 1,400 00 1,000 00 2,850 00 810 60 1,000 00 2,850 00 810 60 810 60	
DESCRIPTION OF SURVEY.	Township of Armour  Township of Armour  Island  Island  Island  Island  Gurd  Gurd  Gurd  Township of Moss  Do Gurd  Town-plot of Coponaning, at Month of French River  Exploration Survey, near Branches of French River  Township of Strong (formerly Laird)  North Boundary of Methnen  Township of Himsworth  Do Harrison  Do Harrison  Do Burton  Do Burton  Do Nicelintock  Do Sinolair	
SURVEYOR.	Walter Beatty J. W. Fitzgerald T. O. Bolger Hugh Wilson J. W. Fitzgerald T. O. Bolger Thos. Byrne Thos. Byrne J. W. Fitzgerald M. McFadden J. W. Fitzgerald M. McFadden John McAree Alex. Niven W. and D. Beatty T. O. Bolger	
Date of Instruction.	28th May, 1875 28th May 8th June 11th June 26th July 14th Aug. 20th Aug. 20th Aug. 28th Feb., 1876 28th Feb., 1876 1st May 1st	
No.	2892521238443958	

<sup>\*</sup> This amount was since paid into the Department by the License Holder.

Thomas Devine, Deputy Surveyor-General.

## APPENDIX No. 30.

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SURVEYOR. SURVEY.	Survey of part of the Township of BedfordSurvey of the Township of Shawanaga
VEYOR.	Surve
SUR	S. O. McGuin
·Date of Instructions.	20th April, 1876

THOS. H. JOHNSON,
Assistant Commissioner.

Deputy Surveyor-General.

Department of Crown Lands,
Toronto, 30th December, 1876

THOMAS DEVINE,

Assistant Commissioner.

THOS. H. JOHNSON,

APPENDIX No. 31.

STATEMENT of Municipal Surveys for which Instructions were issued during the year 1876.

_		6.
	Date when confirmed.	1876.   16th May.   18th May.   18th May.   18th May.   13th May.   13th May.   15th August.   17th May.   17th May.   27th Nov., 1876.   18th June.   24th June.   18th August.   18th
	SURVEY.	Survey of lots 27, 28, 29 and 30, in 1st Con. of Uxbridge  Survey of lots 13, 14, 15, 16, 17 and 18, in 11th and 12th Cons. of Moree  Survey of lots 15, and 26, in 2nd con. of Uxbridge  Survey of lots 25 and 26, in 2nd con. of Uxbridge  H and I, in the bast Gore of Grünsby.  H and I, in the bast Gore of Grünsby.  Survey of lot 10, in 4th Con. of Reach.  Survey of lots 29, and 30, in 7th Con. of Uxbridge  Survey of lots 29, and 30, in 7th Con. of Vxbridge  Survey of lots 29, and 30, in 7th con. of Vxbridge  Survey of lots 19, and 28, in 7th and 8th Cons. of Pympton.  Survey of lots 19 and 20, in the 1st and 2nd Cons. of Pympton.  Survey of lots 19 and 20, in the 1st and 2nd Cons. of Pympton.  Survey of lots 19, and 28, in 7th Con. of Reach  Survey of lots 19, and 20, in the 1st and 2nd Cons. of Pympton.  Survey of lots 19, and 20, in the 1st and 2nd Cons. of Pympton.  Survey of lots 10, 38, in 6th Con. of Reach  boundaryline of Cambridge.  Survey of the lots in the Municipality of Shuniah, Thunder Bay, through which the Pacific Railway line passes.  Survey of lots 15 and 21, in the 9th Con. of Orford.  Survey of lots 15 and 21, in the 9th Con. of Orford.  Survey of lots 15 and 35, in 9th Con. of Whitby.  Survey of lots 33, 34, and 35, in 9th Con. of Sandwich Bast.  Survey of lots 33, 34, and 35, in 9th Con. of Sandwich Bast.  Survey of lots 13 and 144 in 3rd Con. of Sandwich Bast.
	uctions.	\$2 \$2 \$2 \$3 \$3 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4
	No. and Date of Instructions.	116 6th January, 117 18th January, 118 4th February, 119 3rd March, 120 7th March, 121 31st March, 122 31st March, 124 22nd May, 125 22nd May, 126 22nd May, 127 22nd May, 128 12th September, 131 1st August, 132 12th September, 132 12th September, 134 21st September, 135 2th November, 136 1th November, 137 2th November, 137 2th November, 137 2th November, 137 2th November, 138 1st December, 137 2th November, 138 1st December, 138 1st December,
	No.	88 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	SURVEYOR,	C. G. Hanning Alex, Davidson C. G. Hanning W. B. Wadsworth W. E. Yarnold G. G. Hanning W. E. Yarnold Alex. Davidson J. H. Jones C. G. Hanning W. G. McGeorge W. G. McGeorge W. G. Yarnold C. G. Hanning D. R. Browne Hugh Wilson Henry Lillie W. G. McGeorge W. E. Yarnold C. G. Lanning D. R. Browne W. E. Yarnold C. G. Eanning D. R. Browne W. E. Yarnold C. G. Lanning D. R. Browne W. E. Yarnold C. G. McGeorge W. G. McGeorge Janes Warren W. G. McGeorge Janes Warren W. E. Yarnold John Shier E. O'Flynn R. W. Lsendrum
	No.	11

Thos. Devine,

Deputy Surveyor-General,

Department of Crown Lands,

TORONTO, 30th December, 1876.

# APPENDIX No. 32.

STATEMENT of Municipal Surveys confirmed during the year 1876.

Date when confirmed,	B., 26th January, 1876.  unph 214th January, 1876.  22nd February, 1876.  ph. 8th March, 1876.  Th April, 1876.  15th April, 1876.  14th May, 1876.  14th May, 1876.  14th May, 1876.  15th April, 1876.  15th August, 1876.  15th August, 1876.  15th August, 1876.  15th August, 1876.  24th June, 1876.  25th June, 1876.
SURVEY.	Survey of Lot No. 8 in the 3rd Con. of Uxbridge  Sophasburgh Survey of part of the boundary line between the Townships of Edwardsburgh Survey of part of the boundary line between the Townships of Edwardsburgh Survey of Lots from 16 to 34, on line between the 5th & 6th Cons. of Dawn. Survey of Lot 25, in Cons. 1, 2, 3 & 4, up to 14, in the Township of Biddulph. Survey of Lot 27, in 2, 3, 4 & 5 in 7th Con. A, and the 9th Zon. of the Township of Samia Survey of Lots 25, 28, 29 & 30, in 1st Con. Uxbridge Survey of Lots 27, 28, 29 & 30, in 1st Con. Uxbridge Survey of Lots 27, 28, 29 & 30, in 1st Con. Uxbridge Survey of Lots 21, in the 7th Con. Oxorty. Survey of Lots 13, 14, 15, 16, 17 & 18, in the 11th & 12th Cons. of Moore Survey of Lots 34, in the 7th Con. oxorty. Survey of Lot 33, in the 8th Con. Cartwright Survey of Lot 33, in the 8th Con. Cartwright Survey of Lot 33, in the 8th Con. Oxortyright Survey of Lot 33, in the 8th Con. Oxortyright Survey of Lot 34, in the 6th Con. of Uxbridge Survey of Lot 34, in the 8th Con. oxortyright Survey of Lot 34, in the E. Gore, Grimsby. Survey of Lots 34, 5 and 6, in the 4th Con. of Percy Survey of Lots 34, 5 and 6, in the 4th Con. oxortyright Survey of Lots 34, 5 and 6, in the 2th Con. Survey of Lots 34, 5 and 6, in the E. Gore, Grimsby. Survey of Lots 34, 5 and 6, in the 11th and 12th Con. South Norwich.  Lots H. and Li in the E. Gore, Grimsby. Survey of line between Lots 15 and 16, in 1st Con. South Norwich.
No. and Date of Instructions.	29th July, 1875. 31st March, 1875. 9th March, 1875. 18th November, 1875. 18th December, 1875. 19th April, 1875. 19th April, 1875. 19th April, 1876. 4th February, 1876. 4th February, 1876. 2th May, 1876. 2th January, 1876. 3th January, 1876.
No.	25. 25. 25. 25. 25. 25. 25. 25. 25. 25.
SURVEYOR.	C. G. Hanning. T. O. Bolger. C F. Chapman (transferred from J. L. Brown) Alex. Davidson John Shier. Alex. Davidson C. G. Hanning W. E. Yamold W. B. Wadsworth Jannes Warfen W. B. Wadsworth Jannes Warfen W. G. Wonham
No.	20 00 11 12 12 13 15 15 15 15 15 15 15 15 15 15 15 15 15

THOS. H. JOHNSON,

Assistant Commissioner.

DEPARTMENT OF CROWN LANDS, TORONTO, 30th December, 1876.

Deputy Surveyor-General.

THOS. DEVINE,

# APPENDIX No. 33.

STALEMENT of Mineral Lands which have been patented in unsurveyed Territory, on the North Shore of Lakes Superior and Huron, in the Districts of Thunder Bay and Algonia, during the year 1876.

No.	No. of Description.	PATENTEE.	DESCRIPTION OF MINING TRACT.	Acres.	Acres. Amount.	Date of Patent.
1	266	John McNaughton, D. McPhee,	John McNaughton, D. McPhee, Mining Locations, K 62, K 63, K 64, and K 65, near Round Lake,	336	\$ cts.	10th January, 1876.
3.3	066	Lachlan McLachlan, and William	Josephin (191, or Island O in Loch Erne, District of Thunder Bay	6.30	6 30	16th Pebruary, 1876.
ಣ	1,000	John McAree	Location 88 B, North-west of Mountain Lake, at the Head of Pigeon River, District of Thunder Bay	08	00 08	16th February, 1876.
7	1,013	William R. Ross	Locations 1 F, 2 F, 3 F, and 4 F, including Gold Islet, District of Thunder Bay	009	00 009	27th April, 1876.
10	1,018		Locations 34 H, 35 H, 36 H, 37 H, 38 H, North of the surrendered portion of Garden River Indian Reserve, District of Alguna	311	311 00	24th June, 1876.
9 1		Matt. Hale Wilkinson	Location 90 B, at the Head of Pigeon River, District of Thunder Bay. Location No. 17, N1, Figeon River, District of Thunder Bay	88	00 00 08 08	2nd October, 1876. 9th October, 1876.
2	1,028	Kindred,	Location 18 XII, Pigeon River, District of Thunder Bay	80	80 00	9th October, 1876.
6	1,029	B. Thurston, and	Location No. 19, XV. Pigeon River, District of Thunder Bay	80	80 00	9th October, 1876.
10	1,030		Locations 20 XI, 21 XL, 22 XL, 26 XI, 27 XI, Pigeon River, Dis- trict of Thunder Bay	618	618 00	12th October, 1876.
11	1,031	John McGuire	Locations 23 XL, and 24 XL, near Arrow Lake, Pigeon River, District of Thunder Bay	160	160 00	17th October, 1876.
12	1,032	George Alderson	Location "JS," and Stobies Island, Portlock Harbour, District of Alcoma	407.50	407 50	20th October, 1876.
13	1,033	George Calvin Stone	Locations K 144, K 145, and K 146, North-west of Mountain Lake, Pigeon River, District of Thunder Bay.	818	218 00	23rd October, 1876
14	1,034	J. H. Baker, D. A. Montfort, et. al.	D. A. Montfort, Location K 153, North-west of Mountain Lake, near Pigeon River, District of Thunder Bay	41.77	41 77	23rd November, 1876.
15	1,035		Locations K 149, K 150, K 151, and K 152, North-west of Mountain Lake, District of Thunder Bay	443,47	443 47	23rd November, 1876.
			Cross Total	3,542.04	3,542.04   \$3,542.04	
	T	THOS. DEVINE,	THOS. H. JOHNSON	н. лон	NSON,	
		Denutu Surveyor-General	mered.	N V	sistant C	Assistant Commissioner.

Deputy Surveyor-General.

TORONTO, 30th December, 1876. DEPARTMENT OF CROWN LANDS,

#### APPENDIX No. 34.

STATEMENT of Work performed in the Survey Branch during the year 1876.

No.		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 Instructions and letters of instruction for Crown Survey 20 Crown Surveys examined, completed, and closed. 20 Surveyors' accounts for Surveys audited and closed. 23 Reports to Council relative to Municipal Surveys drawn 23 Instructions for Municipal Surveys prepared and enter 21 Municipal Surveys examined and confirmed. 15 Plans of Mining Locations examined. 16 Plans of Private Surveys examined. 76 Plans to accompany instructions prepared. 405 Plans compiled and copied, besides plans of townships r maps. 491 Letters relative to Surveys prepared, written and entered. 30 Mining letters prepared, written and entered. 3,150 Pages of Field-notes copied. 84 Railway Plans and books of reference examined and cer 2,535 Patents issued during the year ending 31st December, 1	a up and entered. red.  reduced and added to the engraved d.

Note.—The foregoing statement does not account for the time spent in furnishing information to parties applying personally at the Surveyor's Branch, who are unable to gain the information they require without the assistance of the head of this Branch, and then much careful research into the old correspondence, plans, field-notes, and other documents is necessary, in order to insure reliability in the information given, which is frequently used as legal evidence in courts of law in disputed cases.

THOS. H. JOHNSON,
Assistant Commissioner.

Thos. Devine, Deputy Surveyor-General.

DEPARTMENT OF CROWN LANDS, TORONTO. 30th December, 1876.

#### APPENDIX No. 35.

STATEMENT of the Names of Candidates who have passed their Examinations before the Board of Examiners of Land Surveyors for Ontario during the year 1876.

#### PRELIMINARY CANDIDATES PASSED.

Charles John Hamilton.
Sauger Munro Brown.
Matthew Neilson.
Thomas Ainslie Young.
Frederick William Fowlds.
David Waugh.
Robert Francis West.
William Linden Brown.
Thomas Smithson Hill.
John Pattison Telford.

Alfred Edmund Morris.
David Gibson.
Richard Coad.
Archibald William Ponton.
Franklin Eugene McCallum.
Conrade Whitley Lally.
Frederick Charles Rolls.
Willis Chipman.
Wolstan Nathaniel Small.
Robert B. Miller.

#### FINAL CANDIDATES PASSED AND SWORN IN AS PROVINCIAL LAND SURVEYORS.

Otto Julius Klotz.
Henry Walter Selby.
Joseph Alfred Carbert.
William Albert Browne.
John Henry Ogilvie.
James Keachie McLean.
William Mazyck Manigault.
Allan George Cavana.

John Strathern.
Balfour Nepean Molesworth.
Lauchlin Alexander Hamilton.
Isaac Lucius Bowman.
Richard Purdom Fairbairn.
Robert Miles Bonfellow.
Herbert Champernoun Denny.

The Board of Examiners of Land Surveyors for Ontario meets at the Office of the Commissioner of Crown Lands, on the first Monday in each of the months of January, April, July, and October, in every year, unless such Monday be a holiday (in which case it meets on the day next thereafter, not being a holiday). 22 Vic., cap. 77, Consolidated Statutes of Canada.

#### PRELIMINARY EXAMINATION.

All persons, before they can be [apprenticed to a Provincial Land Surveyor, must pass a satisfactory examination before the Board of Examiners in the following subjects, viz.:—Vulgar and Decimal Fractions, Extraction of Square and Cube Root, Practical Geometry, Euclid, Plane Trigonometry, Mensuration of Superficies, and the use of Logarithms; good Spelling and Writing required.

#### FINAL EXAMINATION.

Final Candidates, before obtaining a License to practice, undergo a strict and searching examination by the Board of Examiners, as to their proficiency in Euclid; Plane and Spherical Trigonometry; Calculations of Areas by means of the Traverse Tables, &c.;

Laying out and Dividing up of Land; the Adjustments and Use of the Transit or Theodolite; Astronomy, including the calculations necessary to determine the Latitude by meridian altitudes of the sun, moon, or stars, or by double altitudes; Method of determining Time; of finding the time when any star passes the Meridian, with the time of its Elongation, Azimuth Angle, and Variation of the Compass; the Method of Keeping Field Notes; Drawing up Descriptions by Metes and Bounds for insertion in Deeds; taking Affidavits in the matter of Disputed Boundaries; the Law regulating Surveys; Geology; and also as to their proficiency as Draughtsmen.

#### THOS. H. JOHNSON,

Assistant Commissioner.

THOS. DEVINE,

Deputy Surveyor-General.

Chairman of Board.

DEPARTMENT OF CROWN LANDS, TORONTO, December 30th, 1876.



## SECOND ANNUAL REPORT

OF THE

### ONTARIO

# SCHOOL OF AGRICULTURE

AND

# EXPERIMENTAL FARM,

FOR THE YEAR ENDING 31ST OCTOBER,

1876.

Printed by Order of the Legislative Assembly.



#### Toronto:

PRINTED BY HUNTER, ROSE & CO., 25 WELLINGTON STREET WEST. 1875.



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### REPORT

OF THE

# ONTARIO SCHOOL OF AGRICULTURE

AND

#### EXPERIMENTAL FARM.

FOR THE OFFICIAL YEAR ENDING 31st DECEMBER, 1876.

ONTARIO SCHOOL OF AGRICULTURE, GUELPH, December 1st, 1876.

To the Honourable the Commissioner of Agriculture:

Sir,—Along with my colleague, Mr. Brown, I have the honour of submitting for your consideration the Second Annual Report of the Ontario School of Agriculture and Experimental Farm for the official year beginning 1st November, 1875, and ending 31st October, 1876. It will be given under the following six divisions:

- A. Introduction.
- 1. The School.
- 2. THE FARM.
- 3. Experiments.
- 4. THE FINANCIAL STATEMENT.
- 5. RECOMMENDATIONS.
- 6. Appendices.

The second and third belong more properly to Mr. Brown; and, leaving those entirely to him, I shall confine myself exclusively to the remaining four sections of the Report.

#### A.—Introduction.

The Institution known as "The Ontario School of Agriculture and Experimental Farm," is situated about a mile to the south of the Town of Guelph. The Farm consists of 550 acres, about 400 of which are cleared, and is composed of almost every variety of soil. It is in the centre of an extensive agricultural district—one unrivalled in the Province for the raising of stock. Readily accessible by rail from all parts of the Province; in close proximity to a town at once one of the finest grain and stock markets in Ontario; noted, besides, for the strong moral and religious tendencies of its people, no site could have been found more eminently suited for the establishment thereon of such an Institution.

Immediately upon obtaining possession, the Government appointed a Commission to inquire and report regarding the manner of adapting "the said farm and management and control thereof, to the purposes of a model and experimental farm." A few extracts from the Report of this Provincial Farm Commission will show clearly the basis upon which the Institution is at present established.

"The name of the Institution should be 'The Ontario School of Agriculture and Experi-

mental Farm.'

"The objects of the Institution should be :—First, to give a thorough mastery of the practice and theory of husbandry to young men of the Province engaged in Agricultural and Horticultural pursuits, or intending to engage in such; and, Second, to conduct experiments tending to the solution of questions of material interest to the Agriculturists of the Province, and publish the results from time to time.

"That the Farm should be separated into five distinct departments, namely:-

"(1) The Field Department.

"(2) The Horticultural Department. "(3) The Live Stock Department.

"(4) The Poultry, Bird and Bee Department.

"(5) The Mechanical Department.

"All permanent improvements on the Farm should be carried out on a gradually developed system, and in such a manner as to exhibit and test the comparative values of the most approved method of executing the several works, and to test the cost, convenience and durability of the several appliances from time to time recommended for adoption on the farms of the Province.

"That for some time to come the work of the Farm must be mainly confined to the preparation of the fields and buildings for the systematic instruction of the pupils; that the knowledge that might be acquired from these preparatory operations would be most valuable to the pupils; that the labour of the pupils ought, therefore, to be employed as far as practicable in those preparatory operations; and that it is expedient to provide at present merely for the conduct of the Institution during this preparatory term, and utilize the practical experience obtained from it in settling hereafter the permanent organization and educational curriculum."

In order to carry out those recommendations of the Provincial Farm Commission made in January, 1874, such improvements were begun on the residence found on the place as would best utilize it for the intended purposes. Accommodation was provided for about twenty-four pupils; a principal and a rector were appointed, and a foreman for each of the following four departments engaged:—

- 1. THE FIELD DEPARTMENT.
- 2. THE LIVE STOCK DEPARTMENT.
- 3. THE HORTICULTURAL DEPARTMENT.
- 4. THE MECHANICAL DEPARTMENT.

The Institution was opened in May, 1874, and its history since that time may be gained from the two Reports which I have had the honour to transmit to your Department. It may not be amiss, however, in this brief summary to record the progress that had been made prior to November, 1875, towards the accomplishment of the ends specified in the preceding extract.

The fences on the twenty acres lying in front of the buildings, facing the Dundas Road, had been taken down, and that area turned into lawn and gardens. Some of the fields had been cleaned and underdrained, and the beginning of a system of rotation had been made. Various repairs and alterations on the farm buildings had been completed, in order to render them more suitable for the purposes to which they were to be applied.

