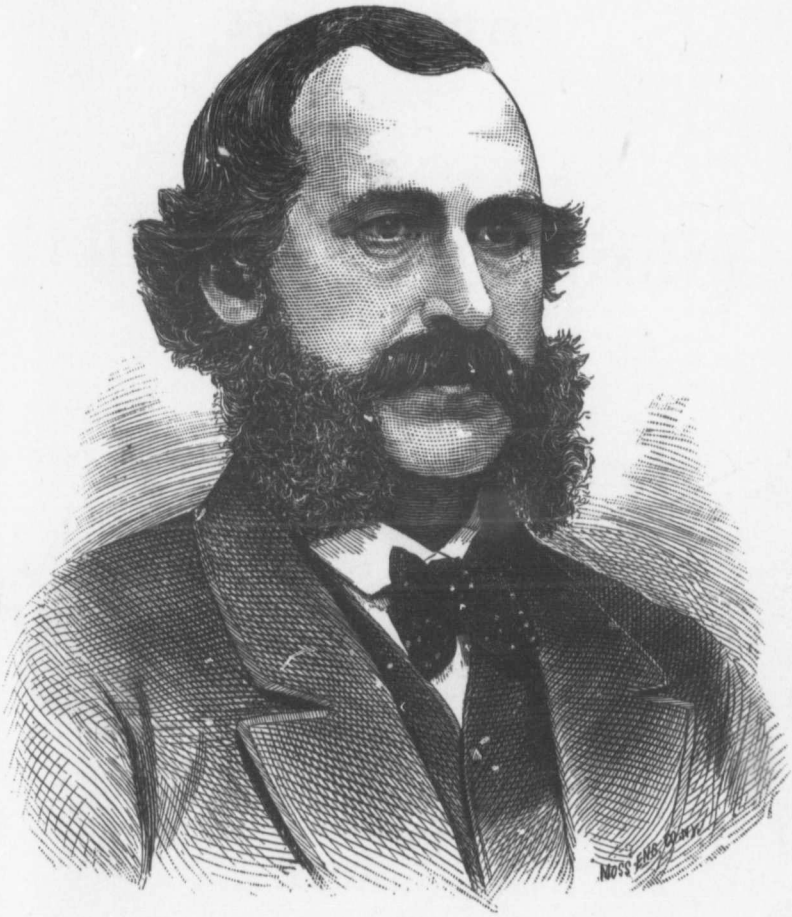

Yours very truly
A Longley

Fru

INT

# TRANSACTIONS

AND

# REPORTS

OF THE

# Fruit Growers' Association

AND

# INTERNATIONAL SHOW SOCIETY

OF

# NOVA SCOTIA.

---

1884.

---

HALIFAX:
NOVA SCOTIA PRINTING COMPANY.
1884.

FR

HI

AV

RE
GE
D. I
GE
CHA
CHA
JOH
JUD
ISRA
T. A
CHA
J. C.
W. I
T. M
JAM

C. R.

# FRUIT GROWERS' ASSOCIATION

AND

## International Show Society

OF

## NOVA SCOTIA.

---

### Patron:

HIS HONOR THE HON. MATTHEW HENRY RICHEY, Q. C.,
LIEUTENANT-GOVERNOR.

---

## OFFICERS FOR 1884.

### President

AVARD LONGLEY, ESQ. .....Paradise, N. S.

### Vice-Presidents:

REV. J. R. HART.....Bridgetown, Annapolis Co.
GEN. J. W. LAURIE.....Halifax Co.
D. B. NEWCOMB, ESQ. .....Cornwallis, King's Co.
GEORGE C. WIGGINS, ESQ. ..... ...Windsor, Hants Co.
CHAS. H. MORSE, ESQ., M. D. .....Weymouth, Digby Co.
CHAS. E. BROWN, ESQ.....Yarmouth, Yarmouth Co.
JOHN H. DUNLAP, ESQ. .....Liverpool, Queen's Co.
JUDGE DesBRISAY .....Lunenburg, Lunenburg Co.
ISRAEL LONGWORTH, ESQ. .....Truro, Colchester Co.
T. A. McDONALD, ESQ..... Durham, Pictou Co.
CHAS. ATKINSON, ESQ.....Maccan, Cumberland Co.
J. C. JACKSON, ESQ. .....North Sydney, C. B.
W. F. McCOY. ESQ., M. P. P.....Shelburne Co.
T. M. KING, ESQ.....Antigonish, Antigonish Co.
JAMES A. FRASER, ESQ. M. P. P.....Goldenville, Guysborough Co.

### Secretary and Treasurer:

C. R. H. STARR .....Port Williams Station, N. S.

# COUNCIL.

## For Halifax County:

HERBERT HARRIS,
W. C. SILVER,
H. B. WITTER,
J. F. KENNY,
PROF. GEO. LAWSON,
D. HENRY STARR,
A. K. MACKINLAY.

## For King's County:

C. F. EATON,
A. H. JOHNSCN,
JOHN G. BYRNE,
J. W. HAMILTCN,
C. Y. JOHNSON,
T. E. SMITH,
R. W. STARR,
ISAAC SHAW,
J. B. BOWSER,
WM. SUTTON,
T. H. PARKER,
T. TUZO.

## For Annapolis County:

BENJAMIN STARRATT,
WILLIAM MILLER,
ROBERT RANDOLPH,
C. B. WHITMAN,
ROBERT MARSHALL,
—— SHAFNER.

## For Hants County:

W. H. BLANCHARD,
W. P. COLCHESTER,
W. H. ALLISON, M. P.
JOHN SANGSTER,
ANDREW SHAW,
H. V. B. FARNSWORTH,
CHAS. BACON,
W. ARMSTRONG.

## For Lunenburg County:

CHAS. FRITZ,
E. B. HYSON.

## For Yarmouth County:

T. B. CROSBY,
S. M. RYERSON,

## For Picton County:

REV. ROBERT BURNET, D. D.

# STANDING COMMITTEES.

## Fruit:

R. W. STARR,
C. E. BROWN,
C. R. H. STARR,
A. H. JOHNSON,
ISAAC SHAW,
ROBERT MARSHALL,

## Publication:

REV. F. J. H. AXFORD,
PROF. HIGGINS,
R. W. STARR,
REV. J. R. HART,
J. W. LONGLEY,
A. H. JOHNSON,
C. R. H. STARR.

## Auditors:

GEO. V. RAND,
GEO. WALLACE.

## HONORARY MEMBERS.

| | *Date of Election.* |
|---|---|
| ROBERT GRANT HALIBURTON, M. A., F. S. A. | Jan. 30, 1873. |
| JOSEPH R. HEA, D. C. L., Toronto | " 6, 1874. |
| GENERAL SIR HASTINGS DOYLE, K. C. M. G. (deceased) | April 9, 1875. |
| ADMIRAL SIR JAMES HOPE, Harriden, Bo'ness, Scotland. | " " |
| HON MARSHAL P. WILDER, Boston, Mass | " " |
| HON. CHARLES DOWNING, Newburg, N. Y. | " " |
| EDWIN W. BUSWELL, ESQ., Boston, Mass | " " |
| REV. ROBERT BURNET, D. D., Pictou | " " |
| D. W. BEADLE, ESQ., St. Catherine's, Ont | " " |
| ROBERT MANNING, ESQ, Boston, Mass. | " " |
| RICHARD STARR, ESQ, Cornwallis, N. S. | " " |
| F. C. SUMICHRAST, ESQ., Halifax, N. S. | Jan. 10, 1877. |
| JOHN LOWE, ESQ., London, G. B. | " 15, 1884. |