A mansard roof had been placed on the main College building, giving accommodation for sixteen additional pupils, and a Veterinary School building, undertaken by the Agricultural

and Arts Association, was in process of erection.

The school had been organized by laying down a curriculum containing the subjects of study, dividing those subjects into distinct departments, and obtaining lecturers for each department. A glance at Appendix A will show what the course of study was, and an

examination of my previous Reports will convince any one that the curriculum had been faithfully observed and successfully carried out. Having premised this much, I will now pass on to the consideration of the twelvemonth's work.

#### 1. The School

When last I had the honour of sending a report regarding this branch of our work, we had in attendance 32 pupils; and, as may be seen by the following Table, these came from no particular district, but were from almost all parts of the Province:—

Counties. Carleton Elgin Frontenac Halton Hastings Lincoln Oxford	1 2 3 . 1 1	Peterboro'. Renfrew. Wellington. Wentworth. Waterloo. York.	. 1 . 6 . 1 . 2
Toronto City England	*	4 Pupils. 3 do.	

As Professor Buckland, who, during the previous winter and spring, had been our lecturer on agriculture, was unable, owing to a severe attack of illness, to proceed any longer with the work, the services of Mr. William Brown, our present Professor of Agriculture, were obtained as lecturer for the Fall term of the Winter Session.

Regular lectures were daily delivered during the term by Mr. Brown, Dr. Baptie, Dr. Grange, and myself on the subjects respectfully of Agriculture, Chemistry, and Physiology, Animal Anatomy and Natural History. As there were in each department, with the exception of Agriculture, a first and a second year, of course a double number of lectures on each of those subjects was given. The regular terminal examinations were held at Christmas on the subjects of study already mentioned, when the students showed by passing, satisfactorily in the great majority of cases, the requisite examinations, that the three months' school work had not been in vain. During the recess the school work was divided into the following departments:—

#### I. AGRICULTURE.

II. Science. { 1. Chemistry and Geology. 2. Natural History.

III. ENGLISH AND MATHEMATICS.

IV. VETERINARY SUBJECTS.

The gentlemen who had formerly acted as lecturers on the several subjects, were appointed as Professors to take charge of the various departments. Mr. William Brown was appointed Professor of Agriculture; Dr. Baptie, Professor of Chemistry; Dr. Grange, Professor of Veterinary Science; and to myself, appointed President, was committed the departments of Natural History, English, and Mathematics. To fill up the accommodation, an addition of four was made to our number at the beginning of the year, one each from the Counties of Brant, Huron, and Northumberland, and one from Toronto City.

The regular work of the four departments above mentioned was continued during the winter months. A glance at the questions contained in Appendix B will show what the subjects treated of included. It may be proper to mention here that during the winter half the students devoted their whole time to study, whilst the other half spent but the afternoon and evening at it, and the forenoon at outside work. The half that was out one forenoon remained in the school-room the next, so that outside instruction was given only every other forenoon—a time quite sufficient to overtake all the work of a farm during the winter season. During the forenoon the study of English and Mathematics was carried on, though owing to

the shortness of the period-three months-only to a limited extent. Yet what was done proved beyond a doubt the absolute necessity for such a department in an Institution like this. The entrance examination to a High School, which is our standard for admission, is not high enough to ensure a fair English education, or an education sufficient to enable the possessor to carry on successfully the business of a farm. And in some of our rural sections, whence our best pupils are drawn, possessing perhaps a female teacher with a third-class certificate, that standard is barely reached. During the last week of March, the work for the scholastic year 1875-76 was finished by a five days' written examination on the subjects of Agriculture; Inorganic, Organic, and Agricultural Chemistry; Structural and Physiological Botany; Zoology and Geology; Veterinary Anatomy; Physiology, Materia Medica, and Pathology; English and Mathematics. Those who answered over seventy per cent. of the questions were placed in first-class; over fifty in the second, and over forty in the third. The class-list, containing the names arranged in order, will be found in Appendix C. On the day after the close of the written examination, the 30th March, the closing exercises of the school for the scholastic year 1875-76 were held, at which the leading local agriculturists and representatives of the press were present. As you were yourself present, I need not inform you of the success attending the meeting. The prizes were distributed to the successful competitors, and words of congratulation and encouragement spoken to all. The school was declared by yourself closed until the 18th of April.

Between the first and the eighteenth of April the following advertisement was occasionally

inserted in a few of the leading newspapers :--

#### "ONTARIO AGRICULTURAL COLLEGE."

"The Scholastic year of this Institution commences on the 18th of April, when there will be openings for twenty students,

"With a full staff, the Institution is prepared to give an agricultural education such

as can be given by no other in the Dominion.

"For full particulars regarding terms of entrance, &c., send for circulars to the undersigned, by whom applications for admission will be received until April 16th.

"WM. JOHNSTON,

" President."

Sixteen of the previous year's students remained, and from amongst the applications received in answer to the advertisement, twenty were selected in order to fill up the vacant rooms. An important change was made in our school work during the Spring Term. The students were divided into two divisions—a senior and junior. Whilst the one of these received outside training, the other was receiving inside instruction. The seniors were working one week in the forenoon and studying in the afternoon, whilst the next week the order was reversed. The same arrangement was followed by the juniors. So that in this way the teaching began at nine in the morning and ended at five in the afternoon. This threw additional work on the teachers, but gave a fine opportunity for practical training outside. And as this is our weak point, I was determined that no matter at what cost, every opportunity should be given to those in charge of outside instruction to overcome it.

Lectures on the subjects prescribed by the curriculum for the first and second years were proceeded with. Mr. Brown lectured upon Agriculture to both years together; Dr. Baptie took up with the first year, Chemical Physics and Inorganic Chemistry; with the second, Practical Chemistry; Dr. Grange gave to the first year, Veterinary Materia Medica, and to the second, Veterinary Therapeutics; whilst in my department there was taken up with the first year, Structural and Physiological, and with the second, Systematic and Economic Botany. The School work of the Spring Term of the Summer Session was closed by a three days' written examination held at the end of June. Owing to the heated term that extended through the most of that month, the students did not pass so creditable an examination as they would otherwise have done.

For the next two months all School work was suspended, and the students were en-

gaged in the harvest field; whilst I was employed during Mr. Brown's absence to Britain,

in managing the Farm.

During the month of September—our holiday month—an advertisement was inserted once or twice in a newspaper or two, informing the public that there were some vacancies to be filled. On October 1st, our Winter Session commenced. Of the old students, twenty-one remained, and from amongst the applications already on the file and those received in answer to the advertisement, nineteen were selected to fill our rooms. They represented almost all portions of the Province, and were of different denominations, as may be seen by the following table:—

Counties. Pupils. Counties. Pupil	ls.
Dundas 1   Middlesex 1	
Essex 1 Northumberland 1	
Halton 2 Ontario 1	
Hastings 3 Peel 1	
Huron 2 Renfrew 1	
Kent 2 Simcoe 1	
Lanark 1 Wellington 5	
Lambton 1 Wentworth 1	
Lincoln 1 York 1	
Toronto City.       2         Kingston City.       2         Ottawa City.       2         England.       4         Province of Quebec.       1         Province of Nova Scotia.       2	
Religious Denomination.	
Roman Catholic	
Church of England	
Presbyterian	
Wesleyan Methodist	
Baptist 2	
Plymouth Brethren. 1	

Work was commenced on the first week of October, and has been steadily continued ever since. The students are now being taught the subjects laid down by the curriculum. The first year is receiving lectures on Agriculture, Chemistry, Zoology, Animal Anatomy with Physiology, and Book-keeping; and the second year on Agriculture, Chemistry, Entomology, Meteorology, Veterinary Pathology, and Book-keeping.

On the whole, the assertion may confidently be made that the results in the class-room during the past year have been satisfactory, and have shown that the curriculum established is both practical and thorough. At the same time a few lessons have been learned and noted for guidance in future arrangements. These will be referred to in their proper

place, under the heading of recommendations.

Although not directly pertaining to school-work, yet as closely connected therewith as a boarding school, it may be proper to mention here that the household matters have been carried on under the management of the efficient housekeeper, not only with economy, but likewise with undeviating regularity and punctuality. The conduct of the pupils during the year has on the whole been excellent. Difficulties to be settled by tact or even by severe measures, there have been, and always in a place like this, there will be, but violations of rules or regulations have been few and far between.

The Veterinary School Building, of which I spoke in my last Report, has been finished during the year. With the money granted by the Agricultural and Arts Association, and the small amount appropriated by Parliament for its completion, there has been erected a

building forty by fifty, with basement, two stories and a mansard. The height gained by the latter has been thrown into the second story, which thus makes a large lecture room forty-seven by thirty-seven, with a twenty foot ceiling, in addition to the rooms required for the Veterinary Department. These are the basement and the ground floor, the former occupied as a dissecting room, and the latter by a lecture room and a small working laboratory. The building is of the same architectural design as the present College Building and is intended to form one wing of a main College, with a frontage of two hundred and forty feet. This structure is used entirely as a school; and the other class-room, has been changed into what was formerly urgently needed, a library and general reading-room. The latter was supplied during the year with the following papers and periodicals, either by ourselves or by the College Literary Society :-

> Toronto Globe, (daily), Mail, " Guelph Mercury, " " Herald, " Canada Farmer, Farmers' Advocate, American Agriculturist, Chicago Live Stock Journal,

Scientific American. Mark Lane Express, North British Agriculturist, Irish Farmers' Gazette, Country Gentleman. Canadian Illustrated News, Harpers' Monthly, Grip,

And the following Periodicals are placed each Sabbath on file:-

Sunday Magazine, Good Words, Quiver,

Family Treasury, Leisure Hour, Sunday at Home.

I cannot close this brief record of the year's work in the school, without expressing my sense of the loss that the Institution has received by the removal of the Professor of Chemistry, to the Science Mastership of the Ottawa Normal School. And my feeling is in no degree mitigated by the knowledge that the cause of the removal on his part was, simply financial improvement. For certainly it is neither just nor reasonable that the Science Master in a Normal School, who teaches only the barest rudiments of Natural Philosophy, Physiology, Chemistry, and Botany, should receive even so large a salary as the Science-Master here, who has under his charge a wide portion of Chemistry, including Inorganic, Organic, Agricultural, Practical and Analytical; a wide range of Natural History, besides the special subjects of Economic Botany and Entomology, together with Geology and Meteorology. There is no comparison between the attainments required in the two Institutions, and no reason based on justice can be adduced for the payment of a higher salary in the former than in the latter.

> ONTARIO SCHOOL OF AGRICULTURE, December 1st, 1876.

SIR,—I have the honour of submitting the following Report on the departments of this Institution under my charge, for the official year ended 31st October last, in which I shall adopt nine divisions, thus :-

I. INTRODUCTORY.

II. THE FIELD.

III. THE LIVE STOCK.

IV. THE GARDEN.

V. MECHANICS.

VI. EXPERIMENTS. VII. INSTRUCTION.

VIII. RECOMMENDATIONS.

IX. INVENTORY AND VALUATION.

#### I. INTRODUCTORY.

It will naturally be expected that, in the first Report by a new management, of what has in so short a time given itself so much history, some notice should be taken of how matters stood at the date of introduction. This I shall do in few words:-

A farm of 550 acres, parallelogram shape, with one-half free of stumps, and under cultivation, situated on an average 850 feet above Lake Ontario; void of any tree shelter on the principal parts; the fences all old except one-fifteenth; one-tenth of the land naturally wet, one-third of it a light shallow loam, resting on gravel, the remainder a good average clay loam—the one predominating in the hollows, the other on the higher parts-many of the fields abounding in stones, loose and fast, and dotted with mounds of gathered ones, and not a few spots hot-beds of thistles. I found a large scattered steading of offices, well built of stone and lime, having a big wooden double barn in the centre, with the usual cattle stalls below, and adjoining root cellars. The three detached stables, as well as the sheep pens, piggeries, and bull sheds, have no communication with the barns. Lying south-west and north-east, the farm is wholly surrounded by public roads, and about a third cut off the south by the Dundas road, running south-east and north-west, while a private one is partly constructed in a line parallel to the length, cutting the fields in two, as shown in sketch under "The Field" department.

Four detached and valuable clumps of timber occupy 56 acres of the area named, with 15 acres of swamp bush. There are no continuous streams of water, but the fields are provided with four, and the steading with three wells. One good stone, one brick, and three poor wooden houses are scattered over the property, while three ruined barns, told of former detail occupancy in connection with the six orchards still standing.

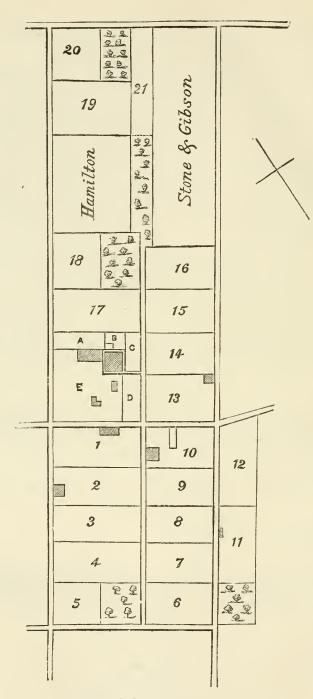
I soon found that, much as had been done, and that well, by my predecessors, very much was wanting to make even a fair beginning in some things; and while I had clearly in view to avoid that which would not be either educational, progressive, permanent, or economical, I must necessarily bow to circumstances for some years, until a growing plan would mature itself. Money can do much, but time must guide most of our agricultural operations.

#### II. THE FIELD.

The first important duty here was the adoption of a system of cropping, suited to local peculiarities—a system subject, of course, as any must be, to unforeseen circumstances, whether seasonal, accidental, or that may arise in the march of improvements. The following will, therefore, be our rotation guide :--

- 1. Pease.
- 2. Wheat or Oats.
- 3. Roots.
- 4. Barley, (seeded down).
- 5. Hay.
- 6. Pasture.
- 7. Pasture.

Then came the sub-division of the farm in accordance with such system, and in order to secure yearly variety of subjects for the same crop, I found that 21 fields, or three to each standard, could conveniently be made to suit all circumstances, as thus sketched:



EXPERIMENTAL FARM, GUELPH.

It will be observed that certain small fields, A, B, C, D and E, are excluded from the regular farm division; these adjoin the buildings. A being in prospect for an orchard, B is required as a convenient run for small animals, and is partly taken up with the carpenter's shop and yard, while C is the permanent experimental plot; D being the kitchen garden, and E the pleasure grounds.

In future, therefore, the farm fields will be referred to according to their numbers, and

the total area is accounted for thus:

D 1		
Roads	12	Acres.
Houses and Gardens	9	4.6
Prospective Orchard	6	44
Paddock	2	"
Experimental Plot	5	44
Kitchen Garden	5	66
Pleasure Grounds	28	66
Swamps	15	66
Woods	56	66
	138	66
21 Fields	412	66
	550	66

Our fields accordingly average a little under 20 acres each, but of course it must be remembered that much of the workable surface is still taken up by zig-zag fences. Of the 412 acres, 102 are in an unreclaimed condition, as represented by fields 3, 4, 6, 12, 15 and 20, while the greater part of 14 has just undergone a summer fallowing in preparation for next summer; 16 acres are old pasture, or what was once cultivated, 24 being from recent hay.

Before proceeding to account for the crops of 1876, it is necessary to premise that large allowances must be made for certain crops, by reason not only of former poverty, but also of an irregularity of fields, in consequence of the new subdivisions, and of the want of live stock for the production of farm yard manure; these, with an unusually dry August for root cul-

ture, should be carefully considered in estimating quantities per acre.

The following Table shows the nature and quantity of the crop in each fie d:-

#### CROPPING SEASON 1876.

No. of Field.	Area.	Extent of each Crop.  Acres.	Nature of Crop.	Estimated Quantity.	Remarks.
1	$20 \begin{cases} \\ \\ \\ \\ 19\frac{1}{2} \end{cases}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	Old pasture. Turnips. Mangolds. Carrots. Potatoes. Rape. Rape. Maize.	1,350 Bush. 800 " 650 " 600 "	Eaten on ground.
3 4 5	$ \begin{array}{c} 20\frac{1}{2} \\ 20\frac{1}{2} \\ 13 \end{array} $	$   \begin{array}{r}     10 \\     5 \\     13 \\     2\frac{1}{2}   \end{array} $	Turnips. Oats. Pease. Old grass Old grass. Hay.	2,700 B. 160 " 400 "	out for founding
6 7 8	$   \begin{array}{c}     13 \\     20 \\     \hline     20 \\     20 \\     \hline     20   \end{array} $	$\frac{20\frac{1}{2}}{2}$	Old grass. Hay. Hay.	15 Tons. 27 T. 38 "	

#### CROPPING SEASON 1876 .- Continued.

No. of Field.	Area.	Extent of each Crop.  Acres.	Nature of Crop-	Estimated Quantity.	Remarks.
9 10 11 12 13 14 15 16 17 18 19 20 21	20 181 19 211 23 { 221 221 18 { 23 13 14	19 21 ½ 3 20 10 12 ½ 22 1 22 ½ 5 13 23	Pease. Oats. Barley. Old grass. Wheat. Oats. Old grass. Fallow. Old grass. Barley. Cultivated past're Old grass. Turnips. Fay. Old grass. Rye.	600 B. 900 " 800 " 30 " 700 " 400 B. 2.100 B. 20 T	2 acres cut for fodder.

From this Table it appears we have had of:-

Peas	33	Acres.
Cereals	100 1/2	66
Roots and Corn	45	66
Hay	761/2	46
Cultivated pasture	421/2	66
Uncultivated	102	66
Fallow		
	110 1	
	412 A	cres.

The area at present under cultivation is, therefore, 298½ acres, which, with field 14, and parts of 1 and 3, will make next year about 330 under the plough.

It may be interesting to shortly sketch the treatment, progress, and condition of the various

crops during the past season.

Golden vine peas, of our own previous growth, were a good crop—strong in straw—from old turf newly broken up—both on a thin soil and on that of a deeper and more loamy character; the blue-eyed marrowfat, and Prussian blue, got for experiment, did not receive such

treatment as justified a report this year.

The three acres of spring wheat were of five varieties, so called, as Golden Drop seems to be identical with Fife. Upon a piece of good light loam, previously summer-fallowed from old grass, neither these nor the McCarling, Farrow, and Russian Baltic made even fair progress, either in straw or grain. The McCarling filled best, the bearded Baltic became shrivelled, showing little substance, and the Farrow was badly rusted. The latter is characterized by a strong, bold, and rather coarse head.

Oats were an excellent crop, both on the same field with the wheat and on No. 10, which had previously been under rape and oats. The Brazilian (white) had a good well-filled head, with strong straw; the New Zealand did not fill well; the Black Tartarian, from our own seed, was only fair in straw and grain, while that from Orillia was much better filled, and that direct from Scotland made a good beginning, looking strong and healthy, but having the disadvantage of a piece of recently reclaimed swamp, with a wet, turfy bottom, where it was

also attacked by wire-worm, the result is meantime unsatisfactory. It may be mentioned that an application of common salt had a good effect in destroying the worm. The Hopetown oats were a heavy crop, and what was received as the English (or White) Tartarian, while showing a poor weak straw, had a very fair head, that had to be early cut. This latter re sembles the common potato oat so much both in berry, straw, and character of growth, that I question the name sent.

The barley from field 11—well cultivated turnip land in 1875—was good in all respects; and that on 16 stood under an average, in consequence of much natural wetness, and late sow-

ing by late possession from a survey dispute.

The rye, from fall sowing, while partly winter killed, or drowned on wet spots, was very even, and gives a fair return. The abundance of pasture prevented the crop from being eaten

off by sheep as purposed.

All our roots were upon land that had been under cereals from a previous crop of pease taken from old grass. The soil of fields 1 and 2 varies very much in a depth of earth resting upon pure gravel—the gravel breaking out in bold knolls, making hollows of a wet character, but deeper loam than the average. Here the treatment—upon two ploughings of the previous fall—consisted of 20 loads of farm-yard manure, 100 lbs. superphosphate, 200 of salt, and 200 bls. of plaster (gypsum) per acre, applied broadcast before drilling, to nine acres of Swedes, consisting of Skirving's purple-top, Rennie's prize purple-top, Sharpe's prize Swede, and Sutton's champion. On about two acres the manures were applied in drill. With the exception of Skirving's, which were fairly ahead, little distinction could be made, either in

seeding, maturing, or weight of the others.

Field 18 is above an average of the farm, being one of the higher lying, and therefore consisting of a heavier loam. On this Skirving and Greystone were sown with farm-yard manure and bone dust in drill to four acres, and similar manure broadcast to seven acres, which were ploughed twice before drilling; weleft two acres treated only with farm-yard manure broadcast, in order to test the application of bone dust. The present crops show no difference in favour of either manure, nor between drill and broadcasting of farm-yard manure. Much of this may have arisen from the peculiar season, and of course the future effects of different modes of applying different manures, will, in this instance, be attended to. These remarks apply to the Skirving turnip, as the Greystones unfortunately were a failure. The field is surrounded by a public road, two fields of old grass, and one of bush—the Greystones adjoined the bush and one of the old grasses, the Skirvings both. The latter were affected by no pest or disease, while the others were almost totally destroyed by an insect attack; this was worse at the junction of the bush and old grass. None of Skirving's were affected, although odd plants stood among the others. Fully three acres did not return one sound root. It is fair to mention that despite the dry season, we had a very fair crop of turnips on the moist deep hollows that had been recently drained.