---

## LIFE MEMBERS.

| | *Date of Election.* |
|---|---|
| J. W. BIGELOW, ESQ., Wolfville | April 9, 1875. |
| HENRY B. WITTER, ESQ., " | " " |
| CHARLES E. BROWN, ESQ., Yarmouth | Oct. 1, " |
| EDWIN CHASE, ESQ., Cornwallis | Nov. 1, " |
| R. W. STARR. ESQ., Port Williams | " " |
| CHAS. R. H. STARR, ESQ., Port Williams | Jan. 3, 1876. |
| W. C. SILVER, ESQ., Halifax | Dec., 1876. |
| JAMES SCOTT, ESQ., " | " " |
| GEORGE LAWSON, PH. D., " | " " |
| JOHN STAIRS, ESQ., " | " " |
| THOS. A. BROWN, ESQ., " | " " |
| THOS. A. RITCHIE, ESQ., " | " " |
| A. K. MACKINLAY, ESQ., " | " " |
| J. F. KENNY, ESQ., " | " " |
| M. P. BLACK, ESQ., " | " " |
| HON. P. C. HILL, " | " " |
| EDWARD BINNEY, ESQ., " (deceased) | " " |
| JAMES FARQUHAR, ESQ., " | 1883. |

# FINANCIAL STATEMENT.

**THE NOVA SCOTIA FRUIT GROWERS' ASSOCIATION in acct. with C. R. H. STARR, Secretary-Treasurer.**

*Year Ending December 31st, 1883.*

| Dr. | | Cr. | |
|---|---|---|---|
| To Publishing Reports | $ 143 61 | By Membership Fees | $ 76 00 |
| " Blank Books, Stationery and Wrappers | 9 19 | " Sale of Tickets and Fruit, Winter Exhibition | 52 16 |
| " Postage | 15 64 | " Cash from late Treasurer | 320 87 |
| " Winter Exhibition | 169 41 | " Government Grant | 300 00 |
| " Printing and Advertising | 33 50 | " Securities | 365 37 |
| " Reporting Convention | 10 00 | " Sundry amounts from other sources | 2 66 |
| " Expenses Meetings | 8 75 | | |
| " Expenses Collections exhibited | 31 48 | | |
| " Amount voted Deputation to Ottawa | 30 00 | | |
| " Secretary's Salary | 50 00 | | |
| " Sundry accounts | 7 87 | | |
| " Balance | 617 61 | | |
| | $1117 06 | | $1117 06 |

## AUDITORS' REPORT.

WOLFVILLE, *Jan'y 15th, 1884.*

The Committee appointed to audit the accounts of the Nova Scotia Fruit Growers' Association, beg leave to report that they have examined the books of the Secretary and Treasurer, and the bills and vouchers, and find them correct.

Much credit is due to Mr. C. R. H. Starr, the Secretary-Treasurer, for the efforts he has made in carrying on the affairs of the Association, and for the manner of keeping the books of the Association,—being concise and clear,—shewing the condition, financially, at a glance; and we congratulate the Association on its present financial condition.

GEO. V RAND,
G. H. WALLACE, } *Auditors.*

## THE WINTER EXHIBITION

Of fruit held at Mason Hall, Halifax, on the 6th and 7th of March, 1883, was undoubtedly the finest show ever made at this season, by the Association.

There were on the tables about five hundred plates of apples, pears, and grapes. These included the several collections from different Counties that had taken the Association prizes at the District Exhibitions. There were some remarkably fine specimens from Cape Breton and the Eastern Counties, thus proving conclusively the adaptability of this section of the Province to fruit growing. The fine specimens of *Gravenstien* and *King of Tompkins*, from Cornwallis, attracted much attention, and Mr. Sutton's exhibit of open-air grapes in perfect condition, was a great surprise to spectators. Mrs. Edwin Chase exhibited a fine collection of canned fruits in glass.

All the fruit was in excellent state of preservation, and the Halfax *Morning Chronicle* justly said "The show for the time of the year perhaps excels anything that could be seen in any part of the world."

The following is a list of

PRIZES AWARDED:

Section.

1. Best and largest collection of Apples grown in the Province of Nova Scotia; six of each, named and labelled. The fruit must be grown in the Province, but may be the growth of several orchards, credit being given to the several growers on the labels.

| | | |
|---|---|---|
| 1st. | John Otis King, Windsor | $10 00 |
| 2nd. | Not awarded | 6 00 |

2. Best and largest collection of Apples grown in any county in the Province, except Kings, Hants and Annapolis; one doz. each, named and labelled. The fruit must be grown in the County, but may be the growth of several orchards, credit being given to the several growers on the labels, but only one Prize to be awarded to each County, 1st, $4; 2nd, $3.50; 3rd, $3; 4th, $2.50; 5th, $2; 6th, $1.50. No entries in this section.

3. Best collection of Apples, not more than six varieties, one dozen of each, named and labelled.

| | | |
|---|---|---|
| 1st. | T. H. Parker, Berwick | $ 2 00 |
| 2nd. | Edwin Chase, Cornwallis | 1 75 |
| 3rd. | C. R. H. Starr, Port Williams | 1 50 |
| 4th. | Edward McLatchey, Grand Pre | 1 25 |

Section.

4. Best collection of long keeping Apples, not more than four varieties, one dozen each, named and labelled.

| | | |
|---|---|---|
| 1st. | T. H. Parker | $ 2 00 |
| 2nd. | Edward McLatchy | 1 75 |
| 3rd. | Edwin Chase | 1 50 |
| 4th. | John G. Byrne, Kentville | 1 25 |

5. Best bbl. of Baldwins for the English market, selection, package, method of packing and marketing to be taken into consideration.

| | | |
|---|---|---|
| 1st. | T. H. Parker | $ 5 00 |
| 2nd. | Edward McLatchey | 3 00 |

6. Best collection of sweet Apples for domestic use throughout the season, with description of quality, season of ripening, &c.

| | | |
|---|---|---|
| 1st. | T. H. Parker | $ 3 00 |
| 2nd. | Edwin Chase | 2 00 |
| 3rd. | Not awarded | 1 00 |

PEARS.

| | | |
|---|---|---|
| 1st. | John G. Byrne | $ 1 25 |
| 2nd. | William Sutton, Cornwallis | 1 00 |

COLLECTION GRAPES.

| | | |
|---|---|---|
| 1st. | Not awarded | $ 2 00 |
| 2nd. | William Sutton | 1 50 |

CANNED FRUITS.

| | | |
|---|---|---|
| 1st. | Mrs. J. W. Chase | $ 5 00 |
| 2nd. | Mrs. Edwin Chase | 4 00 |

*Judges*—F. C. Whitman and E. E. Dickie.

DOZENS—GRAVENSTEIN.

| | | |
|---|---|---|
| 1st. | John G. Byrne | $ 1 00 |
| 2nd. | C. Y. Johnson, Wolfville | 75 |
| 3rd. | T. E. Smith, Cornwallis | 50 |
| 4th. | T. E. Parker | 25 |

RIBSTON PIPPIN.

| | | |
|---|---|---|
| 1st. | R. W. Starr, Port Williams | $ 1 00 |
| 2nd. | T. E. Smith | 75 |
| 3rd. | William Sutton | 50 |
| 4th. | J. G. Byrne | 25 |

GOLDEN RUSSETT OF W. N. Y.

| | | |
|---|---|---|
| 1st. | E. E. Dickie, Canard | $ 1 00 |
| 2nd. | T. H. Parker | 75 |
| 3rd. | John W. Maxner, Windsor | 50 |
| 4th. | Not awarded | 25 |