Mangolds were a comparative success, both on hill and hollow; the far-reaching habit of this plant and adaptability to warm climates gave it an advantage over the turnip this season. Both the Long Reds and Yellow Globes were fair crops, as were also the sugar beet

under like conditions, although they had a decided inclination to sporting.

On the same field were also over two acres of carrots—Altringham and White Belgian; part received superphosphate, and another part no manure whatever. Those manured took a decided lead—in both conditions the Altringham being inferior.

Early rose potatoes were a very fair crop, both in size and quantity, upon a good deep loam on No. 1 field. The Bug came early, seemed to go off early; at least few were seen in drilling, but afterwards made much damage. Paris green was applied.

Much of the hay crop, both of timothy and clover, had started with many blanks the previous year, and, though re-seeded, could not, of course, give more than a fair cut even

with the favourable season, as 100 tons from 76 acres cannot be called satisfactory.

It will be observed that No. 17 is the only cultivated pasture on hand this year, with other detached spots throughout, which, being three years old, and fully one-third of the surface occupied by thistles, cannot be taken as a specimen of what may have been or should be. We depastured this with sheep on cake and corn, in preparation for next year's breaking-up.

We had such a rush of old grass on the uncultivated portions in early spring, and so few stock to keep it down, that fields 6, 12 and 20 were rented to neighbouring farmers.

ridge of gravel and a "muck-hole;" in the one case plants were stunted, and in the other could not be sown; elsewhere, however, the crop was good. The corn stood heavy on the

ground, was cut in good season, and well secured.

We were unable to supply the large demand for wheat (Fife) and golden vine pease, which, besides being good of themselves, were specially prepared as seed. A considerable quantity of barley was also disposed of, and for next season I already hold several applications for seed grains. There is no intention, meantime, of doing more in the growth of seeds other than a first-class farmer should; and what has drawn attention to ours is simply the fact of grain true to their kinds, with particular cleaning and a guarantee of soundness.

With reference to improvements, for which no allowance was made in the estimates of 1875—work done by our own hands as opportunity permitted—I have pleasure in drawing attention to the completion of several drains in fields 1, 2, 9 and 10, where, with a balance of tiles on hand, we were enabled to fill up old open ditches that cut fields awkwardly, and to finish several outlets to those of the previous year; as much as 200 rods have been thus treated. Then, again, we have been levelling abrupt hollows from gravel knolls, making a workable surface of the sites of old barns and houses, as well as grading roads, from the gathering of field stones, in preparation for gravelling. The stumping and summer fallowing of the greater part of field 14 has been a work of considerable value, both as an addition to the farm and as a lesson to students.

Were an attempt made to arrive at a close approximation of how the farm stands as a self-sustaining one, several important figures would come under review. I have no intention of making such an attempt at present, both for its inutility and impracticability. Until the land is a farm in the modern sense, this is not required; yet, in order to show how much may, and does, go uncredited as a fair natural consequence of our position of many members making one family, let the following be considered:—

Horse work for College, for year	\$150
Cord wood for garden, College, &c.	90
Keep of garden and College horses	275
Manure for garden	100
Use of implements in garden, &c	60
Horse work and manual labour at permanent improvements	350
Keep of extra team of horses for educational purposes	200
_	
,	\$1,225

#### III. THE LIVE STOCK.

When I took office in January last, there were only 26 head of cattle and 156 of sheep on the premises; so, when spring came, 114 grade shearling wethers had to be purchased, to keep down grass, and fatten. These are still on hand,—some will be disposed of at Christmas, the majority will have to be fed over winter, as they made little progress after the pastures failed. We fattened six cattle during winter, with what result will be seen under Finance.

The prices realized for various live stock sales will be seen under the same head. We had a ready market for shearling Cotswold rams, from \$30 to \$50; of the Southdown lambs, from \$15 to \$25; and of young Berkshire boars, from \$15 to \$25 each. We are maintaining our purity of Berkshire, by service from the Messrs. Snell's stock, and have just purchased a

first class newly imported young boar.

In March we began a stock of poultry by the purchase of one cock and two hens of each of the following sorts:—Houdan, S. S. Hamburgh, Black Spanish, Dorking, P. Rock, Partridge Cochin, Light Brahma, and Dark Brahma, along with an assortment of common poultry, and pure Rouen ducks. Owing to over-confinement in the severe weather, among the cattle, where we had to place them until proper accommodation could be arranged, several of the pure breeds died, and though a considerable number of eggs were obtained, and breeding set afoot, little success was made,—for reasons not very evident, nor probably practically understood. Now, however, we look for more success, having placed this department under special charge.

We have had a bull calf from Louan, of Brant the 5th, a heifer from Martha—both

good in points and doing remarkably well, while our third native pure short-horned cow, Cambridge 10th, dropped a bull calf—yet too young to require other notice.

Our success in sheep breeding has been barely an average, -with Cotswold, fifty per

cent.; Leicester, 190 per cent.; and with Southdowns, seventy-five per cent.

In accordance with your instructions of the 17th July last, I proceeded to Britain in order to purchase more live stock, according to a memorandum agreed upon. Leaving this on the 18th, and Quebec on the 20th July, I arrived at Liverpool, on the 1st August, and at once made an inspection of several herds and flocks in England and Scotland—selecting those that have taken a prominent lead of late years, and with the most of which I was previously acquainted. Having made a careful estimate of the cost of transit by rail and ship, as well as numerous incidental expenses, and waiting advice from you with reference to the particular family of short-horns from which to make choice, I gave my attention to the other breeds required—making purchases thereof subject to what I would be able to accomplish financially after settlement of the short-horns.

On receiving a telegram that there was "no advice regarding Durhams" I was necessarily placed in a somewhat awkward position—having to take upon myself the entire responsibility of choosing a class of cattle now so various, even in their distinctly characteristic families, and so evenly divided in merit by their respective admirers. Looking at the question from a purely independent and unprejudiced stand-point, and desirous only of one thing—the success of our farm, I decided to purchase the best general purpose short-horned animals of any blood, strain, or family that I could obtain, and that were at the same time thoroughly pure,

of unblemished pedigree, and within the means at my command.

As it may appear rather singular why I did the greater part of my business at the farms of the Queen, and two of the titled aristocracy, I feel called upon to state that in the most of cases I found farmers inclined to overvalue their animals—it may have been to a Government representative,—while, on the other hand, landed proprietors, having equally good stock, were disposed to secure our orders, both for the sake of their own names, and probably as being more interested in the success of our School.

The animals bought, stand for their respective degrees of merit, and as each voucher contains a pedigree, there can be no difficulty in judging of the nature of my selections. You will observe that preceding the pedigree is a warranty of each animal being free of disease and

any physical defects.

I beg further to state, that all the animals are either direct prize-takers, or are immediately related to others that have, so that in the event of criticism, reference to the opinion thus publicly expressed by three of the best judges both of England, Scotland, and Ireland,

may be useful.

The short-horned bull and heifer are from Her Majesty's herd at Windsor; the cow from Mr. Campbell. of Kinellar, Aberdeenshire; the Herefords and Devons are also from the establishments at Windsor; the Aberdeen polled bull is from The Earl of Fife, Banffshire; the heifer from his Commissioner, Mr. Hannay, and the cow from Farquharson, of Haughton, Aberdeenshire. All the Ayrshires are from The Duke of Buccleugh, Dumfriesshire.

Of the sheep, the Border Leicesters are from Mr. Ferguson, of Kinochtery, Scotland; the Oxford Downs from H. A. Brassey, of Oxon; the English Leicester, from Mr. Stamper, of Highfield, Yorkshire; the West Derham Abbey Long Wools, from Hugh Aylmer's of that place in Norfolkshire, and the Prince Albert Windsor pigs are from Her Majesty's stock.

Leaving Liverpool on the 1st, arriving at Quebec on the 10th, and having to keep the animals in quarantine for seven days, they did not arrive here until the 20th September last,

all in good condition and free from disease.

Following is statement of my intromissions connected with these purchases:—

#### CATTLE.

	\$ cts.	\$ cts.
Short-Horns.		
Bull, "Duke of Bedford."	1,021 00	
Cow, "Ury 11th."	307 00	
Heifer, "Rosalie,"	<b>367</b> 00	
-,		1 695 00

Herefords.  Bull, "Duke of Connaught."	487 00	
Heifer, "Princess Mary."	172 00	
" "Heatherbell."	172 00	
		831 00
Devons.		
Bull, "Prince Albert Victor."	487 00	
Heifer, "Nellie."	145 00	
		$632 \ 00$
Aberdeen Polls.	050 00	
Bull, "Gladiolus."	358 00	
Uow, "Leochell Lass 4th."	$\frac{358\ 00}{206\ 00}$	
Heifer, "Eyebright."	200 00	922 00
Aurahima		922 00
Ayrshires. Bull, "Sir Walter."	195 00	
Cow "Beauty."	148 00	
Cow, "Beauty." "Flora."	148 00	
Heifer, "Juno."	148 00	
<del>,</del>		639 00
SHEEP.		
6 Border Leicesters	318 00	
4 Oxford Downs	194 00	
6 Long Wools (W. D. A.)	280 60	
1 English Leicester	52 00	044 00
SWINE.		944 00
SWINE.		
3 Prince Albert Windsor		75 00
O I IIIIO MANON I I IIIIII I I I I I I I I I I I I I		.0 00
Dogs.		
2 Sected Collins		01.00
3 Scotch Collies		81 00 1,3 <b>40</b> 00
Freight		279 00
Assistance		256 00
Travelling Expenses		414 00
2. wowing - wpostoon		
		0.1.00.00
		8,108 00

With our stock thus increased, upon the back of a failure of pasture, we have had difficulty in maintaining condition. The rape for the sheep has been convenient, and as the season advanced, the cattle getting a short run to fields, they find the corn chopped with hay

a change not too sudden from the grass.

We have already had extensive applications for the service of the newly imported short horn bull, the Border Leicester, and Cotswold rams, and more limited for the Devon and Ayrshire bulls, and a few for the Oxford Down and West Derham Abbey long-woolled rams. We also held orders for the Windsor boar. I have arranged to charge only \$5 for bulls, \$3 for rams, and \$2 for boar services.

A horse suitable for the general farmer is one thing—one for a school is quite another thing; everybody's horse being what we want, I have had to sell and buy as circumstances demanded, and still they are not complete in respect to adaptability, though otherwise well

supplied.

Altogether, on the question of live stock, though not fully made up in numbers, we have the nucleus of five of the principal pure breeds of cattle, of six breeds of sheep, two of pigs, and eight of poultry, from which we hope ere long not only to complete our own requirements, but to offer some for sale by public auction, if not next year, certainly in 1878.

#### IV. THE GARDEN.

The proper name as yet for this department is "the little farm," for 80 per cent. of the work has been house-building, road-making, tree-planting, draining, levelling, ploughing, and subsoil-ploughing—all preparatory to thoroughness, and the accomplishment of many important objects.

The old garden was cropped as usual, and the old orchard kept in the same form.

The lawn embraces the flower-garden and orchard. The seeding-down of the lawn has been a work of some difficulty, and now, though somewhat blanky on some parts, enough plants exist to soon form a firm turf all over. Fifteen clumps of trees and evergreens have been spotted irregularly over this, with the view to shelter and ornament. On the west side a border of native trees, flowers, and ferns is in course of completion; the border on the south, adjoining the Dundas road, is planted with pine, spruce, maple, and shrubs—having flowers in their season. The three sides of the block which forms the College grounds, being roads, are now lined with young maples, properly guarded; those, numbering 250, were planted during the fall and spring, and seemed to have made a good start—not one being dead, though of course the second and third years are the testing ones. The border on east of lawn is intended for deciduous trees, in which a beginning has been made; the border road here has been gravelled, and those of the kitchen garden are being similarly improved. The wire fence between lawn and garden is planted with thirty varieties of hardy grape-vines.

The kitchen garden extends to five acres, inclusive of roads, and has been laid off in six breaks—one being a shift or rotation division. With the exception of half an acre, the whole has been subsoiled to 18 inches, many stones removed, a very large area of open ditch and hollows levelled, at the same time that a few leading drains were established. There are about 1½ mile of wooden edging on road sides, and at the two crossings in

centre of breaks, spaces are left for rockeries or fountains.

The new garden has also been cropped—principally with potatoes, cabbage, and Indian corn. Early rose, peachblow, and Early Vermont potatoes were very good, as was also the corn, with the exception of the Italian and Chinese—a sugar variety—which though showing a stringy leaf did not come to maturity, Cabbage very good; carrots fair—seed having been poor; apples inferior.

The new work-shop, office, store, room, cellar, and propagating houses, in one range,

are now finished

Any large results, therefore, of garden cropping and experiments therein are still in the future, yet, in proportion to size and importance, no department has done so much as the Horticultural.

#### V. MECHANIOS.

While reference will be made under "Instruction" to the School value of this department, it is my first duty to show its existence by material evidence other than ordinary repairs. And first, as to figures:—

Value of work performed during year on College buildings...... \$197 28

#### Field:

··· ·			
Removing old barns and houses	\$40	00	
Putting up Hay Scales	49	75	
Fences			
Repairs to Stables	70	65	
Addition Residences	73	67	
Alteration to Horse Powers	36	30	
Pumps	20	00	
Sundries	42	65	
		<del></del> \$535	27

Stock:				
72 Hurdles made 15 Sheep Racks 10 Feeding Boxes Pig Yards	69 2	00 50		
Poultry House	$\begin{array}{c} 262 \\ 56 \end{array}$	59		co
Gurden:		<b>⊅</b> '	494	00
Wire Fence Sundries	\$110 39	00	149	76
Meteorological Observatory			105	
		\$1,4	81	93

The sum against the College buildings, is almost altogether value of labour; in the field, the removal of old barns and houses was not only one of horse work, but had to be undertaken carefully by the mechanical foreman, with block and tackle, partly to save

some good material, as also for safety with the students.

Old round stone causewaying in stable gradually breaking up, and the want of any floor in a spare cattle range, which was always flooded by water in spring, and which we now use as loose horse boxes, have by plank, been made good and serviceable. Accommodation for labouring men being one of our wants, it has been partially remedied by adding a wooden kitchen to a foreman's residence, thus affording more space for boarders.

Hitherto the working of the threshing, root pulping, and straw-cutting machines by horse, even in a double barn, has been cause of much inconvenience in blocking up for other jobs, therefore, by placing *one* horse power stand midway, outside between accesses, and the use of two "jacks," with the ordinary shafting, we are enabled to go and come at all times.

Hurdles and sheep racks are articles deserving greater notice among farmers, not only by direct saving of money in labour, but in economy of food. As now made by our students, the present mode of sheep racks combines the following essentials:—

1. Its use out, or inside, by being covered.

2. Easy change of position by its lightness on runners.

3. Feeding with long or cut materials, by use of sliding boards.

4. Feeding cake, corn, or turnips in troughs attached.

5. A complete cover for animals while feeding, by projecting roofs.

6. Supplying food at top or ends, as the rack might have to stand against a wall, or under a low roofed house.

Some improvement is invariably on the card each season, and our next will be to reduce the cost to \$8 each rack. With hurdles, we can divide a twenty acre field into three parts, thus crossing it twice, in two hours, with the use of teams and one or two hands.

Our poultry house, 58x28 feet, with its regulated warmth by brick flues, outside courts, removal of earth by digging both in and out, nesting, breeding, roosting without soiling any part of the house, feeding space with passage room, and an infirmary, may be taken as a fair example of what is required for separate keep of different breeds.

The Meteorological Observatory has been erected in front of the College, and gave excellent chance of display of taste on the part of the students, being made of small rustic cedar and spruce, with the bark on, saw ripped. Of octagonal shape, with curve in each, and a glass door to observe the instruments without the risk of foreign interference, the style of the whole thing is generally admired.

The piggeries are now provided with outside courts, and a centre space, on and off the passage for scale and page, in connection with weighings in experiments. The erection of the larger weighing scales, Buffalo make, was a scientific job of some interest.

Thus, over all the other departments, the Mechanical one, by the hands of the students alone, has during the past year given itself credit for a sum of \$1500; \$850 of

which may be safely sat down as value of labour, and so, more than covering the salary of the foreman as an instructor, whose labour, always given when possible, is also additional.

#### VI. EXPERIMENTS.

Shortly after my appointment here we took up the subject of experiments in all forms—the feeding and breeding of animals, as well as the cultivation of crops under a variety of conditions. Being aware that one of the recommendations of the Commissioners, at the establishment of this Institution was, the separation of a considerable portion of the farm as an experimental one, and that such an important change should be undertaken, only after mature consideration, I have as yet taken no direct steps towards its accomplishment. An experimental farm in our case, means the laying aside of as much land as shall give full employment to two teams of horses, and where a model steading should be built; the one implies time, the other money. I say time, because, as yet, there is not even one field on the whole farm in a condition fit for good farming, let alone model and experimental work. A thoroughly, good ordinary cultivation is our present system, and when this is carried out all over, the higher work of experimenting on a large scale, will be both easier, cheaper, and much more successful. Meantime, the farm is so subdivided, that, withdrawing an area of 80, 100, or even 120 acres, will make no awkward break either in fencing or cropping.

But, experiments are wanted now. There are A. B. C. duties owing the country and students in this respect that must not be delayed—an initiatory work, having in view the testing of elementary principles, that should guide all sound, scientific and practical farming in animal and plant life, with special reference to different modes of feeding, manuring and cultivation, or, as the Commissioners have put it, "to conduct experiments tending to the solution of questions of material interest to the agriculturists of the Province."

While nothing definite has been laid before us, no suggestions, anything wanted by the farmers—something they would like to see done, it was thought desirable that simplicity should mark our first effort in this department, with growing experience as a guide, and practical utility our beacon—that is, will the experiment beuseful to the general farmer, is it within the range of his daily work—can he lay his hands upon our results and follow them if desirable—will his land be enriched, his crops increased, and his stock give earlier and better returns? Another leading idea in feeding was, to use meantime only such materials as have been produced on the farm, or what are within the reach of any ordinary farmer.

Then we had to establish a code of action such as these:

- 1. All principles must be laid down by facts of practice and science.
- 2. If a principle seems wanting, we may have to establish one.
- 3. To ascertain the exact state of information regarding any contemplated experiment—repetition might be useless.
- 4. To select the subject of enquiry.
- 5. The solving of a definite question, whether affirmative or negative.6. Whether the subject is practical or economical, or both combined.
- 7. The arrangement of a definite plan of operations—the form in which the enquiry should be prosecuted.
- 3. Uniformity of treatment.
- 9. Duplicates indispensable.

The foregoing apply to both field and live stock experiments.

In feeding animals there should be considered:—

- 10. Breed and age.
- 11. Previous treatment and present condition.
- 12. Equal dispositions and circumstances during trial.
- 13. The time, forms and quantities of food.
- 14. Periodical weighing; character of housing and temperature.
- 15. Feeding by equal value of materials in same time.
- 16. The greatest result in the least time, at the least cost.
- 17. Value of manure so obtained.

In field experiments there should be :-

18. Uniformity of soil and exposure.

19. Soil neither rich nor poor by recent artificial means.

20. Analysis of soil and manures.

21. All experiments to be with or without manures, and in duplicate for all forms.

22. Preparation, and distribution of manures.

23. Modes of cultivation.

24. Testing germination of seeds.

25. Sowing, brairding, coming into ear, tillering, and maturing.

26. Weather record, diseases and accidents.

27. Care in harvesting.

28. Weighing grain and straw, roots and tops separately.

29. Nutritive value of produce by analysis, and by feeding of animals.

30. Milling properties of grain.

31. Effect of manures on subsequent crops.

32. All useless and misleading without minuteness.
33. The result of one experiment suggesting another.

#### LIVE STOCK EXPERIMENTS]

With these clearly in view, and not forgetting a progressive plan of education, we began a

set of experiments on the feeding of pigs.

Five weeks were decided upon as a complete stage in the use of one kind of food, weighings being weekly, feeding thrice daily with gradually increasing quantities for safety, and latterly giving as much as the animals could eat—avoiding waste. For winter weather the housing was very indifferent, though good for summer. Every attention was paid to regularity, cleanliness, and accurate weighings of food and animals. Nothing occurred to mar the course of the experiments. The animals, in both instances, were of one litter, varying but little in weight, and apparently of similar dispositions. There are two divisions, a winter and summer experiment; the one in February, the other in July and August.

In winter the food selected was :-

Raw pease and water.

Boiled pease.

House refuse and wheat middlings.

In summer it was:-

Raw pease and water.

Boiled pease. Steeped pease.

Raw Indian corn and water.

Steeped corn.

As the season of the year affects animal growth very much, it will be necessary to keep

the experiments distinct.

First, therefore, with reference to the feeding properties respectively of raw pease, boiled pease, and kitchen refuse, with wheat middlings, in winter, the following abstract Table shows the results in each of the three five week stages:—

ABSTRACT TABLE,

Shewing the results of the feeding properties respectively of raw peas, boiled peas and kitchen refuse.

	it.		ပ်		9	9	9	:		4	li
	Profit.		69		9.16	8.16	9.56	>		\$26.97	
8019	niog	for	ပ် ∳		32.82	30.03	21 69	91.00		\$94.37	
Value	ПО	Entry.	ပ် ∯-		12.60	11.60	10 05	respir		\$35.05	
Increase of Value	Weight in 5	week stages, Entry.	1st, 2nd, 3rd.	,	82 80 78	72 111 47	112 00 211	*0 80 C11			
Consumed.			Third Stage.		{ 210 lbs. wheat middlings,	( and nouse refuse, \$2.12. ∫ 354 lbs. raw pease,	\$3.60	369 lbs. bolled pease, 1115 of 04			
Kinds, Quantities, and Value of Food Consumed.			Second Stage,		g 381 lbs. boiled pease,	\$4.10. \$4.10. \$210 lbs. wheat middlings,	and house refuse, \$2.72.	426 lbs. raw pesse, \$4.30.	,		
Kinds, Q			First Stage.		424 lbs. raw pease,	\$4.24. 364 lbs. boiled pease.	\$3.95.	210 lbs. wheat middlings,			
	-	Srd	Stage.		505	482)	~	485	`		
Weight.	,	Zn 7	Stage		427	415		421		_	
Δ	,	lst ,	Stage, Stage Sta		347	304		332			
Weight	on	Entry.			252	939		217			
Pen of		Twopigs	Each.		-	•	3	ಣ			7.

The three pens contained two animals each, of common grade Berks, which had been similarly fed on house refuse for several weeks previously. While the Table may fully explain itself, a few analytical notes will not be out of place. What draws attention first is the lead taken by house refuse; animals that at the start stood  $17\frac{1}{2}$  lbs. each less, made up so fast in five weeks as to come within  $7\frac{1}{2}$  lbs. of those fed on raw pease, and in comparison with the others which got boiled pease, they began with  $7\frac{1}{2}$  lbs. less weight, but overreached them in the same time by no less than 14 lbs. each. The specially prepared food stands in the third

place as regards increase of weight-raw pease taking second rank.

Then with reference to quantity and value of food, the animals in pen 1 eat a little over 6 lbs. each of raw pease per day, at a cost of \$2.12; pen 2 consumed 5½ lbs. of boiled pease each per day, at a cost of \$1.97, and pen 3, on house refuse and 3 lbs. of wheat middlings each, per day, cost \$1.36 per head, so that the swill and middlings also hold their own in the position of economy to the extent of nearly 30 per cent. over raw pease, and 33 per cent. over boiled ones. This completes the results in the first stage of the winter pig experiments, and the next to record is but a continuation of the same food and animals by a change of positions, that is, pen 1 was put upon boiled pease instead of raw; pen 2 on swill and middlings, in place of boiled pease; pen 3, on raw pease, from refuse and middlings. In this stage we observe the comparatively large increase to those animals changed from boiled pease, (which were formerly least in results) to house refuse and middlings, still prominently marking what we call refuse as the best of three sorts of pig food, in ordinary use, and upon which we may speculate that changing from raw to boiled pease is a great loss, from refuse to raw pease is not good, and that from either to refuse is certainly good.

In the third stage we have pen 1 changing from boiled pease to refuse, pen 2 from refuse to raw pease, and pen 3, from raw to boiled pease. What is now the position of weights and costs? The increase of 78 lbs. of flesh on refuse costs  $3\frac{1}{2}$  cents per lb., that of 64 lbs. of boiled,  $6\frac{1}{4}$  cents per lb.; and that of 47 lbs. on raw pease costs nearly 8 cents per lb. In this place we have raw pease taking the second place to boiled ones, but on reference to the notes of progress and detail weekly weighings, we find that during this third stage one of the pigs of pen 2 was sick for nearly three weeks—only one lb. additional weight being made from the 22nd to the 29th of February, with both animals. One noticeable fact with reference to the weather—during severe frost, those animals receiving refuse—which generally consisted of a large proportion of watery materials, always failed to keep up their usual increase at the scales, and those on harder fare did not suffer to any appreciable extent. The pigs were sold for  $6\frac{1}{2}$  cents per lb., live weight, allowing twelve hours without food previous to weighing. The fact of the almost equal sums of profit, throughout the stages, testify to a careful selection of equi-conditioned

animals.

In the summer experiment, beginning on the 1st July, I shall give more detail in figures and less explanation as a means of gathering any more facts or suggestions in comparison with those of winter.

EXPERIMENTS in Pig Feeding for Ten Weeks beginning 1st July, 1876.

FIRST STAGE.

_					
	lo di	Total weigh	2883 2683 2883 2873 2873 119		384 384 384
	ni əs	rorai increa Argiaw	1043- 777- 813- 69- 69- 44-		110 42 823 1013 963 963
	b.	Total foo	407 3763 384 294 1563		364 <u>\$</u> 195 <u>\$</u> 391 430 <u>\$</u> 401 <u>\$</u>
	FIFTH WEEK.	Increase in weight.	28 100± 245± 133± 7±2± 7±2± 7±2± 7±2± 133± 143± 143± 143± 143± 143± 143± 143		22 22 22 23
	Кіктн	Food consumed.	832 841 841 843 313 313		755 44 80 78 713
	WEEK.	Increase in weight.	12 12 13 13 9	-	21 163 23 23 12 25 25 25 25 25 25 25 25 25 25 25 25 25
	FOURTH WEEK	consumed,	865 244 742 303 303 303 303 303 303 303 303 303 30		881 865 851 851
	WEEK.	Increase Jugisw ni	20 22 22 82 65 65 65 65 65 65 65 65 65 65 65 65 65		15½ 7 20 17 20 20
	Тніво Wеек,	Food consumed.	28.5 28.5 28.5 28.5 28.5 28.5 28.5 28.5	STAGE.	744± 40 89 89 80± 80±
	WEEK.	Increase Jught, ii	23 19 16 145 101	SECOND STAGE	26 141 242 243 243 243 243 243 243 243 243 243
	SECOND WEEK	consumed.	78½ 66 61 34 34	<u> </u>	383 283 78 80 80 80
	First Week.	Ancrease Jugiew ni	30 13 13 11 11 11		23 25,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10,53 10
	First	consumed.	75 73 63 32½		872 76 933 84
		Weight onentry.	184 191 206 161 75		230 119 268½ 288½ 288½ 287½
		Food.	1 Raw pease and water 2 Boiled pease 3 Steeped pease 4 Raw corn and water, 5 one pig. Steeped corn.		1 tormerly 4. Kaw pease and water. 2 formerly 5. Boiled pease. 3 formerly 2. Steeped pease. 4 formerly 1. Raw corn. 5 formerly 3 Steeped corn
		Pen.	1 2 3 4 5 one pig		1 tormerly 4. 2 formerly 5 3 formerly 2 4 formerly 1 5 formerly 3

In this we have also two animals in each pen, with the exception of one, but the experiment was only continued over two stages, which it may be remarked, is amply sufficient to test pig feeding. Raw pease cost 68 cents per bushel, steeped pease, 70c., boiled pease, 73c.; raw corn, 56c., and steeped corn 58 cents per bushel. Age of pigs on entry, four months.

With regard to increase of weight in the first stage, it is interesting to observe that raw pease are again ahead—having kept their position each week, except in two instances, but finish up well, and over the whole stage take the first place. Corn comes next, then steeped pease, boiled pease, and raw corn. A remarkable dimunition of weight occurs during the fourth week with all the animals receiving pease, especially those in steep, where an addition of only one pound each is made for the whole week. The cause for this is not very evident—it was not in the weather, not in the animals themselves, and must be looked for in the food.

The second stage in this summer's experiment again prominently shows raw pease as the leader in increase of flesh, but with boiled pease second, then raw corn is a step in advance, steeped corn being two behind, and steeped pease coming last in place of being third as in previous stage.

Before summarising let us look at the financial result of the question as shown in next table:

Food.	Fire	ST STAG	Е.	Seco	OND STA	GE.	Total Increase in	Increase in Value.	or	
	Quantity.	Value.	Increase.	Quantity.	varue.	Loss				
	lbs.	\$ cts.	lbs.	lbs.	\$ cts.	lbs.	lbs.	\$ et =.	\$ ets.	
Raw Pease	294	4 61 4 66 4 44 2 94 1 60	104½ 77½ 81½ 69	364½ 195½ 391 430½ 401½	4 13 2 38 4 55 4 30 4 15	110 42 82½ 101½ 96¾	214½ 119½ 164 170½ 140½	11 75 6 56 9 02 9 38 7 73	†3 01 -0 48 †0 03 †2 14 †1 98	

Price of pork 5½ cents per lb., live weight.

Although differing in quantity, the difference of price per lb. brings the cost of three conditions of pease to practically the same figure, but on reference to *increase* of weight, we have this important fact again pressed home to us, from the winter trials, by this summer one, that the less cooking pease receive the more valuable they are for pig-feeding; indeed it is already shown that boiled and steeped pease are a loss at 68 cents per bushel, and though the profit on raw ones is small, it is yet no less than 300 per cent better than the others. Again, though in favour of raw corn there is so little difference between it and that submitted to steep in water, as to show only 16 cents on the whole trial.

These tables are considered so full that further explanation is considered unnecessary.

To summarize in a few words: we have had two carefully conducted experiments in pig feeding in the extremes of a Canadian climate, from which some important practical facts are to be gathered—facts towards which I beg to draw particular attention, because hitherto

either not sufficiently known or disbelieved by many farmers.

The present practice with the greater number, in any country I believe, is to prepare food for pigs either by steeping, steaming, or boiling, under the belief that cooking in any shape is better than giving in the raw state. I am not at present prepared to say definitely what other kinds of food may do, raw or cooked, with pigs or other domesticated animals, or how the other animals would thrive with pease or corn, raw or boiled, but I now assert, on the strongest possible grounds—by evidence indisputable, again and again proved by actual trials, in various temperatures, with a variety of the same animals, variously conducted, that, for fast and cheap productions of pork, raw pease are 50 per cent. better than cooked pease or Indian corn in any shape. There is no incomparable comparison here as there would be with house refuse, which, nevertheless, affords our next most important lesson in these figures. It seems that pieces of fat, dish washings, sundry parings, bits of bread, and various nondescripts, called kitchen refuse, are at least one-third better as pig-food than even raw pease,

allowance being made for any superior quality from an establishment which has very much more the character of an hotel than an ordinary farmer's house.

#### PLOT EXPERIMENTS.

The subject selected for the permanent plots adjoins the barns on the south-east, has a slightly varying exposure, north and south-east, with a fairly uniform soil, consisting of about one foot of an average free loam, resting upon a subsoil neither stiff nor sterile, but naturally wet over one half. The gross area of five acres has been reduced to exactly four, for plots, by roads and division walks; each plot is exactly one-tenth of an acre; there are, therefore, forty in the field. The cropping in 1875 was Indian corn and oats; the land is largely overrun by thistles and other weeds. From this it may be inferred that as yet the plots are not in a condition for accurate work—neither free enough of superfluous water nor clean enough to give results upon which the checking of general farm practice could be safely conducted. Such is the fact. But just as it is necessary to bring any ordinary farm under a proper system and management, so here it was considered best to begin cropping at once, in order to bring about an earlier reliable beginning in this department. No one expects much for two years from experimental plots.

The mode of management requires notice: Under my own superintendence, and with the advice of the Professor of Chemistry, students alone are employed at these experiments—one being responsible each season and receiving assistance as required. This has worked well; gives a larger interest and opportunity for lessons distinct from the other departments.

Not being able to complete the establishment of the Meteorological Observatory until July, actual records were not begun until the 16th of that month, and therefore too late for the most important season of growth. So far as obtained in what relates to the official year, however, the usual "means" are tabulated at end of this report, and the amount of rainfall previous to the 16th of July is from the journal of the experimental foreman, who was temporarily provided with instruments.

One way to present experiments is by simply tabulating results with all the necessary data, and allowing everyone to judge for himself; another is to sift the whole trial thoroughly in all its bearings. I shall adopt the middle or abstract course, for two reasons,—first, because being our apprentice year so to speak, it is necessary to show how to make comparisons and draw conclusions; and second, the greater number of the experiments being introductory to others, comparatively little requires explanation. Few tables will suffice, as a large proportion of the plots were rendered useless by the roughness of soil, and many others by the nature of the crop have to lie over for another season. Reliable figures alone will be given, and first for general reference the following list in the order of numbers shows what crops, manures, and modes of cultivation were selected:—

- Plot 1 Club Wheat, drilled, not hoed, no manure.
- " 2 Club Wheat, drilled, hoed, no manure.
  - 3 A—Oregon Wheat, no manure. B—California—Bay, brewing Barley,
    - no manurc. C—Chevalier Barley, no manure.
    - D—Red Fern Wheat, "
    - E—Hybridising,
    - 4 A—Six rowed Barley, drilled thin, no manure.
      - B—Six rowed Barley, drilled thick, no manure.
- " 5 A—Golden Drop Wheat, broadcast, no manure.
  - B—Golden Drop Wheat, superphosphate.
- " 6 A—Golden Vine Peas, thick sown, no
  - B—Golden Vine Peas, thin sown, no manure.

- Plot 7 A—Club Wheat, broadcast, deep ploughing, no manure.
  - B—Greystone, Skirving, and Dale's Hybrid turnips. F. Y. Manure deep ploughing.
  - deep ploughing.

    8 A.F. Y. Manure, ordinary ploughing.
  - and lime.
    9 A—Club Wheat, broadcast, subsoiling,
    - no manure.
      B—Greystone and Skirving turnips, F.
  - Y. Manure, subsoiling.

    10 A—W. Belgium and Red Altringham
    Carrots. F. Y. Manure, Superphosphate, ordinary cultivation.ds,
    - B—Mammoth and Y. Globe Mangol same manure.
  - " 11 A—Same crops and manure as No. 10, subsoiling.
    - B—Same crops and manure as No. 10, subsoiling.

```
Plot 12 A—Same crops and manure as No. 10, | Plot 25 A—Golden Drop Wheat, broadcast,
          deep ploughing.
                                                           early sowing, no manure.
        B—Same crops and manure as No. 10,
                                                        B-Golden Drop Wheat, broadcast, late
    deep ploughing.
13 Timothy, Sweet Vernal, Rye, and
                                                          sowing, Nitrate of Soda.
                                                    26 Pease A—Marrowfat, no manure.
B—Small white, "
          Hungarian Grasses.
       A—Manured with Nitrate of Soda.
                                                    27 Pease A-Prussian Blue,
                          Sewage.
                                                              B-Golden Vine,
              66
                     66
                                                    28
       C-
                         Liquid Manure.
                                                              Summer fallowed.
             66
                     66
       D \longrightarrow
                          Gypsum.
                                                    29 For Fall Wheat.
       E-Not manured.
                                                    30 Drain 2 ft. deep in centre. A.-W. Oats, no manure.
    14 Same Grasses as No. 13.
       A—Manured with Bone Dust.
                                                        B—G. D. Wheat, no manure.
       В—
                         Puslinch Marl.
                                                       C—Y. Globe Mangolds, F. Y. Manure.
              66
                     66
                                                       D—Aberdeen Green Top and W. G.
Turnips. Superphosphates.
       C-
                         Soot.
       D--
             66
                    66
                         Lime.
    15 Maize manured with A-Superphos-
                                                    31 A-Australian Oats, no manure.
          phate, B-F. Y. Manure.
                                                       B-Brook Wheat,
       Yellow Dutton, 3 drills, in hills.
                                                       C-Bokhara Clover,
       Tuscarora, 3 drills,
                                                       D-Odessa Wheat,
       Mammoth Sweet, 2 drills, in hills.
                                                       E-Alfalfa Clover,
                                                       F-Cow Grass,
       Crosby's Early, 3 drills,
    16 Maize, no manure, A-Yellow Dutton,
                                                       G-Kentucky Blue Grass, no manure.
                                                    32 Drain 3\frac{1}{2} feet deep in centre.
          2, in hills
       Tuscarora, 2, and Mammoth Sweet, 2,
                                                        Crop same as No. 30.
          in hills.
                                                    33 Potato and W. Tartarian Oats, drilled,
       B—Beans, no manure.
                                                          no manure.
    17 A-W. Tartarian Oats, broadcast, no
                                                    34 Potato and W. Tartarian Oats, broad-
          manure.
                                                          cast.
                                                    35 A—Sugar Beet, no manure.
B— "liquid manure, sewage
       B—Oats, mixed.
    18 Lucerne—A—F. Y. Manure, B—no
                                                          and superphosphates.
          manure.
    19 Red, White, Alsike, and Sanfoin Clo-
                                                    36 Turnips.
                                                          A—Greystone, F. Y. Manure.
       A-Bone Dust, B-Puslinch Marl, C-
                                                          B—Dale's Hybrid,
                                                                                 "
                                                         C-Skirving's,
          Lime.
       D-Liquid Manure.
                                                          D-W. Globe,
    20 A—Buckwheat, no manure.
                                                          E—Aberdeen G. T. Yellow.
       B-W. Mustard,
                                                    37 Turnips same kinds, with bone dust. 38 "" " without manure-
    21 Potatoes.
                                                                           without manure.
                                                    39 Tares A—no manure. B—Tares and oats, no manure.
       A—Crompton's Surprise, F. Y. Manure.
       B-Brunell's Vermont Beauty, "
    22 "A-Breezes prolific, F. Y. Manure.
                                                    40 A—Red Clover.
        B—Early Vermont,
                                                       B-White "
    23 "A—Climax
                                                       C—Alsike
         B—Early Rose,
                                                       D-Sanfoin "
    24 "A-Left for experiments, Early Rose,
                                                       E—Timothy Grass.
          F. Y. Manure.
                                                       F—Orchard "
         B—Early, Rose, different sized sets,
                                                       G-Rye
          F. Y. Manure.
                                                       H-Sweet Vernal Grass.
```

It will therefore be unnecessary to repeat in any of the tables what crops have, or have not, received manures and special cultivation—a case or two excepted, the number of the plot being sufficient to connect.

In all applications of farm yard manure, the quantity used was at the rate of twenty loads per acre, each load weighing 2900 lbs.; of superphosphates 10 bushels per acre; of lime 75 bushels per acre; of nitrate of soda, 150 lbs.; of Gypsum, 50 pecks; of bone dust, 40 pecks; of marl, 300 lbs.; and of soot, 60 bushels per acre. Subsoiling means 17 inches in depth by a common plough followed by a regular subsoiler; deep ploughing to 10 inches, common to seven. The two drains at different depths are special for the purpose of tests,—in future years more than the present. Width of grain drill, nine inches; potato drill, 33 inches; turnips, mangolds, and carrots, 27 inches apart in drill; Indian corn, 36 inches.

The farm yard manure used in these experiments was about two-thirds from cattle, the remainder from the horse stables. The marl, from Lake Puslinch, is of a small shelly description, yet to be analysed, and more attention paid to it next season.

Wheat was a failure, owing principally to rust, which attacked the plants in their early stage. The disease among the turnips referred to under "The Field," also damaged the same sort here. It is rather remarkable that the Red Altringham Carrots, in all cases, produced stalks similar to what the plant shows in seeding by regular transplanting—a circumstance owing to diseased seed more than peculiarity of the plant itself, even under the fact that the Altringham changes very much.

# CEREALS.

		Promotomoto fina i and make promotomotomotomotomotomotomotomotomotomo		Mixture.	Common sort.	Badly lodged on July 18th.		Manured, see plot list.	Not manured, see plot list.	Manured, "	No manure, "	Manured, "	No manure, "
er acre.	Straw.	lbs.	3120	5860	1360								
Produce per acre.	Grain.		35 bushels.	** 14	., 27	,, 98	,, <del>2</del> 65	., 22	,, 98	36	,, 08	., 16	62
	Reaping.		Aug. 16.	" 16.	., 16.	;	" 4.						
Dates of	Heading.		July 15.	" 14.	" 14.	., 6,	<u>∞</u> د						
	Braiding.		May 30.	28.	.08 ,,	., 26.	., 26.						
ng.	Rate per acre.	lbs.	96	104	100	102	09						
Seeding.	Date.		May 23.		May 23.	22.	22.						
Plot.			17	17	30	4	4	15	16	15	16	15	16
Kinds.			Oats, White Tartarian	" White & Black "	" White	Barley, six rowed	"" "	Maize, Yellow Dutton	" " "	" Tuscarora	" "	" Mammoth Sweet	27 27 27

In oats the first noticeable fact is the rather even produce per acre with the three varieties given—one being a mixture of white and black Tartarian, and the very large difference in amount of straw, the common white giving more grain by 20 per cent., and less straw by 57 per cent., than the White Tartarian does.