### Nonpareil.

| | | |
|---|---|---|
| 1st. | T. S. Whitman | $ 1 00 |
| 2nd. | T. H. Parker | 75 |
| 3rd. | J. G. Bryne | 50 |
| 4th. | E. E. Dickie | 25 |

### King of Tompkins Co.

| | | |
|---|---|---|
| 1st. | T. H. Parker | $ 1 00 |
| 2nd. | M. G. Allison, Windsor | 75 |
| 3rd. | R. W. Starr, Port Williams | 50 |
| 4th. | John G. Byrne | 25 |

### Blenhiem Pippin.

| | | |
|---|---|---|
| 1st. | C. R. H. Starr | $ 1 00 |
| 2nd. | J. G. Byrne | 75 |
| 3rd. | Rev. F. J. H. Axford | 50 |
| 4th. | Not awarded | 25 |

### Baldwin.

| | | |
|---|---|---|
| 1st. | E. E. Dickie | $ 1 00 |
| 2nd. | A. H. Johnson, Wolfville | 75 |
| 3rd. | T. H. Parker | 50 |
| 4th. | William Sutton | 25 |

### Northern Spy.

| | | |
|---|---|---|
| 1st. | C. R. H. Starr | $ 1 00 |
| 2nd. | Edward McLatchey | 75 |
| 3rd. | Duncanson Bros., Falmouth | 50 |
| 4th. | John W. Maxner, do. | 25 |

### Yellow Bellflower.

| | | |
|---|---|---|
| 1st. | James Maxner, Windsor | $ 1 00 |
| 2nd. | T. H. Parker | 75 |
| 3rd. | Edwin Chase | 50 |
| 4th. | John G. Byrne | 25 |

### R. I. Greening.

| | | |
|---|---|---|
| 1st. | T. H. Parker | $ 1 00 |
| 2nd. | John G. Byrne | 75 |
| 3rd. | A. H. Johnson | 50 |
| 4th. | Henry Trenholm, Windsor | 25 |

### Esopus Spitzenburg.

| | | |
|---|---|---|
| 1st. | Charles Bacon, Falmouth | $ 1 00 |
| 2nd. | John G. Byrne | 75 |
| 3rd. | A. H. Johnson | 50 |
| 4th. | Not awarded | 25 |

### Fallawater.

1st. R. W. Starr ..... $0 75
2nd. and 3rd. Not awarded.

### Hubbardston Nonsuch.

1st. Edward McLatchey ..... 75
2nd. and 3rd. Not awarded.

### Blue Pearmain.

1st. T. H. Parker ..... 75
2nd. J. G. Byrne ..... 50
3rd. Not awarded ..... 25

### Pomme Grise.

1st. John G. Byrne ..... 75
2nd. Edward McLatchey ..... 50
3rd. James Maxner ..... 25

### Grimes' Golden.

1st. R. W. Starr ..... 75
2nd. William Bustin, Belleisle ..... 50
3rd. Not awarded ..... 25

### Emperor Alexander.

1st. Edward McLatchey ..... 50
2nd. T. H. Baker ..... 25

### Famuse.

1st. John G. Byrne ..... 50
2nd. Joseph Wilson, Windsor ..... 25

### Newton Pippin.

1st. Edward R. Bishop, Greenwich ..... 50
2nd. Not awarded ..... 25

### Clyde Beauty.

1st. Edwin Chase ..... 50
2nd. Not awarded ..... 25

### Bishop Bourne.

1st. J. G. Byrne ..... 50
2nd. Not awarded ..... 25

### Flushing Spitzenburg or Vandevere.

1st. James Maxner ..... 50
2nd. Geo. C. Johnson, Wolfville ..... 25

*Judges*—Andrew Shaw, Edward Parker, and John B. Mills.

# MINUTES OF SPECIAL MEETING,

*Held in Masonic Hall, Halifax, March 7th, 1883, 9 o'clock a. m.*

Vice-President G. A. S. Crichton, Esq., in the chair.