The case of thick and thin sowing with Barley will have to be carefully repeated, and meantime we begin with 16 per cent. in favour of the former, even though badly lodged by

heavy rains.

With Indian Corn, manured and not manured, we notice the Yellow Dutton leading with 100 per cent. in favour of manuring; Tuscarora only giving a similar preference by 16 per cent., and the Sweet Mammoth distinctly rejecting farm-yard manure and superphosphates to the extent of 17 per cent.; query, would the latter do better with a manure having more saccharine properties?

TURNIPS.

Kind.	Plot.	Quantity per acre. Bushels.	No Manure.	Farm-yard Manure.	Bone Dust.
Graystone Skirving's P. T. Swede Dale's Hybrid Greystone Skirving's Dale's Greystone Skirving's Dale's Greystone Skirving's Skirving's Greystone Skirving's Skirving's Skirving's White Globe Aberdeen G. T. Y	7 7 8 8 8 8 8 8 9 9	111 82 101 204 131 143 194 203 196 292 186	127 63 98 182 93	266 387 428 341 139	375 220 337 257 42
		<u>M</u> eans	113	312	246

The first glance at the preceding Table on Turnips will reveal the fact that its publication cannot be grounded upon merit depending on large produce per acre, which, by the way, is but one of hundreds, and may be a secondary point among experiments proper. Of the three varieties under farm yard manure and different cultivations, the Greystone over the whole, leads with 25 per cent. over both the others, but is least in ordinary cultivation and lime. The latter part of the Table speaks for itself, and is probably the most interesting A. B. C. portion of all the root results. In this the Skirving walks out with the best mean of all conditions, followed by the White Globe, Greystone, Dale's Hybrid, and Aberdeen Green Top Yellow.

### MANGOLDS AND CARROTS.

Kinds.	Plot.	Ordinary Cultivation.	Deep Ploughing.	Sub-soiling.	Means.
		Bushels.	Bushels.	Bushels.	Bushels,
Carrots— White Belgian  Red Altringham		201	221 127	209	210 133
Manyolds— Yellow Globe  Mammoth	12	320 237	320 240	365 304	335 260

With far-searching roots it is proposed to continue experiments by different modes of cultivation, from ordinary ploughing to deep subsoiling, in order to ascertain effects and draw some strong practical conclusions. The preceding Mangold and Carrot Table is, so far, fairly reliable; but, as with some others, verification is indispensable to safe guidance. With the exception of one instance—the White Belgian Carrot—all the results seem to be in favour of subsoiling, an operation known to be slow in its effects.

### POTATOES.

W. 1		Bushels per Acre.				
Kinds.	Plot.	Ordinary Sets	One-eyed Sets.	Whole Sets, or tubers.		
Crompton's Surprise	21	75				
Brunel's Vermont Beauty	21	92				
Breeze's Prolific	22	101				
Early Vermont	22	70				
Climax	23	105				
Early Rose	23	156				
	24	184	84	265		

As already noted, the distance between potato drills was 33 inches, and between sets 17 inches, in the examples thus tabulated, planted on the 2nd June and gathered on 11th October; they came through the usual warfare with the Colorado beetle, by use of Paris Green, and necessarily the produce is much smaller. The Table exhibits first, a trial of six varieties with the ordinary set or cutting, having two or three eyes, in which the Early Rose leads off with 50 per cent. over Breeze's Prolific and the Climax, and no less than 100 per cent. on an average over all the others. Then the Early Rose, in duplicates of each, is put under experiment by using sets with only one eye, and the whole tuber, as against ordinary cuttings. Here the result reaches as much as 200 per cent. in favour of whole sets over one eye, and 33 per cent. on ordinary ones.

PEAS.

		PRODUCE PER ACRE.		
Kinds.	Plot.	Grain.	Straw.	
		Bushels.	lbs.	
Marrowfat	)	21	2640	
Small White	26	22	3420	
Prussian Blue	27	15	2320	
Golden Vine	j	22	3280	

### EXPERIMENTS IN FIELD A, CROP 1876.

NATURE OF CROPS.	Plot.	Quantity sown per acre.	PRODUCE Grain.	PER ACRE.	Weight per bushel.	Remarks.
Barley, six rowed "two rowed " "Mangold, Yellow Globe		lbs. 104 106 96	bushels.  28 10 11½ 892	lbs.	lbs, 40 43 36	15 bushels salt per acre.
Oats, Bohemian  White Tartarian  Black Tartarian  Potato and White  Wheat, Fife	6 8 9 10 11	100 96 112 88 100 112 94	$ \begin{array}{c} 18 \\ 42\frac{1}{3} \\ 23 \end{array} $ $ \begin{array}{c} 21\frac{1}{2} \\ 35 \end{array} $ $ \begin{array}{c} 8\frac{1}{2} \\ 8 \end{array} $	2640 2440 3328 1824 1822	38 29 41 38 36	Partly lodged. From Scotland, partly spoiled in harvesting here. Canadian seed.
" Rio Grande " Farrow " Golden Drop " McCarling " Blue Stem	15 16 17 18 19	96 98 96 92 92	$\begin{array}{c} 7\\11\\4\frac{1}{2}\\10\frac{1}{2}\\8\end{array}$	2712 2450 1908 2340 2292		

Besides the regular experimental plot, we had space this year on Field A (see farm plan). on which to test certain cereals (received from various districts), on a large scale, and where the land was supposed to be in better order from a crop of rape which was eaten off by sheep in the previous fall. Plots of one-fourth of an acre were accurately measured, one shallow ploughing and single harrowing given on 24th April and 17th May respectively—all being drilled on the 19th May. The average brairding came on 26th May, and heading on the 13th July. Barley was harvested on the 12th, Oats on the 15th, and Wheat on the 21st August. Comment is unnecessary with a Table so full, as a whole, in regard to cereals, but the crop on plot five requires explanation. Plots four and five were sown with Mangolds and Sugar Beet; the striking of both was very blanky and irregular, the Beet being old seed from Ottawa. Part of the plot under Mangolds lies immediately below the sewage outfall of the college kitchen, where the drainage ends in a cess-pool. When the plants became sickly by drought in July and August, the overflow from this was allowed to run down one of the Mangold drills, having Long Reds on one side and Yellow Globes on the other. The result was a complete revivification of the plants, and a production of no less than 892 bushels per acre of sound roots, some weighing 14½ lbs. each. The Long Reds were the heaviest crop, but accidentally damaged before ingathering. This success should be a hint for next season.

### VII. INSTRUCTION.

Our farm is a school in every possible detail, in every department. The greatest difficulty of any under my charge is, to see that every student has his changes of labour, that he does that labour well, that he understands the how and why of it on practical and scientific grounds, and that nothing whatever is done upon the premises that would stand as a bad lesson for any one. Outside work should accord with inside teaching—the students have to be taken from the lecture room to the field, and what is done in the field, the fold, the shop, and the garden, has to be questioned in the house, in order to rivet attention, impress principles, and make science and practice go hand in hand.

In order to ascertain the progress of each student, and give a larger interest to manual labour, I have instituted special bi-yearly examinations of several details, such as cleaning, harnessing, and handling horses, ploughing, thinning roots, handling and explaining points of animals, shearing sheep, sowing broadcast by hand, mowing with scythe, hoeing, use of mechanical tools, and other practical subjects. The mechanical department is an important one—how few people can drive a nail properly—where the erection of all kinds of fences, additions and repairs to buildings, making hurdles and sheep racks, gates, and numerous repairs are

usual on a large farm; the cleaving and repairs to our implements, giving opportunity to a thorough acquaintance with their different parts. The detail parts of buildings, the method of computing lengths of timbers, and the principles involved in construction, are matters of thorough practical instruction. Then again, we profess to undertake all our own surveying and levelling-having begun duplicate enlarged reference plans of the farm and buildingsa work that cannot be hurriedly completed, owing to one-fourth only of the students being engaged upon it at one time, and at times of the year not otherwise important. All levelling for drainage, roads, and garden, is now performed by the students with a farmer's simple level, and a more perfect one as a check. All calculations that come under what may be called agricultural mathematics, are put to practical test. Ploughing is one of the favourite, as it is one of the most difficult acquirements. In this it is our endeavour to give as many lessons as possible under careful superintendence; but at times, with a rush of work, and so many students to instruct with a limited number of ploughs, such lessons as yet have been more limited than I would wish. A more matured system and two annual private ploughing matches will be my future aim in this matter; and, of course when practicable, we will, as heretofore, attend public ploughing matches. The more important public markets of Guelph are a source of many good lessons to us, but of all our applications of lecture-room work to outside practice, none have been so fruitful of pleasure and profit as visits to different herds and flocks. Within a radius of fifteen miles we have choice of some twelve herds of superior Short-horns, two of Galloways, one of Devons, and three of Herefords, as well as various flocks of Leicester, Cotswold, and South Devons, to each and all of which we are made welcome in a way highly creditable and characteristic of the country. True, such a practice requires careful handling, when of course, a lesson is the chief object, and as yet I am not satisfied with our plan of examinations, note-taking, and subsequent comparisons. In connection with this it may almost seem superfluous to refer to the immense value now in our hands in the possession of no fewer than six breeds each of cattle and sheep by which the pupil can be fully exercised by actual handling, on points, characteristics, and comparisons, both previous, and subsequent to these inspections.

The keeping of a daily record of farm work by each student, as a part of his examination papers, is under consideration—patchy examples of it having already been undertaken. With reference to my own charge, I should desire much in our every-day work to give

more attention, as a matter of practical education, to—

1. Knowing a weed from a grass. 2. Knowing a soil by handling.

3. Able to name any cereal grain.

4. Judging value of animals.

5. Judging areas.

6. Knowing diseases and lameness in animals.

7. Judging ages in animals. 8. Judging wool thoroughly.

- 9. Administering medicine to animals.
- 10. How to kill and clean an animal for market,
- 11. Putting a proper value on unpaid labour.
- 12. Estimating quantities of crops in field.13. Knowing flour.
- 14. Estimating weights.

15. Milking.

- 16. Actual work in a dairy.
- 17. Judging weather by use of instruments.
- 18. Knowing when an animal is prime fat.
- 19. Knowing trees and their uses.
- 20. Estimating the time of various works.
- 21. Handling and knowing minerals.
- 22. The management of a dog.
- 23. Knowing when to buy and sell.

24. Searching pedigree.

25. Appreciating the value of common, or little things.

26. Drawing a plan to scale.

### VIII. RECOMMENDATIONS.

One of the first requirements in connection with the adoption of a regular rotation of cropping, and grazing of numerous breeds, is division fencing, and the fact that but one-fifteenth of what requires renewal is all that has been done, shows the importance of the recommendation that fields 1, 2, 3, 7, 8, 9, 10, 14, 15, and 17 should be undertaken next season, together with part around the experimental plots, and on sides of division road. Between 15 and 16, or the east side of 17, should be a dry stone dyke, to serve not only as a specimen for students and the country generally, but as a means of clearing several mounds of stones in adjoining fields—that between one and two should be a wire fence—also as a specimen and as being more in keeping in front of one of our best houses.

With reference to drainage, all I ask for at present is what is absolutely necessary to complete those fields already partly operated upon; namely, 2, 4, 13, 14, and 15, thus securing, along with the fencing, a valuable addition to our ploughable area for permanent work. Any delay in this would be regretted, especially as 14 has just received an excellent summer fallowing, and 15 being still largely under stumps, its reclamation, which we purpose over-

taking at same time, will be incomplete unless accompanied by thorough drainage.

At the present moment this farm has not even a common cellar fit for keeping either milk or vegetables. Independently of any ordinary cellarage, however, an establishment of this character is unfinished and wants in educational completeness without a properly constructed Dairy. Now that we are in possession of various cows remarkable either for production of quantity or richness of milk, our management would certainly be inconsistent without a suitable house, which, besides the ordinary underground space for milk, should have a churn and store-room with an ice and experimental room overhead. Of course, its size should be such as to provide for increase of stock and students.

Our cellars in connection with the barn are already too small for the increasing area of root cultivation, and the separate preservation of any crops from the plot and field experiments is at present unattainable. We want a root-house; an underground space of 18x40 would suffice, and in order to utilize the stone walls, I propose to erect upon them a common wooden building to be used as a tool-house and seed-room in connection with the experimental

department.

The question of additional implements at an extensive farm and school, will of necessity

be almost an annual one. I shall but refer to three wants:

What is called a Boiler—a kind of kettle on the top of a stove is at present all the cooking appliances at the service of the Ontario Government Farm. With this we have had to prepare our experimental pig food, to the exclusion of anything for horses, cattle and poultry; and so, as to keep the same system would mean other three kettles—leading to expense and much trouble, a small vertical engine boiler to supply steam to troughs, would meet all our present requirements.

I am of opinion that many farmers should be able to fasten a loose horseshoe, and repair a broken machine bolt or chain link. This handicraft, in the seed and harvest hurry, would often

be valuable. We cannot do this without a portable forge and tools.

Last winter all the pea crop was flailed at an expense of about \$120,—a pea-thrasher

costs \$130.

I find the following in the report of the Commissioners, dated 31st January, 1874: "That there should be an Arboretum in which are grouped as near each other as practicable, all the species and varieties belonging to each genus of deciduous trees which will grow in this country, and the students made familiar by comparison and contrast with the particular characteristics of each, and instructed in the economical uses to which each is specially adapted."

Concurring in this recommendation, and believing that our "progressive development" now calls for such a step, I advise a beginning next year. Having myself had a long experience in the practice of tree culture, and given considerable attention to the scientific bearing-of Arboriculture, the management of an Arboretum (and pinetum) will not call for any unusual effort; and more, if you are desirous that Arboriculture should form part of the cur-

riculum of studies here, I am willing to undertake it.

A matter of much value in connection with the Live Stock department is that of the method of winter feeding—whether it should be that of pulping roots and cutting hay and

straw, or that of giving them in the whole state. The question is not one of expense only, it bears largely on what is best adapted to different digestive organisms—both as a practical fact in rapid feeding for the butcher, nutrition for breeding stock, and substantial growth for young animals.

Permit me, in one sentence, to suggest that you should take into consideration whether it is one of our duties here to receive donations of special seeds and manures for the purpose

of testing, and if, within certain limits, even implements should be reported on.

In Appendix will be found Inventory and Valuation of Live Stock, Crop, and Implements, with abstract of Meteorological Observations.

I have the honour to be, Sir,
Your obedient servant,
WM. BROWN.

The Hon. S. C. Wood, Commissioner of Agriculture.

### IX. FINANCIAL STATEMENT.

This is contained in the several Tables of Appendix E. Table A shows the amount expended out of the appropriation granted for the eleven months ending 30th Nov., 1876. Table B shows the estimated amount required for 1877. Tables C and D give an inventory and values of stock and implements. Table E shows in an abstract form the farm income and expenditure for the financial year beginning 1st Nov., 1875, and ending on 31st Oct., 1876. Table F shows the estimated farm income and expenditure for the

financial year 1877.

In Table A there should properly be included certain amounts paid out of two accountable warrants for \$1,000 each, which will be placed, according to custom, in the December accounts. Were these included, and the amount for December charged, the expenditure on maintenance account for the twelve months of 1876 would be about \$17,000. There are two "items" which, when the December accounts come in, will exceed the sums respectively appropriated, viz., "Furniture and Furnishing," and "Repairs and Alterations." A good deal of what has been done under the former head should more properly have gone into Capital Account, as it has been in connection with the new School building, and in furnishing some eight rooms in the Mansard story. As regards the latter, all work done has been properly "repairs," but unforseen repairs. The drains and sewers, when originally laid, had been put down during the winter season, in order to open the Institution in the spring. And as might have been expected, these have now to undergo revision, and, as a consequence, I have been obliged to relay a long drain and sewer this summer. In digging the well likewise, which was to supply the place with water, a small ordinary well was sunk, which, having a poor spring at the best, was found to be totally inadequate to supply the water required. It has been, therefore, sunk deeper and made wider at a considerable cost. A system of common outside water closets likewise, with no outlet for sewage, had been built within twenty feet of the well and thirty of the house, and in process of time the natural result followed. These have been removed, and others, at a considerable distance, erected. These alterations were imperative, and have cost a little more than the appropriation for "Repairs." Taking the onehalf of those items as a fair proportion for ordinary expenditure, and adding to it the rest of the expenditure for household expenses and for food, as well as the wages of the matron and her servants, we will have the cost of maintaining forty pupils. These sums make a total of \$4,908.76 for the eleven months. This is a little under the \$130 per annum, which will be found laid down in my last report, as the average cost of maintaining a student for the year. The charges under the heading of "Experiments" will be found fully explained in the report of the Professor of Agriculture.

Little requires to be said regarding expenditure on Capital Account. The various works causing the charges under Permanent Improvements, such as fencing, altering stables and barns for permanent work, building poultry house, greenhouses, &c., are fully explained elsewhere. The charges under "Live Stock," mostly incurred on an importation from

Britain, have likewise come under review. In consequence of over-expenditure on other items, only four hundred dollars have been spent on "Library and Apparatus," but the greater part of that amount has gone into the Laboratory. The finishing of the Veterinary School building has cost some two hundred dollars more than was estimated.

Taking the last two years as a guide, and basing our estimate on the standard of \$130 as the cost of a stu lent's maintenance for the twelve months, the various items under "Food" and "Household Expense," are placed as seen in Table B. The only increase is in "Fuel," and the Veterinary School Building will require the extra amount to heat it. Nothing can be altered under "Repairs," for, besides another drain requiring, in all probability, relaying, we must have one or two fire extinguishers, at whatever cost. The item for "Statistical Bureau" is fully explained under the head of "Recommendations." Under "Contingencies" will come, this year, the amount required to renew our Insurance policies. The item of "Bonus to Pupils" would, had I my will, be entirely expunged, for it is an utterly abused one. And after this year it will not appear, but as all our students came in under the old arrangements, viz.: of getting ten cents an hour for work, and paying two dollars a week for board and washing, it will this year be required, or there will be a breach of faith on the part of the authorities here and at headquarters. Hereafter, however, by charging board and washing at cost rate, and paying for actual work done, the bonus will, I hope, be on the other side.

The sum of \$1,000 is again asked for library and apparatus, and as we are establishing a museum too, the amount is rather on the small side. The next three items under Capital Account are fully explained in the Report of the Professor of Agriculture. The charges under "Building," will be found fully considered under "Recommendations."

In Table A is given an abstract of the business of the Farm for the financial year. Divested of all detail, the balance sheet stands somewhat thus:—

Cash receipts from all sources		
Balance in hand	\$479	74

In reality, however, there is no balance, for 632 bushels of barley and 280 of rye, which should have been counted in next year's assets were placed in this, and the amount received for them was greater than the balance shown. The expenditures nader "stock" and "feed and fodder" represent rather business transactions than ordinary expenditures. Having so much actual pasture land, we have made a custom of buying cattle and sheep in the spring and selling them when fattened, so that No. II. of income is largely a cross entry with "stock" and "feed and fodder," though the largest part of the latter is charged against working and not fattening stock. "Repairs" is abnormally large, owing to our placing the barns and out-buildings, as well as the houses for the men, into shape. Indeed a large portion—the greater part of this item—should have gone under "permanent improvements." The whole of the cash expenditures are larger than they will, in all probability, be at any future time.

By a glance at Table F, it will be seen that the policy of making the Farm pay its own

running expenses is being steadily pursued.

In conclusion, it may be well to remark that in dealing with the finances of the Institution, a threefold end should be kept in view. In the first place, all permanent improvements should as speedily as possible be made, and then the Farm allowed to pay for all the others as well as for running expenses. In the second place, the maintenance account should be almost abolished by the students paying for board and washing; and, in the third place, the salaries of the staff provided for in a manner to be described in the following section.

### V. RECOMMENDATIONS.

Any recommendations that I may make will concern the School. In the first place, then, the accommodation is too limited. Within thirteen months I have filed seventy-three applications, and have been obliged to allow some twenty-two informal applications to slip, simply because I could give no assurance of admission. Of course these were not all at one time. And it must be remembered that all this has been almost spontaneous, for besides an ad-

vertisement now and then, little was done. A few circulars at the first of the season were issued, but it soon became apparent that until accommodation was provided it was useless to push. For, under our present system of managing this place as a Public Institution, where everything becomes a target for party firing, it would have been a delicate matter to choose the students required out of the number which would from all appearance have applied. Appreciating the difficulty I stopped. But I have no hesitation in saying, that by energetic work the number of applications inside of twelve months can easily be made the double of seventy-three. And it must be remembered that this evidence of desire on the part of the public was in the face of a painful record, advertised by a general election throughout every county in the Province. When that record has been overcome, greater things in the way may reasonably be expected.

And if the accommodation be doubled, the proportionate cost will be diminished. The staff in the first place, will need no increase. Everything is at present done by lecturing, and it is as easy to lecture to a hundred students as to forty, though it may be a little more difficult to examine the latter number. And, if the expense of the staff is no greater, the cost of maintenance all round, will be proportionately less. We would then be able, if I may be allowed the expression, to grow our own beef, and bake our own flour, to the manifest ad-

vantage both of the School and the Farm.

So that both the necessities and the advantages are on the side of building. And the cost will not be great. On the south side of the College stands the Veterinary School building. By placing another wing at the same distance on the north side, and filling in between, there would be erected a building with a frontage of two hundred and forty feet. If the north wing and north centre be at present built, they will give accommodation for fifty additional students, together with the Farm Manager and his family. And this can be done at a cost of \$25,000. It would be advisable, therefore, and I would recommend that the architect should be instructed to prepare a plan of the College as it will appear when completed, and the sum

of \$25,000 be placed in the estimates for this year.

Again, it is advisable to look forward to the time when the Institution can stand on its own footing. It is easily conceivable that when well-established, the students will be readily willing to pay for board and washing if tuition is free, and thus a great part of your Maintenance Account may be abolished. And it is positively certain that when put into shape, the Farm will pay its own expenses. When these branches of expenditure are struck off, there remains but the salaries of the staff. In order for ever hereafter to meet this charge, I think it would be highly advisable to set apart six townships on the proposed line of the Canada Pacific Railway, through Ontario, as a land endowment for the benefit of this Institution. From the time the Railway was under way, these townships would pay the salaries of the staff. This would be but following the practice of the United States, as the land scrip there, forms a large part of the revenue of each Agricultural College Were this carried out, at the end of the first ten years of the existence of the College, it would, with the exception of the cost of experiments and permanent improvements, in the shape of buildings, be self supporting.

Coming down to the School proper, I would make a couple of suggestions. In the first place I would amend the course of study at present adopted. Our pupils consist of three main classes: in the first place farmers' sous, who are fairly skilled in the various farm operations, but indifferently trained in school work; in the second place, the sons of residents in our cities, towns, and villages, who are fairly trained in school work, but know nothing of farm operations; and in the third place, farmers and farmers' sous who are pretty well skilled n.both. I would make a preparatory year for the first two classes, -the one in the school and the other on the farm The last class would step immediately into the first year. As can readily be seen, this would necessitate the establishment of an English Department; but that is, and always will be, a necessity. We have a few students, and a greater number of applications from rural sections, where the only teachers have been third-class, and the majority of these females. Those students are among our most carnest and diligent, and those applications the ones that should be encouraged; but the former are a drag on their classes, and the latter cannot be entertained simply because the preparatory English training has be partment in such an Institution is an absolute necessity. We cannot afford to send out our stu dents unable to write well a common business letter, or calculate the interest on an ordinary note. The entrance examination to a High School, which is our admittance standard, includes neither. Besides, we must apply arithmetic to mensuration at least, if not to the elements of levelling and surveying, and must teach the student how to read and appropriate a book. And all this, simple as it may seem, requires that the knowledge of English and Mathematics exacted of the entrant, should be carried forward and increased by the student. An English Department is therefore a necessity, and the plan proposed of establishing a preparatory section for each of the two classes mentioned, will, if adopted, I am certain, prove a signal success.

The second suggestion that I would make regarding the School is, that it should be affiliated to the University of Toronto. In offering such a suggestion I would disclaim any intention of making the Institution a department of any university. As the term is usually understood, that could only be effected in this instance by using the teaching of University College. With that educational Institution the proposal has nothing to do. It is with the

University of Toronto, as an examining body, that I would desire you to treat.

In the first place, then, it is highly advisable that the students who complete their course with us, should receive not only a certificate of attendance, but a certificate or diploma which would testify that they had studied successfully the various subjects embraced in the curriculum. Such a certificate, diploma, or degree, is given in every similar institution. Now the more weight this certificate can carry, the greater value will it be to the graduates, and the greater will be the ultimate advantage to the Institution. But that has been too recently established, and is too little known for any certification by its masters to carry the weight, the value, or the influence, that a similar certificate from such a body as the Senate of the University of Toronto could command.

Again, whilst this Institution might be called a "Public Institution," it is, unlike all other Public Institutions, essentially an educational one. But it stands outside of our present educational system, for its ends are special and its training technical. The more, however, all our educational institutions are brought into harmony, the better will it be for the success and stability of each. To this rule we are no exception We have at present no status in educational circles, and are consequently without the reflex influence which the possession of it commands amongst the classes we more especially desire to reach. Such a status would be obtained, and our Institution placed in harmony with our whole educational system, by

attiliation with the University of Toronto.

Still further, it is a well-established rule that certificates of qualification should never issue on the results of examinations conducted by the teachers. That rule will be followed in the event of the course suggested being adopted. And lastly, in order to give us the power to grant diplomas or degrees, we would require a charter from Parliament. The time may come when this Institution, standing at the head of affiliated agricultural schools in the Province, would have a legitimate right to make such a request. But that time has not yet arrived, and there are slight signs of its dawning on the horizon. Instead of Parliament increasing the number, its true policy is to buy up existing charters, and make one degree-granting body for the Province. In view of the soundness of that policy, it would be an evidence of legislative folly to ask for this place such a power; and a sign of legislative wisdom to put it in affiliation with that body, which under whatever name,—University of Toronto, or University of Ontario,—is destined to be the only degree-granting body in the Province Many other arguments might be adduced, but these will be sufficient to show the reasons for, and the ends to be attained by, affiliation with the University of Toronto.

And lastly, I would take the liberty of making a recommendation which I have put into practical execution by asking \$300 towards it in my estimate of expenditure for 1877. A fair amount of crop and other statistics relating to agriculture are at present collected by the Secretary of the Bureau of Agriculture, and published in the Commissioner's Annual Report. My proposal is to use somewhat the same agencies, but extend the sphere of operations and the subject matter of the statistical reports, so as to include the whole Province and everything relating to agriculture therein, and publish reports monthly, or every two months at the farthest. In other words, I recommend that in this Province we follow, with such variations as our circumstances require, the plan adopted by the Department of Agriculture at Washington. The benefits that would accrue to the agricultural and all other interests, by adopting such a course are evident; and the reflex benefits to the Institution would not be

few in number.

And now, in conclusion, it may be allowable to take a retrospect of the past and a glance at the present and the future. It will be two years on the first of next month since the real work of the Institution began. A school had to be organized, and a farm brought into order for the purposes to which it was to be placed. The former was completed in a month, the latter is still going on. One hundred and three acres of natural pasture land have been broken up, and brought under the plough. Seventy acres have been cleared. Main drains have been laid through half the Farm, and eighty-two acres under-drained. Fencing has been begun, and levelling and road-making are gradually changing the appearance of the place. The thirty acres in front of the buildings facing the Dundas Road have been laid out in lawn and gardens; approaches to the buildings have been cut out, graded and gravelled; flower-borders and shrubberies have been made; trees planted, and the lawn seeded down successfully. A kitchen-garden of six acres has been laid out, fenced, and put into order; and the nucleus of a system of forcing-houses and green-houses begun. The out-buildings have undergone necessary repairs, and various new structures, such as a poultry-house and a carpenter's shop have been erected. A Mansard roof has been placed on the main College building, and at a distance of fifty feet to the south another structure, forty by fifty, with a basement, two stories and a Mansard, has been erected to be used entirely as a school. And the latter has progressed. At the time spoken of there were twenty-six pupils in attendance, now there are forty. It was then difficult to get pupils, it is now difficult to procure accommodation. The teaching was then fitful, now it is systematized. We have laid down a course of study which includes Agriculture and all the allied sciences. The course has been divided into departments, and masters procured for each department. The students are receiving an education the value of which can not be too highly estimated. Only when some scores of graduates have been placed in the country will it be known. We are now established, an accomplished fact, and working out our destiny. The farm is being brought more into the shape of a "model" farm, experiments have been inaugurated, as a glance at the preceding pages will show, and the school work is prospering favourably. Our relation to the outside public is becoming more satisfactory. The disfavour is wearing away, the indifference vanishing, the freezing recognition is thawing into a warmer; and a kindlier interest is being manifested in our aims and our projects. Scores of letters lie near me to testify to these facts. We are working away quietly, but gathering strength for future energy. We are learning lessons from similar Institutions in other countries, and from our own mistakes, and gradually working such knowledge into our system, in order that the experiment may be an ultimate success. And by careful management, ready tact, and thorough work on our part, together with the moral and material support of the public, success is certain. The past has been assuring, the present is satisfactory, and the future is hopeful.

I have the honour to be, sir,
Your obedient servant,
WM. JOHNSTON,
President.

The Honourable S. C. Wood, Commisioner of Agriculture.

### APPENDIX (A).

CIRCULAR OF THE ONTARIO SCHOOL OF AGRICULTURE FOR THE SCHOLASTIC YEAR 1876.

HONORARY COUNCIL-Hon. David Christie, Hon. George Brown, Hon. Archibald Me-Kellar, Professor Brekland, James Young, Esq., M.P., Delos W. Beadle, Esq., Jas. Laidlaw, Esq.

### STAFF.

- (a) William Johnston, M.A., President and Bursar.(b) William Brown, Esq., Professor of Agriculture.

- (c) George Baptie, M.A., M.B., Professor of Chemistry. (d) E. A. A. Granger, V.S., Professor of Veterinary Science.
  - JAMES STIRTON, Instructor in Live Stock Department. James McNair, Instructor in Field Department.
  - John F. Barron, Instructor in Horticultural Department.
  - James Mackintosh, Instructor in Mechanical Department.

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<sup>(</sup>a) Gold Medallist of University of Toronto.

<sup>(</sup>b) Gold Medallist of Highland and Agricultural Society of Scotland.
(c) Medallist of the University of Toronto, and formerly Professor of Chemistry in Victoria College Medical School.

<sup>(</sup>d) Formerly Lecturer on Anatomy, in the Ontario Veterinary College.

### INTRODUCTION.

The Institution known as "The Ontario School of Agriculture and Experimental Farm," is situated about a mile to the south of the Town of Guelph. The Farm consists of 500 acres, about 400 of which are cleared, and is composed of almost every variety of soil. It is in the centre of an extensive agricultural district—one unrivalled in the Province for the raising of stock. Readily accessible by rail from all parts of the Province, in close proximity to a town at once one of the finest grain and stock markets in Ontario—noted besides for the strong moral and religious tendencies of its people, no site could have been found more eminently suited for the establishment thereon of such an Institution.

Immediately upon obtaining possession, the Government appointed a Commission to inquire and report regarding the manner of adapting "the said farm and management and control thereof, to the purposes of a model and experimental farm." A few extracts from the Report of this Provincial Farm Commission will show clearly the basis upon which the

Institution is at present established.

"The name of the Institution should be 'The Ontario School of Agriculture, and Experi-

"The objects of the Institution should be:—First, to give a thorough mastery of the practice and theory of husbandry to young men of the Province engaged in Agricultural and Horticultural pursuits, or intending to engage in such; and, second, to conduct experiments tending to the solution—f questions of material interest to the Agriculturists of the Province, and publish the results from time to time.

"That the Farm should be separated into five distinct departments, namely:

"(1) The Field Department.

"(2) The Horticultural Department."
"(3) The Live Stock Department.

"(4) The Poultry, Bird, and Bee Department.

"(5) The Mechanical Department.

"All permanent improvements on the Farm should be carried out on a gradually developed system, and in such a manner as to exhibit and test the comparative values of the most approved method of executing the several works, and to test the cost, convenience and durability of the several appliances from time to time recommended for adoption on the farms of the Province.

"That for some time to come the work of the Farm must be mainly confined to the preparation of the fields and buildings for the systematic instruction of the pupils; that the knowledge that might be acquired from these preparatory operations would be most valuable to the pupils; that the labour of the pupils ought, therefore, to be employed as far as practicable in those preparatory operations; and that it is expedient to provide at present merely for the conduct of the Institution during this preparatory term, and utilize the practical experience obtained from it in settling hereafter the permanent organization and educational curriculum."

In order to carry out the suggestions of the Provincial Farm Commission, the Government made such improvements on the residence found on the place, as would best utilize it for present purposes. Accommodation was provided for about twenty-five pupils, a Principal and a Rector were appointed, and a foreman for each of the following four departments engaged, viz.:

1. Farm Department.

2. Live Stock Department.

3. Horticultural Department.

4. Mechanical Department.

The Institution was opened in May, 1874. Since that time many improvements have been made on the Farm, and the facilities at hand for the purposes of education greatly increased. The nucleus of a breeding stock, consisting of six different breeds of cattle, five of sheep, three of pigs, and eight of poultry, has been secured, and the latest and most improved implements bought.

A Mansard storey, giving accommodation for eighteen additional students, has been placed

on the main building; and a three-storey building, with veterinary and other class-rooms, to

be used entirely for School purposes has been erected.

Besides, the experience gained during the last year and a-half has enabled the following course of study, rules and regulations to be drawn up. Although temporary—but in force for the "Preparatory, Term"—they are published, in order that the people, and especially the farmers—of the Province may see at a glance the terms of admission to, the subjects taught in, and the benefits to be conferred on its pupils by "The Ontario School of Agriculture and Experimental Farm."

### I. TERMS OF ADMISSION.

Before admission to the School as a pupil, each candidate being at the full age of fifteen years, will produce the following certificates:

(1) As to moral conduct.

(2) As to physical health and strength.

(3) As to the assent of his parents or guardians for admission.(4) As to his intention to follow agriculture as an occupation.

The standard of education necessary for admission as a pupil will be as follows:

(1) Reading, Writing, Spelling.

(2) English Grammar and Composition—analysis and parsing of simple sentences; familiar and business correspondence.

(3) Arithmetic -through Proportion.

(4) Outlines of General Geography, and Geography of Canada.

Those who can produce Certificates of entrance into any High School, those who hold Teachers' Certificates, or are graduates or undergraduates of any University in Her Majesty's dominions, are considered to possess the literary qualifications requisite for admission.

### II. COURSE OF STUDY.

First Year. — Practical Agriculture.

Practical Horticulture.

Botany-Structural and Physiological, and Zoology,

Elements of Geology and Physical Geography. Chemical Physics and Inorganic Chemistry.

Animal Anatomy and Physiology, with

Veterinary Surgery and Practice.

Mensuration, Bookkeeping and English Literature.

Second Year.—Agriculture.

Horticulture.

Agricultural Chemistry.

Economic and Field Botany.

Zoology, Entomology and Meteorology.

Animal Anatomy and Physiology, with

Veterinary Surgery and Practice.

Mechanics, Land Surveying and English Literature.

The regular course is one of two years, but a single year's course may be taken by those who can produce evidence of having assisted in farm operations for at least two summers.

The term of engagement is for one year.

### III. DEPARTMENTS OF INSTRUCTION.

1. Agriculture.

2. Horticulture.

3. Chemistry.

4. Natural Sciences, except Chemistry.

5. Animal Anatomy and Physiology, with Veterinary Surgery and Practice.

6. English and Mathematics.

### IV. Course of Apprenticeship.

The pupils will be daily distributed alternately to each of the following four Departments:—

1. The Live Stock Department.

2. The Field Department.

3. The Horticultural Department.

4. The Mechanical Department.

They will be taught the manner of performing the various operations in each Department by the Instructor or his assistants in that Department; and being distributed alternately to each, it is expected that at the end of two years a thorough apprenticeship will have been served. The instruction received in the class-room will, as far as possible, be illustrated and exemplified in the fields, yards and shops.

### V. Hours of Labour and Study; Fees; Remuneration.

The relative number of hours of labour and study will vary with the seasons, but the arrangements will be such that an annual daily average of five hours of each will be obtained and enforced.

For skilled work faithfully and zealou-ly performed, payments at the rate of ten cents an hour will be made; for all other in proportion. Tuition will be free. Board and washing will be charged at cost rates.

By this arrangement the cost of education and training will be reduced to a minimum. To a farmer's son, able and willing, with any experience at all, the cost should be nothing, and in no case will it be allowed to exceed fifty dollars per annum.

### VI. SESSIONS AND EXAMINATIONS.

There will be two sessions in each year, a winter and a summer one. The former will commence on or about the first of October, the latter about the middle of April.

There will be a vacation at the end of each session.

Examinations, which every student is required to pass, will be held at the close of the session—in each inside Department, on the subject of Lectures in that Department for that session; and in each outside Department, on the work of that Lepartment for the session.

### A. GENERAL RULES.

### I.—Students are Required:—

1. To render cheerful and willing obedience to orders.

2. To conduct themselves in a gentlemanly and orderly manner at all times.

3. To avoid all noisy or boisterous conduct in or about the building.

- 4. To observe neatness in dress at prayers, meals, and lectures, and tidiness in their rooms.
  - 5. To observe all general and minor regulations.

### II.—The following practices are Absolutely Prohibited:—

1. Profane swearing, improper language, and gambling.

2. Use of intoxicating liquors and firearms.

3. Use of tobacco while on detail, in or about the building, barns or outbuildings, or in any place except in the smoking room.

4. Entering the domestic or sleeping apartments without permission.

5. Absence without leave.

### B. GENERAL REGULATIONS.

- 1. All students shall reside in the building, where they are under the immediate charge of the Rector.
- 2. Each student upon entrance shall sign a declaration that he will conform to the rules and regulations relative to students.
- 3. A register shall be kept of the attendance of students at prayers, work, and lectures.
- 4. All students shall attend the morning and evening prayers unless exempted from so doing, in consequence of the objection of their parents or guardians.
  - 5. They shall regularly attend their respective places of worship on Sabbath.
- 6. No student shall be absent from the Institution after the time of evening prayers, except by permission of the Rector.
  - 7. The Rector is authorized to impose fines and other penalties for the infraction of
- rules and regulations.
- 8. The morning bell shall be rung at 5:30 a.m.; bell for morning prayers at 6 a.m.; breakfast at 6:30 a.m.; farm bell at 7 a.m.; school bell at 9 a.m.; farm bell at 12 noon; dinner at 12:30 p.m.; farm and school bells at 1:30 p.m.; farm and school bells at 4:30 p.m.; tea at 5 p.m.; school bell at 7:30 p.m.; bell for evening prayers at 9 p.m.; lights out and doors closed at 9:30 p.m.
- 9. No student who fails to pass the requisite examinations, or to work thoroughly will be allowed to remain in the Institution.

### APPENDIX (B).

EXAMINATION PAPERS—EASTER, 1876.

### ONTARIO SCHOOL OF AGRICULTURE.

### FIRST AND SECOND YEARS.

PRACTICAL AGRICULTURE.

Examiner: WILLIAM BROWN, Esq.

1. In selecting a district of unsettled country for farming, what would you desire besides good soil?

2. What are the effects of an over clearance of forest?

- 3. What are the essentials of good fences, and the principles to be attended to in their construction?
- 4. What constitutes a good plough, and state the requirements of good ploughing? 5. What conditions should guide us in locating farm buildings, and upon what principles should their detail arrangement be made?

6. Name the chief characteristics of the Galloway, Devon, Hereford, Ayrshire and

Short-horned cattle.

- 7. Give sketch showing position and names of the principal timbers required in a barn 100x60x18.
- 8 What are the points of an animal good for fattening, and the conditions in the field and buildings most favourable to it?

9. What are the essentials in the grain of all cereals?

10. Why is succession of crops made dependent upon cereals?

11. Distinguish between the available fertility of a soil, and its actual productive powers.

12. Give the results of our physical analysis of the new garden soils.

### SECOND YEAR. -

### AGRICULTURE.

### Examiner: WILLIAM BROWN ESQ.

1. What are the characteristics of clayey, loamy and sandy soils?

2. State the advantages of irrigation.

3. Describe the benefits of the use of the roller.

4. Name the principal grasses cultivated in the United States and Canada.

5. To what crops are the following manures most beneficial under ordinary circumstances: Bones, Nitrate of Soda and Gypsum?

6. What is implied by a regular use of the cultivator, or grubber?

- 7. Name the ordinary leguminous plants, their favourite soils and general treatment.
- 8. Show why alternating wheat and clover on strongly limed land is not always profitable.
- 9. Give the average analysis of guano.
- 10. State shortly the most approved method of managing farm yard manure, with reasons,
  - 11 Describe the system of green crop manuring, and on what soils it is most suitable.

### FIRST YEAR.

### CHEMISTRY.

Examiner: George Baptie, M.A., M.B.

- 1. Define weight.
- 2. How would you obtain the specific gravity of samples of the following:
  - (a) Sand.
  - (b) Sugar.
  - (c) Cork.

What is its specific gravity?

- 5. What are the points to be attended to in the construction of a thermometer?
- 6. The average temperature for January at an observatory where the Centigrade thermometer is used was 1°·25; at another where the Fahrenheit is used 44°·45. What is the difference in the temperature of the two stations expressed, both according to the Centigrade and Fahrenheit scales?
- 7. A Fahrenheit thermometer at our green house shows -1°. What should a Centigrade placed beside it indicate?
  - 8. Mention various modes of chemical combination, giving examples of each.
- 9. Give the combining weights of, and group the non-metallic elements according to their quantivalence.
  - 10. Name the haloid elements. Give the properties of each member of the group.
- 11. Give the ordinary methods of preparing hydrogen and oxygen. Properties of each? Describe experiments which show these properties.

12. Describe the preparation of hydric chloride, hydric sulphate, and hydric nitrate.

Express the reactions.