The Secretary read the report of the Publication Committee, which stated the MSS. was in the hands of the N. S. Printing Co., whose tender for printing was the lowest received. The Publication Committee had ordered from the Burland Lithograph Co., Montreal, 1000 portraits of the late Dr. Hamilton, for insertion in this issue.

Mr. Silver, in moving the adoption of the report, indorsed the action of the Publication Committee in procuring the portrait of the late President.

J. A. Halliday seconded the resolution, and passed high encomiums upon the late President, and said he spoke after having had fifteen years connection with the Association.

The Secretary asked for instructions as to the distribution of the reports, and thought we should use them as a means to increase the membership.

Mr. Parker thought if we sent a delegate through the chief fruit districts, he could do much to increase the membership.

R. W. Starr said he thought it would be well not to make any very strict rules with regard to this issue, and moved the distribution be left to the Publication Committee. Seconded by Mr. Parker and passed.

The Secretary then laid on the table the report of the Special Committee on *Frost-proof Warehouse at Halifax.* This included a memorial to the Hon. Minister of Railways, correspondence with the Manager of the W. & A. Railway, and others. The report recommended the sending of a deputation to Ottawa to lay the whole matter before the Government.

Questions were asked as to the probable cost of the necessary warehouse. Mr. Hart said the cost of the Acadia Warehouse was about $6,000.

Mr. Silver said the necessity for frost-proof warehouses was unquestionable. The Halifax Chamber of Commerce heartily endorsed the efforts of the Association, and would support the deputation. He believed the project, if carried out, would amply repay the expenditure. Mr. Silver generously offered to contribute $10 towards the expenses of a deputation.

James A. Frazer, M. P. P., Vice-President for Guysborough Co., endorsed the action of the Association and the recommendation of the Committee, and authorized the Secretary to draw on his bankers, W. L. Lowel & Co., for $5 towards payment of expenses of delegate.

Moved by R. W. Starr, seconded by E. McLatchy, that the report of Special Committee be received and adopted. Passed.

R. W. Starr thought a deputation of *one* from the Association, in connection with the delegates from the Chamber of Commerce, and the members, would be sufficient.

The Secretary would not recommend the Association to vote more than $30 from their funds for expenses.

Moved by Mr. Hart and seconded by T. H. Parker, that the sum of $30 be devoted to the above purpose. Passed unanimously.

Moved by Rev. F. J. H. Axford, seconded by Mr. J. T. Jackson, that the Secretary, (C. R. H. Starr,) be the delegate. Passed unanimously.

The Secretary moved a vote of thanks to the press generally, for favours; also, to the Railway Managers for reduced fares. Passed.

The propriety of sending a collection of fruit from this exhibition to London was discussed, but owing to the lateness of the season was not considered advisable.

Moved, seconded, and passed, that the fruit belonging to the Association be sold at auction.

# CONVENTION OF FRUIT GROWERS, AND MEETING OF THE NOVA SCOTIA FRUIT GROWERS' ASSOCIATION.

[PHONOGRAPHIC REPORT, BY H. OLDRIGHT.]

HALIFAX,
*Wednesday, March 7th, 1883.*

The Convention and Meeting of the Nova Scotia Fruit Growers' Association was formally opened in the New Mason Hall, at 3 p. m. to-day.

On the Platform were His Honor the Lieutenant-Governor (Hon. Adams G. Archibald), Major-General Sir Patrick L. McDougall, His Worship The Mayor of the City of Halifax (George Fraser, Esq.), Dr. Burnet of Pictou, and other leading gentlemen.

The body of the building was filled with a highly respectable audience, consisting of Members of the Legislature, and ladies and gentlemen from the city and rural districts.

The tables throughout the Hall were covered with very fine specimens of apples, pears, and canned fruits, from different parts of the Province, but principally from Kings and Annapolis Counties.

In the absence of the President, Charles E. Brown, Esq., of Yarmouth, Vice-President of the Association, occupied the chair, and called upon the Lieutenant-Governor to deliver the opening address.