13. Names of combinations of hydrogen with non-metallic elements. Give the formula and properties of three which you regard as most important.

### SECOND YEAR.

### CHEMISTRY.

### Examiner: George Baptie, M.A., M.B.

1. Describe the preparation and properties of the following: Na. K H O, K H C  $O_{s}$  K Cl  $O_{s}$ , and Na<sub>2</sub> Co<sub>3</sub>.

2. Give the properties of Calcium Chloride, Calcium Sulphate, Copper Sulphate, Red

and Black Oxides of Copper, Silver Nitrate and Corrosive Sublimate.

3. Give names and formulæ of the first form non-atomic alcohols, and of their corresponding acids.

4. Show how ordinary alcohol can be built up from its elements.

5. Formula of [ethyl] ether, and describe the continuous etherfication process.6. Give the "empirical" and "rational" formula of glycerine. Its preparation?

7. Give the formula, and describe the preparation of the following actids Oxalic, Tartaric, Citric and Lacetic.

8. Formula of cellulose, grape sugar, cane sugar: and show how the first and last may be converted into the second.

9. Describe the preparation of sugar.

(a) From cane.

(b) From beets.

10. Write notes on starch, milk, and fats and oils,

11. Describe preparation of vinegar from alcohol.

### AGRICULTURAL CHEMISTRY.

### Examiner: GEORGE BAPTIE, M.A., M.B.

1. Given a mass of granite, explain how from it a soil may in time be formed.

2. Give the substance of lectures on the following atmospheric constituents: oxygen and carbon di-oxide.

3. Account for the presence of chemical compounds of nitrogen in the atmosphere.

4. What quantities of "ammonia" and "nitric acid" (according to experiments of Bineau), are annually supplied to an acre of land from the atmosphere alone? Discuss Leibig's conclusions founded on these data.

5. How do you account for the presence of nitrogen (said to have been found by some observers) among the products exhaled by plants?

6. What is the action of humus?

7. If true, from your knowledge of chemistry, how do you explain the statement: The swamps of Luther, since the fire, are yielding excellent crops?

8. Lime-Where and why applied? Account for the different results of liming ob-

tained by farmers.

9. Certain compounds of iron are injurious to crops. What are they? Explain the "practical treatment" of soils containing them.

10. How do you account for the presence of potassium carbonate in soils, and express the reaction by use of symbols?

- 11. Write notes on SiO<sub>2</sub>.12. Where do you place "farmyard manure" among manures? Why? Discuss the ordinary way of making it.
- 13. Compare the value of equal weights of solid and fluid excrement to the farmer. 14. What is "superphosphate?" How made, and from what materials? Influence of the material upon the product.

### FIRST AND SECOND YEARS.

### STRUCTURAL BOTANY.

### Examiner: W. Johnston, B.A.

- 1. Distinguish the Vegetable Kingdom of Nature, on the one hand from the Minera. and on the other from the Animal.
  - 2. Define Structural Botany, and give its Divisions, founded on the organs of plants.
- 3. "All plants have their origin from, and grow by means of, cells." Prove this assertion, and give the structural and chemical composition of a cell.

4. Define "cell" and "vessel," and enumerate the varieties of each.

- 5. Distinguish between a Root and a stem, describing the structure of the former, and naming its abnormal forms.
  - 6. Describe the internal structure of each of the three kinds of stem.
  - 7. Describe the structure of a Leaf, and give the main divisions of leaves.
  - 8. Define Inflorescence, and describe the forms of Indefinite Inflorescence. 9. Name and describe the Floral Organs, and the separate parts of each.
- 10. Give the structural composition of the Seed, and the manner in which the plant springs therefrom.

11. Give a botanical list of Fruits.

12. Write brief notes on "Intercellular Canals," "Stomato," "Epidermis," "Hairs," "Parasites," "Bud," "Node," "Stolon," "Tendril," "Bulb," "Phyllotaxis," Bract," "Spore," "Embryo."

### SECOND YEAR.

### PHYSIOLOGICAL BOTANY.

### Examiner: W. Johnston, B.A.

1. Name the elements entering into the composition of plants, and give a list of the organic constituents.

2. Give the physiology and mode of reproduction of cells and vessel.

3. Describe the mode of growth of the root.

4. Describe the mode of growth of the stem.

5. "Leaves are organs of digestion rather than of respiration." Discuss the statement, and show what physiological functions are performed by leaves.

6. Give the causes of construction, expansion, coloration and defoliation of leaves.

- 7. Give the physical, chemical and vital cause at work in the circulation of the sap.
- 8. Give the chemical changes that take place in the reproductive organs during the period of flowering.

9. Describe the process of fertilization.
10. Describe the process of hybridization.

11. Give the causes of diseases in plants, enumerating the commoner diseases.

12. Give the pathology of sweat, rust, mildew and dry rot.

### FIRST YEAR.

### ZOOLOGY.

### Examiner: W. Johnston, B.A.

- 1. Define zoology and name its sub-kingdoms, giving the characteristics of the first three.
- 2. Describe an amœba, a sponge, a sea-anemone, a coral and a sea-urchin, and place cach.
- 3. Describe a naked and hidden-eyed Meduse, distinguishing the one from the other.
- 4. Describe a leech, a lobster, a crab, a tick and a spider, and place each under his own class.
- 5. Give the general anatomy of an insect, and the main divisions of the *Insecta*, with examples of each.
- 6. Give a general description of lamellibranchiate and gasteropod mollusks, describing as examples an oyster and a land-snail.

7. Give the anatomy of the Vertebrata, and name its classes.

8. Show the differences in the vertebral column of a fish, a frog, a turtle, a snake, a bird, and a man.

9. Name the orders of birds, giving examples of each.

10. Give a zoological description of a sloth, a whale, a tapir, a camel, a deer, an ox, a sheep, a bear, a dog, a lion, a rat, a baboon, and a man, and place each animal named, if you can, under its own order.

### SECOND YEAR.

### ZOOLGGY.

### Examiner: W. Johnston, B.A.

1. Distinguish Natural History from other sciences.

- 2. On what principals are animals classified, and what names are given to the divisions in order.
  - 3. Name the zoological sub-kingdoms and the characteristics of the first four.

- 4. Compare the structure of an amoeba with that of a foraminifer; of an infusorian with that of a "wheel" animaleule; of a sponge with that of a coral; of a sea-anemone with that of a sea-urchin; and place each under its own order.
  - 5. Name the orders of the Scolecidee, describing as example a tape-worm and a fluke.
  - 8. Give the general characters of the *Insectu*, and name the orders.
- 9. Distinguish between the structure of a crab, a spider, a centipede, a plant-louse, a field-bug, a grasshopper, a house fly, a butterfly, a bee and a beetle, placing each under its order and class.
- 10. Give the anatomy and physiology of the Vertebrata, and distinguish the five classes the one from the other.
- 11. Compare the anatomy of a fish, an amphibian, a reptile, a bird and a mammal, showing the modification from the typical vertebrate.
- 12. Describe the structure of a lamprey, a trout, a sturgeon, a shark, a frog and a crocodile, and place each under its own order and class.
  - 13. Name the order of birds, giving examples of each.
  - 14. Name and give examples of the orders of Mammalia.
- 15. Distinguish zoologically between a kangaroo and a camel; a sloth and a squirrel; a whale and a seal; a horse and a deer; an ox and a lion; a bear and a tapir; a dog and a racoon; a tiger and a baboon; a hog and a cat; a mouse and a mole; an anthropoid ape and a man. Place each animal under its own family, order and class.

### FIRST AND SECOND YEARS.

### VETERINARY ANATOMY.

### Examiner: E. A. A. GRANGE, V. S.

- 1. What two classes are the organs of digestion divided into?
- 2. Name the parts which constitute the preparatory organs of digestion.
- 3. Name the parts which constitute the essential organs of digestion.
- 4. Mention the divisions of the small intestine.
- 5. Mention the divisions of the large intestine.
- 6. Mention those organs which are accessory to the essential organs of digestion.
- 7. Describe the course of the esophagus.
- 8. What are the names of the openings into the stomach?
- 9. What are the names of the various coats forming the walls of the stomach?
- 10. What is that cavity called which contains the essential organs of digestion, and what is the name of the membrane which lines it?
- 11. What is the name of the cavity which contains the principal organs of circulation and respiration ?
  - 12. Name the cavities entering into the formation of the heart.
  - 13. Give the course of the blood through the heart and lungs.
  - 14. What are those organs called which carry on the general circulation?
  - 15. Name the openings into the right auricle.
  - 16. Name the openings into the left verticle.
  - 17. What is the name of the functional blood vessels of the liver?
- 18. What are the names of the two large blood vessels which return the blood to the right side of the heart?
- 19. Mention the sensitive structures entering into the formation of the foot of the horse.
  - 20. Name the three parts into which the hoof is divided.

### SECOND YEAR.

### VETERINARY MATERIA MEDICA AND PATHOLOGY.

### Examiner: E. A. A. GRANGE, V. S.

- 1. What is meant by an anti-spasmodie?
- 2. Mention three medicines which act as anti-spasmodics?

- 3. What are the actions of aloes?
- 4. What is the dose of aloes as a purgative for the horse?
- 5. What is considered the most useful purgative for the ox ?
- 6. What is a tonic?
- 7. What classes are tonics divided into?
- 8. Mention two medicines which act as tonics?
- 9. What is the dose of sulphate of iron as a tonic for the horse?
- 10. What is the action of blood-letting?
- 1. Give a definition for disease?
- 2. What is inflammation?
- 3. Mention the various terminations of inflammation?
- 4. Give an example of inflammation terminating in suppuration?
- 5. Mention the principal diseases of bone?
- 6. Give the causes, symptoms and treatment of bone spavin?
- 7. Give native causes, symptoms and treatment of splint?
- 8. What is spasmodic colic?
- 9. Give the causes, symptoms and treatment of spasmodic colic?
- 10. What is the difference in the treatment of spasmodic colic and enteritis?

### FIRST YEAR.

### PHYSIOLOGY.

### Examiner: George Baptie, M.A., M.B.

- 1. Give proofs of the circulation of the blood.
- 2. Describe the circulation of the blood.
- 3. Give the general composition of the blood, and its behaviour when drawn.
- 4. What is the function of the heart ? Describe its structure.
- 5. Where is the purest blood to be found? Reasons.
- 6. Huxley says: "All work implies waste." Explain minutely:
  - (a) The disposal of this waste material.
  - (b) The structure of the organs by which it is accomplished.
- 7. Classify foods.
- 8. Mention representatives of each class, and describe fully the digestion of each article named.
  - 9. What is the great motor agent of the body? Explain its working.
  - 10. How is respiration effected?
- 11. Explain the different effects upon two animals (the trachea of one plugged, that of the other open), when kept for a short time under water.

### GEOLOGY.

### Examiner: GEORGE BAPTIE, M.A., M.B.

- 1. What are the characteristics of unstratified rocks?
- 2. Name and briefly describe the more important groups of unstratified rocks.
- 8. Distinguish a granite from a gneiss.
- 4. Distinguish stratified rocks from eruptive rocks.
- 5. Classify sedimentary rocks, according to their origin.
- 6. What are metamorphic rocks?
- 7. How do you account for the phenomena of metamorphism?
- 8. How were stratified rocks believed to have been produced?

9. State clearly the action of each agency mentioned in answering the preceding question.

10. Write notes on the following:-

(a) Elevation above and depression below sea level.

(b) Denudation.

(r) Tilting up and fracturing of stratified rocks.

- 11. What are the data for determining the relative ages of two rock formations? 12. Give a table of the different ages and periods to which rocks are referred.
- 13. Give a tabular classification of the rocks of Ontario, descending from the more recent formation to the oldest.

14. Describe the Guelph formation.

15. What is a fault?

### FIRST YEAR.

### SHORT-HORN HISTORY.

Examiner: W. Johnston, B.A.

1. Compare the Devon, Hereford, Ayrshire and Galloway breeds of cattle with the improved Short-horns.

2. What were the originals of the improved Short-horns, and describe their characteris-

tics?

3. By whom, and on what principle, was this breed of cattle gradually improved? Illustrate by examples.

4. Trace the history and pedigree of Hubback, and explain what is meant by the

"Kyloe" controversy.

5. Ketton, Brampton, Kirklevington, Killerby, and Warlaby herds—who were the owners? Sketch the biography of each.

6. How did the Short-horns so soon take a front rank, and illustrate the truth of this

by quotations from the sales of the first three herds?

7. Give a concise sketch of the Short-horn importations into Canada since 1833, and

name our most famous breeders of to-day.

8. How many vols. of the E., Am. and Can. Herd Books have been issued? How are the numbers recorded in each of the three? "Coates" and "Stafford" herd books. Distinguish.

9. Give the points of a Short-horn as respects

 (1.) Head,
 (6.) Hips,

 (2.) Horn,
 (7.) Rump,

 (3.) Brisket,
 (8.) Flank,

 (4.) Fore ribs,
 (9.) Twist,

 (5.) Crops,
 (10.) Touch.

### FIRST YEAR.

### ENGLISH AND SURVEYING.

Examiners: W. Johnston, B.A., W. Brown, Esq.

'At each according pause, was heard aloud
Thine ardent symphony, sublime and high!
Fair dames and crested chiefs attention bow'd:
For still the burden of thy minstrelsy
Was Knighthood's dauntles deed, and Beauty's matchless eye."

"The western waves of ebbing day Roll'd o'er the glen their level way; Each purple peak, each flinty spire Was bathed in floods of living fire."

Scott's Lady of the Lake.

1. Re-write the first extract in prose, and explain fully the meaning of the second.

2. Paraphrase the expressions "crested chiefs." "minstrelsy," "Knighthood's dauntless deed," "Beauty's matchless eye," "flinty spire."

3. Derive and give the meaning of "ardent," "symphony," "sublime," "minstrelsy,"

"dauntless," "spire," "dames," "glen."

4. Analyse the second extract, and parse the italicised words in the first.

8. On ground sloping at an angle of 45°, a road 20 feet wide and 230 feet long was cut in the solid, an upper retaining wall being built, what quantity of earth was removed, and what was the cost of the wall at \$10 per foot at its height?

9. The Ontario School of Agriculture being 888 feet above the level of Lake Ontario,

which is distant 30 miles, what would be the mean inclination of a pipe to convey water? 10. The Ontario Experimental Farm extends to 550 acres, with a boundary of five miles,

what would it be reduced to if 1 chains were cut off all round?

11. The opposite sides of a field measure ten and eight chains—one of the others being 15 chains—what is the acreage ?

### SECOND YEAR.

### ENGLISH AND SURVEYING.

### Examiners: W. Johnston, B.A., W. Brown, Esq.

1. Give the main divisions of the Aryan group of languages, and show how our own language is included in that group.

2. Show how the Celtic and Norse elements were introduced into the English language,

and give example of both elements.

3. Explain fully what you mean by the study of the English language, and discuss the part that "Grammar" plays in such a study.

> Eli.: What now, my son? Have I not ever said How that ambitious Constance would not cease Till she had kindled France and all the world Upon the right and party of her son.

- (1). And wound his honour with this diffidence.
- (2). Lord of thy presence, and no land beside.
- (3). And all the unsettled humours of the land.
- (4). To do offence and seath in Christendom.
- (5). As great Alcides' shows upon an ass.
- (6). For this down trodden equity we tread.
- (7). Pay that duty you truly one to him that owes it. (8). Save in aspect, have all offence sealed up.

SHAKESPEARE'S King John.

- 4. "Constance," "Elinor," "my son," "her son." Sketch the biography of each, and discuss the right of John to the English throne.
  - 5. Give the derivation and meaning of the italicised words.
  - 6. Point out all figures of euphory, syntax or rhetoric found in the extracts.
- 7. Compare the characters of Elinor and Constance, of Richard Faulconbridge and King John, as drawn by Shakespeare in the play.
- 8. On ground sloping at an angle of 45°, a road 20 feet wide and 230 feet long was cut in the solid, an upper retaining wall being built, what quantity of earth was removed. and what was the cost of the wall at \$10 per foot at its height?

10. The Ontario Experimental Farm extends to 550 acres, with a boundary of five miles,

what would it be reduced to if  $1\frac{1}{2}$  chains were cut off all round?

<sup>9.</sup> The Ontario School of Agriculture being 888 feet above the level of Lake Ontario, which is distant 30 miles, what would be the mean inclination of a pipe to convey water?

<sup>11.</sup> The opposite sides of a field measure ten and eight chains—one of the others being 15 chains—what is the acreage?

### APPENDIX (C).

### ONTARIO SCHOOL OF AGRICULTURE.

### Easter Examination Class Lists, 1876.

Cr	ASSES.	AGRICUI	TURE.	Снем	CHEMISTRY.			
Caraca Call Ca		1st and 2nd Years.	Second Year.	First Year.	Second Year.	Second Year.		
HONOURS.	[I	1 G. W. Meyer 2 J. Rutherford 3 J. Campbell 4 A. C. O'Beirne 5 J. Meyer 6 J. Farlinger 7 C. Wells 8 J. Canfield 9 W. Sykes 10 T. Mason	1 O'Beirne 2 { Mason { Campbell 3 Wells	1 Meyer, J 2 Palmer	1 { Mason Campbell 2 O'Beirne 3 Douglas	1 Campbell 2 O'Beirne 3 Mason 4 Douglas 5 Gill		
HON	HI	1 G. Halse 2 A. Whyte T. Gill 3 J. Douglas 4 A. Lindsay 5 W. Pillar 6 T. Palmer 7 G. Shaw 8 J. Blackwell	1 Meyer G 2 Dunn, C 3 Dunlop 4 McCraney 5 Sykes 6 Gill	1 Lindsay 2 Farlinger 3 Halse	1 Meyer, G 2 Gill, T	1 Sykes 2 Meyer, G 3 Dunlop		
		1 A. Scott 2 P. McCraney 3 K. Knott 4 J. B. Robinson 5 W. McKercher 6 J. Ferris 7 C. Dunn 8 J Donaldson 9 T. Ellis 10 J. Gow 11 J. McIntosh 12 J. McKinnon	1 Douglas 2 Pillar 3 Canfield 4 Shaw	1 McKinnon 2 McKercher 3 Whyte Gow Rutherford Robinson Blackwell McIntosh Knott Ferris Scott Ellis	1 Shaw 2 Sykes 3 Dunlop 4 Wells Dunn Canfield McCraney Pillar	1 Wells 2 Shaw 3 Canfield 4 Dunn 5 McCraney Pillar		

### Easter Examination Class Lists.—Continued.

	VETERINARY ANATOMY.	VETERINARY MATERIA MEDICA	Вот	Zoology.		
CLASSES.	1st and 2nd Year.	PATHOLOGY.	First Year.	Second Year.	First Year.	
I	1 Dunlop 2 Shaw 3 Meyer, J 4 Mason 5 Halse 6 McKinnon 7 Lindsay 8 Campbell 9 Palmer 10 Rutherford	1 Sykes 2 Gill 3 Dunlop 4 Mason	1 McIntosh 2 Farlinger 3 Rutherford 4 Palmer 5 Blackwell	1 Campbell 2 O'Beirne 3 Douglas 4 Sykes	1 Palmer 2 Meyer, J. 3 Farlinger 4 Lindsay 5 Rutherford	
II	1 Douglas 2 Gill 3 Sykes 4 Scott 5 Gow 6 O'Beirne 7 Wells 8 McKercher 9 Knott 10 Meyer, G	1 Dunn 2 O'Beirne 3 Shaw 4 Campbell	1 Halse	1 Meyer, G 2 McCraney	1 McKercher 2 McIntosh 3 Halse 4 Whyte	
III	1 McCraney 2 Pillar 3 Farlinger 4 Ellis 5 Whyte 6 Blackwell McIntosh Robinson Canfield Donaldson Ferris	1 Meyer, G 2 Wells 3 McCraney 4 Douglas Canfield Pillar	1 Knott 2 Whyte 3 Ellis 4 Gow 5 Donaldson Scott	1 Dunn 2 Dunlop 3 Shaw 4 Wells 5 Mason 6 Gill 7 Canfield	1 Gow 2 Blackwell 3 Donaldson 4 Scott Ellis Robinson Knott Ferris	

### Easter Examination Class Lists.—Concluded.

Zoology.	SHORT HORN	Geology.	Physiology.	English and Mathematics.
Second Year.	HISTORY.	GEOLOGI.	T HISIOLOGI.	Second Year.
1 Mason 2 O'Beirne 3 Campbell 4 Wells 5 Douglas 6 Meyer, G	1 Lindsay 2 Meyer, J 3 Farlinger 4 Palmer 5 Halse 6 Rutherford	1 Campbell 2 Douglas 3 Sykes 4 O'Beirne	1 Palmer 2 Lindsay 3 Halse 4 Farlinger 5 Meyer, J 6 Rutherford 7 McKinnon	1 O'Beirne
1 Gill 2 Shaw 3 Dunlop	1 McIntosh 2 McKercher	1 Gill 2 Wells 3 Meyer, G	1 McKercher	1 Meyer, G 2 Wells 3 Douglas 4 Farlinger 5 Meyer, J 6 Campbell
1 Pillar 2 McCraney 3 Dunn 4 Sykes 5 Canfield	1 Whytel 2 Knott 3 McKinnon 4 Blackwell 5 Donaldson 6 Gow Scott Ellis Robinson Ferris	1 McCraney 2 Shaw 3 Campbell Pillar Dunn	1 Whyte 2 Donaldson 3 McIntosh 4 Knott 5 Blackwell Robinson Gow Scott Ferris Ellis	1 Shaw 2 Dunlop 3 Campbell 4 Sykes 5 Gill

## APPENDIX (D).

# MEANS OF METEOROLOGICAL OBSERVATIONS DURING THE SUMMER OF 1876.

Means of Meteorological Observations at the Ontario School of Agriculture, from 16th July to 31st October, 1876.