LIEUTENANT-GOVERNOR ARCHIBALD. — Had the President of the Association been present, he could have stated that I came here on the express understanding that I was not to deliver the opening address. It would be presumption in any one not well acquainted with fruit culture (which I do not profess to be) to speak to such an audience as the present on the subject. I, therefore, beg to be excused from delivering the opening address. I desire, however, to express my best wishes for the success of the Exhibition. I heard a gentleman remark that this was the best winter exhibition of fruit he had ever seen. This observation, coming from an expert and a

gentleman who has been in the habit of attending such exhibitions, is of great weight. There are gentlemen present who are perfectly familiar with the whole subject of fruit culture, and, in common with the rest of the audience, I shall have much pleasure in hearing them. (Applause.)

The CHAIRMAN then called on Major-General McDougall to address the meeting.

MAJOR-GENERAL McDOUGALL observed that he must call on Mr. Starr to prove that he (the General) attended on the express understanding that he was not to make a speech. He was not familiar with the subject. He, however, wished the best possible success to the exhibition.

MR. STARR acknowledged the correctness of the General's first remark.

The CHAIRMAN said that His Worship the Mayor was the next gentleman on his list of speakers.

The MAYOR observed that he was in the same position as the gentlemen who had preceded him, (laughter), and the conditions on which he attended, were expressed in writing to the Secretary of the Association. He felt honored in being called on to address the meeting, but he felt it his duty to decline for two good reasons. In the first place, the subject was one with which he was not well acquainted, and, secondly, he had another engagement of a public character, which required his attendance this afternoon. The exhibition was an index of the prosperity of fruit growing in Nova Scotia, which could not be too highly appreciated. He trusted that the effort now being made would tend greatly to the success of the great object which the Association had in view. (Applause.)

The CHAIRMAN said that he would now call on a gentleman (Dr. Burnet of Pictou) who was thoroughly acquainted with the subject of Fruit growing, who had attended the meetings of the American Pomological Society and kindred associations, and who had been President of the Ontario Fruit Growers' Association.

REV. ROBERT BURNET, D. D., who was received with loud applause, then rose and delivered the following address:

## APPLES, AND APPLE-GROWING IN NOVA SCOTIA, IN RELATION TO THE MONEY QUESTION.

It is admitted that we live in a utilitarian age. Perhaps, it is well that it is so. Little is effectually done without a shrewd conclusion that there is in our labour to be a *quid pro quo.* After all "it is the money makes the mare to go," and what is true of a bit of horseflesh is equally true of things in general, and especially in matters horticultural. Where does the profit come in? is an important question, and where it is ignored, or overlooked, little progress is generally made in fruit-growing. Not that we mean to affirm that fruit-growers are more sordid than others, but only like others they keep their weather eye open to the main chance. CAN APPLE-GROWING BE MADE PROFITABLE IN NOVA SCOTIA? is our theme on the present occasion, when the Fruit Growers' Association of Nova Scotia have met in convention, by mutual discussion, to advance horticultural interests.

*The capabilities* of the Province for fruit-growing are undeniable. The past progress and present prospects settle the question of adaptedness for fruit-growing. It is true that portions of the Province, owing to certain favourable geographical exposures, are better adapted than others for the prosecution of fruit culture, but every portion with which we are acquainted is well calculated to produce fruit, and more especially apples, in paying quantities. What might be, at first sight, considered as certain drawbacks to fruit growing, is in the main, highly beneficial. The late and backward spring, if taken due advantage of, might be made to conduce to sure cropping. The great desideratum is to plant late flowering varieties. Indeed this is desirable in any climate. A sure crop can always be secured, if the weather is allowed to expend its sleet, and hail, and frost, before the flower puts in appearance. Late flowering varieties of apples are almost always sure croppers. Take the *Canada Red* and *Northern