Latitude,

; Longitude,

; Elevation 1,122 feet above sea level (888 feet above Lake Ontario).

No. of days on which Rain fell.	п	9	4	©1	7	6	
Total Rainfall.	Inch. 4.90	2.37	1.47	.11	1.76	2.33	
Prevailing Wind.			N.W.	S.E.	N.W.	N.W.	
Lowest Temperature.	0		42. on 27th	40.7 on 27th	34. on 29th	18. on 15th	
Highest Temperature,	0		85. on 19th	92.8 on 31st	77.8 on 1st	70.4 on 21st	
Minimum Thermometer.	0		54.	54.	48.2	33.1	
Maximum Thermonneter.	0		76.	79.5	62.8	47.7	
Wet Bulb Thermometer.	0		.19	60.5	53.6	38.	
Temperature of Air.	0		8.79	67.5	. 57.	40.2	
eter ached neter. T.	0	:	68.2	.69	58.2	40.9	
Barometer and attached Thermometer. B. T.	0	:	28.940	28.980	28.866	28.757	
Момтн.	May	June	July	Angust	September	October	

### APPROPRIATION EXPENDITURE

FOR ELEVEN MONTHS ENDING 31st October, 1876.

Maintenance Account.
Meat, fish and fowl\$1,039 41
Bread and biscuit
II. Household Expenses. Fuel
Light 67 13
Laundry, soap and cleaning 57 75
Furniture and furnishings
repairs and alterations
III. Business.
Advertising, postage, &c
IV. Miscellaneous.
Medicines 51 88
Unenumerated 97 57
Contingencies 176 98
V. Experiments
VI. Salaries and Wages 7960 30
Capital Account.
Permanent improvements \$2,081 15
Live stock
Implements       372 49         Library and apparatus       392 97
Library and apparatus       392 97         Addition to greenhouse       200 00
Furnishing veterinary building
Finishing mansard story
<del></del>

### ESTIMATED APPROPRIATION EXPENDITURE FOR 1877.

### | Maintenance Account. | I. Food. | \$1,500 00 | Bread and biscuit | 600 00 | General groceries | 1,500 00 | - 3,600 00 | | | | II. Household Expenses. | Fuel | 1,200 00 | | | | Light | 150 00 | | | Laundry, soap and cleaning | 150 00 | | | Furniture and furnishing | 300 00 | | | Repairs and alterations | 400 00 | |

2,200 00

III.	Business.	0.00				
		0 00		00		
IV.	Miscellaneous.  Medicines and medical comforts	0 00	"	00		
	Contingencies	0 00	)			
v.		0.00	-,	00		
٧.	Experiments		600		<b>9</b> 9 750	0.0
					\$8,750	00
	A. Salaries and Wag	ES.				
	President and Science Master	0.00	)			
	Professor of Agriculture and Farm Manager 2,000					
		0 00				
	Rector and Secretary 1,000					
		0 00				
		00				
		0 00	)			
		0.00				
	Matron	0.00	) 1			
	Kitchen and dining-room housemaids 426	00				
		0 0	)			
		00				
		0.00				
		0 00				
	Assistant do. for 5 months 100					
	(Yearis 1 ferror 1		0,.00			
	Carried forward				\$17,510	00
	II. CAPITAL ACCOUNT					
	Library and apparatus		1,000	00		
	Permanent improvements		4,750			
	Implements		800			
	Finishing greenhouse		750			
	Building		25,000			
					\$32,300	00

### TABLE C.—INVENTORY OF LIVE STOCK WITH VALUES.

### IX. INVENTORY.

### Horses.

14	Horses and mares\$	2.300	00
1	Buggy-horse	150	00
1	Colt	50	00
1	Gelding	100	
1	Filly	125	00
	-		- \$2,725 00

CATTLE.					
1 three-year-old bull 1 yearling bull 1 "" 2 bull calves 5 cows 1 heifer calf	• • • • • • • • • • • • • • • • • • • •	\$150 1,136 125 256 2,910 200	00 00 00 00		: 00
Herefords:  1 three-year old bull 2 Heifers	602 00 574 00	1,176	00	*	
Devons:  1 Yearling bull 1 Heifer	602 00 260 00	862	00		
Ayrshires:  1 two-year-old bull 2 Cows	310 00 526 00 265 00	1,101	00		
1 Yearling bull 1 Cow	473 00 473 00 321 00	1,267	00		
Grade Short Horns:  8 Cows	400 00 90 00 30 00 135 00			\$9,827	00
SHEEP.  Cotswolds:					
33 Breeding ewes	\$	1,190 175 240 160	00		
Leicesters :	\$	1,565	00		
9 Ewes (border) 2 Ewe lambs 11 " (cross) 2 Shearling rams (border) 1 " (cross) 8 Ram lambs "	363 00 25 00 175 00 250 00 40 00 120 00	0,80	00		
Dereham Long Wools ;  5 Shearling ewes	150 00 200 00	973 3 <b>5</b> 0			

South Downs:						
	280	00				
2 Shearling ewes	70	00				
1 Three-shear ram 1	00					
	60	-	2550	0.0		
3 Ram lambs	60	00	\$570	00		
Grade, Store Sheep:						
Two shear wethers      " " ewe, }	81	00				
1 " " ewe,						
12 Shearling wethers 1	100					
	$\frac{45}{500}$					
_	55 55		781	00		
Total for sheep	00	-		_	\$4,439	00
P <sub>IGS</sub> .						
Berks:						
2 Sows, one year old			\$150	00		
1 " nine months old			50	00		
4 " under 3 months				00		
6 boars, under 3 months			90	00		
			360	00		
Windsors:			300	00		
2 sows, under 6 months	105	00				
	100		205	00		
Total for pigs					\$565	00
Dogs.						
2 Scotch colley dogs			\$70	00		
1 " " bitch			77	00		
					\$100	00
Poultry					\$100	00
· · · · · · · · · · · · · · · · · · ·						
Total value of Live-stock				_	\$17,756	00

### TABLE D.--INVENTORY OF IMPLEMENTS WITH VALUES.

### IMPLEMENTS.

### 1.—Field Department.

4	Waggons	\$200 00
1	Truck waggon	50 00
1	Democrat "	50 00
1	Buggy	40 00
2	Carts	70 00
8	Sets double-trees	16.00
5	Neck yokes	5 00
3	Pair bob sleighs	90 00
1	Long sleigh	25 00
	Pleasure "	40 00

1 Cutter	\$40	00
1 Seed drill	70	
1 Broad-cast sower	70	
1 Johnson Reaper	100	
1 Foyce "	50	
1 Clipper mower		00
1 Light "		
2 Horse rakes	60	
	50	
1 Cultivator		00
	100	
2 Jacks	90	
1 Separator	250	
5 Shafts		00
1 Sawing machine	40	
2 Drag saws	8	
1 Fanning mill	25	00
Wheel-barrow, curry-combs, brushes, oil-cans, hand-		
frails, wrenches, saw and hammer	20	00
4 Iron ploughs	120	00
2 Iron-beams ploughs	32	00
1 Wooden "	12	00
1 Metal-beam "		00
1 Double mold "		00
2 Gang " 1 Subsoil " 1 Scuffler		00
1 Subsoil "		00
1 Scuffler	14	
1 Turnip drill		00
4 Sets iron harrows	48	
1 Wooden roller		00
		00
1 Cast "		
Shovels, forks, spades, and stone boat		0.0
~ C . M		
5 Sets Team harness	150	00
5 Sets Team harness	150 60	00
5 Sets Team harness	150 60 25	00 00 00
5 Sets Team harness	150 60 25 15	00 00 00 00
5 Sets Team harness. 6 " plough "	150 60 25 15 30	00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30	00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales	150 60 25 15 30	00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures.	150 60 25 15 30 4 40	00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3	00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3 8	00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3 8	00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3 8	00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks	150 60 25 15 30 4 40 60 3 8	00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart.	150 60 25 15 30 4 40 60 3 8 3	00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks,	150 60 25 15 30 4 40 60 3 8 3 40	00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks,	150 60 25 15 30 4 40 60 3 8 3 40	00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber,	150 60 25 15 30 4 40 60 3 8 3 40	00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks,	150 60 25 15 30 4 40 60 3 8 3 40 130 90	00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber,	150 60 25 15 30 4 40 60 3 8 3 40 130 90	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber,	150 60 25 15 30 4 40 60 3 8 3 40 130 90	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber, scythes, cradles, and scoops.  2.—Live Stock Department.	150 60 25 15 30 4 40 60 3 8 3 40 130 90	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3 8 3 40 130 90	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck	150 60 25 15 30 4 40 60 3 8 3 40 130 90 92 \$2,908	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures Stable lamps, horse blankets, and waggon jack 2 Cross-bent saws 2 Potato scoops 4 Hay racks Hay weight scales Water Cart Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber, scythes, cradles, and scoops  2.—Live Stock Department.  1 Horse-power, connecting-rods, jock, &c 1 Straw cutter 1 Grain crusher	150 60 25 15 30 4 40 60 3 8 3 40 130 90 92 \$2,908	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures. Stable lamps, horse blankets, and waggon jack. 2 Cross-bent saws. 2 Potato scoops. 4 Hay racks Hay weight scales. Water Cart. Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber, scythes, cradles, and scoops.  2.—Live Stock Department.  1 Horse-power, connecting-rods, jock, &c	\$2,908	00 00 00 00 00 00 00 00 00 00 00 00 00
6 " plough " 1 " light " 1 " buggy " 2 " cart " 1 Barn truck 1 " weighing scales 2 Half-bushel measures Stable lamps, horse blankets, and waggon jack 2 Cross-bent saws 2 Potato scoops 4 Hay racks Hay weight scales Water Cart Spades, forks, rakes, bags, riddles, chains, picks, crow-bar, baskets, shovels, spuds, hoes, grubber, scythes, cradles, and scoops  2.—Live Stock Department.  1 Horse-power, connecting-rods, jock, &c 1 Straw cutter 1 Grain crusher	\$2,908 \$100 \$25 \$25 \$30 \$4 \$40 \$3 \$3 \$40 \$90 \$2,908	00 00 00 00 00 00 00 00 00 00 00 00 00

Poultry implements	\$16	00
Cattle chains, 50	111	
Bull leaders, 8		00
O Facility of the state of the		00
2 Feed boilers	8	00
Wheel-barrows, dung fork, scoop shovels, grain scoop,		
socks, sheep shears, grindstone, pails, dung scrapers,		
&c	45	00
9 Feeding baskets	12	00
12 Cattle blankets	15	00
Sheep racks, troughs, &c	105	0.0
_		
	\$511	00
	ΨΟΙΙ	00
3.—Mechanical Department.		
· ·		
Wire-fencing implements	\$20	00
2 Drag saws	10	
2 Chargest same		
2 Crosscut saws		00
1 Framing saw	3	00
Adze, sleik, lever, hollow auger, monkey-wrench, pkg.		
screws, carriage bolts, oil-stone, glue-pot	18	00
24 Pairs T. & H hinges	4	20
4 Kegs nails	16	00
1 Stove	5	00
Office desk	2	50
4 Framing chisels	3	20
Block and tackle	12	
Staples, mallets, paints, oil and brushes, glass, gate	12	00
hinges, axe and pick handles, tool baskets, putty,		
nost grooms and have anombles, tool baskets, putty,		
post spoons and bars, crow-bars, extra bit, and	~ 1	0.0
rake teeth	51	
1 Boring machine		00
4 Jack-planes		00
4½ Single planes	6	00
4 Smooth planes	3	60
1 Jointer	2	50
3 Rip saws	6	00
3 Crosscut saws	5	25
1 Panel saw	I	25
3 Draw knives		00
3 Framing squares		50
1 Panel square.		90
4 Try squares	1	
1 set match planes	1	
4 Convey desirons	-	
4 Screw drivers	0	
6 Nail hammers	6	
2 Bench gauges	0	
2 Rabbit planes		20
9 Bead planes	3	60
3 Scratch awls	0 -	45
1 Bench vice	7	00
1 Mortice gauge	1	00
3 Work benches	18	
1 Grindstone	7	
3 Boreing braces	4	
75 Auger bits	15	
1 Bevel		70
5 Handscrews		80
o mandscrews	1	OU

24 Gimlet bits 1 Set firmer chisels 3 Hand axes 1 Chopping axe 5 Farm gates (on hand) 1 Ruler 1 Compass 1 Key-hole saw 1 Hammer saw-set 1 Drag	6 1 35 1 1 0	00 00 30
1 Planet millLumber (300 ft.)	6 33	00
	\$360	60

400 Flower pots	\$25	00
3 Garden rakes	3	00
16 Garden spades	. 20	00
12 Draw hoes	8	00
5 Dutch hoes	3	00
12 Shovels	15	00
3 Scythes	4	00
2 Garden ploughs	20	00
1 Cultivator	8	00
2 Barrows	6	00
1 Screen	1	00
2 Trowels		80
6 Pruning saws	4	00
4 Manure forks	3	00
3 Potato forks	4	00
2 Garden reels and lines	3	00
3 Tree scrapers		50
3 Hammers	2	00
1 Edging shear	2	00
2 Hedge shears	5	00
6 Garden watering pots	7	50
1 Pruning shear	3	00
1 Green-house syringe	5	00
2 Pruning knives	1	50
40 Hotbed lights	70	
9 Diales	2	50
Pairs green dusters, knife, bill hook, and dibbles 1 Set double harness	6	25
1 Set double harness	30	00
1 Set cart harness	5	00
1 Garden cart	40	00
1 Gravel screen	15	00
1 Set garden harrows	10	00
1 Road soraper	5	00
1 Garden roller	10	00
1 Hand cart	3	00
1 Garden sickle	0	25
1 Mower	40	00
	0.007	•
	\$391	30

\$359 00

### Abstract:

Field department	\$2,908	00		
Live stock				
Mechanical	360	60		
Horticultural	391	30		
		_	\$4,170	90

### Crop.

### GARDEN :-

Apples, 20 bushels, 50c	\$10	00
Carrots, 150 bushels, 50c	75	00
Beet, 40 bushels, 50c.	20	00
Potatoes, 200 bushels, 40c	80	00
Celery, 400 plants, 5c.	20	00
Parsnips, 40 bushels, 60c.	24	00
Cabbage, 3,000 head, 4c.	120	00
Cauliflower, 200, 5c	10	00

### FARM:-

Wheat, 40 bushels, at 90c.	36	00
Oats, 1,500 bushels, at 35c	525	00
Barley, 1,000 bushels, at 70c.	700	00
Rye, 250 bushels, at 52c.	130	00
Peas, 800 bushels, at 70c.	560	00
Turnips, 5,800 bushels, at 10c.	580	00
Mangolds, 700 bushels, at 15c	105	00
Carrots, 550 bushels, at 20c.	110	00
Potatoes, 550 bushels, at 40c.	220	00
Hay, 95 tons, at \$9	855	00
Straw and maize	670	00
Manure	200	00

### Gross Abstract of Valuations.

	Live stock Implements		
III.	Crop	5,050	00
		\$26,976	90

TABLE E.—Abstract of Farm Income and Expenditure, from 1st November, 1875, to 31st October, 1876.

\$ cts.	2,407 50	5,784 27	2,265 00	579 74
& cts.	100 00 450 00 460 00 460 00 525 00 550 00 200 00	1,772 58 1,571 80 1,158 11 438 84 722 42 108 91 11 61	1,675 00 320 00 60 00 30 00 180 00	100 00
EXPENDITURE.	I. Furm Produce Consumed.   I. Furm Produce Consumed.   125 bushels Seed Barley   700   Reas   1150   Oats   250   Carrots   250   Mangolds   7500   Turnips   7500   Turnips   35 tons Hay   Straw (estimated value)	I. Cash Expenditures. Labour Stock Feed and Fodder Seeds Repairs Manures Contingencies	III. Placed on Furm or Supplied to College.  Increase of Stock Manure 150 bushels of Wheat. 30 Wheat. Milk supplied to College IV. Balance on Hand.	200 bushels Barley. Cash Deposit in Bank
\$ cts.	104 20	4,576 61	3,150 70	3,175 00
& cts.	1,497 411 28 625 58 625 58 462 80 145 60 56 00 56 00 57 50 57 50 57 50	60 00 200 00 200 00 165 00 165 00 524 00 505 00	684 00 426 20 400 00 287 50 155 00 1,675 00	320 00 180 00 1,000 00
INCOME,	A. Cash Balance from 1874-75  I. Farm Produce. 2429 bushels Barley 117 Wheat 884 Deas 1157 Oats 280 Res Carrots 250 Mangolds	tons Hay v (estima Lambs— coe—Fall p—Christ e—Easte	Sheep—Baster 1876 Wool—Summer of 1876 Wool—Summer of 1876 Phys—Spring and Fall of 1876 Broeding Sheep—Fall 1876 III. Miscellancous.	Manure Milk aupplied to College Amount received from Appropriation
	1			

TABLE F.—Estimated Farm Income and Expenditure, from 1st November, 1876, to 31st October, 1877.

EXPENDITURE. \$ cts.	I. Furm Produce to be Consumed.  1500 bushels 525 00 560 00 8 8 800 00 580 00 580 00 105 00 110 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 8 105 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 110 00 1	Farm or Supplied to College.	Manures of Stock 2,500 00 670 00 670 00 670 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 70 00 7
& cts.	79 74  Oats	3,411 00 Labour Labour Live Stock Feed and Fodder Seeds Live Stock Repairs Contingencies	2,226 00 Ananura Milk and Eggs supplied Wheat, 40 bushels
& ets.	36 00 525 00 525 00 560 00 560 00 560 00 560 00 560 00 560 00 560 00 560 00 560 00	852 00 852 00 852 00 850 00 850 00 850 00 850 00	2,500 00 210 00 670 00
INCOME.	A. Cash Balance from 1876.  I. Farm Produce. Wheat 40 bushels. Oats 1500 " Barley 600 " Turnils 5800 " Mangolds 700 " Carrots 550 "	Polatones   Property   Property	ServiceSpring 1877  III. Misrellaneous.  Increase of Stock Milk and Eggs supplied to College Manure.

### REPORT OF THE PHYSICIAN.

GUELPH, 14th December, 1876.

The Honourable Productal Secretary.

SIR,—It gives me pleasure to be able to state that the health of the pupils upon the whole has been good.

The cases requiring treatment have been mostly the result of cold or accident.

Since my last Report we have had one death, following an accident to a young man of previously weakened constitution.

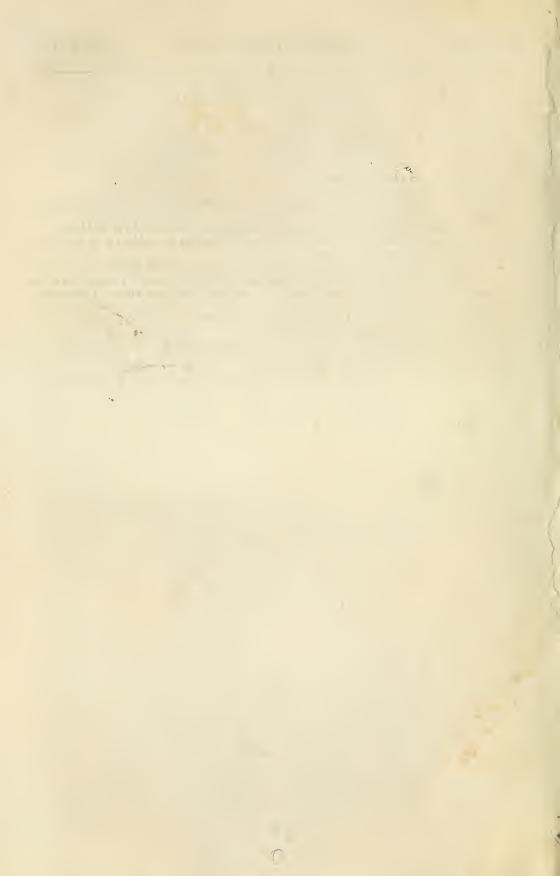
We have not had a single case of contagious disease among the students.

When any of the students require treatment I have the cordial co-operation of the President, and everything is done to make it comfortable for those who are indisposed.

I have the honour to be, Sir,

Your obedient Servant,

W. E. McGuire, Physician, Ontario School of Agriculture.











BINDING STOT. AUG 2 3 1967

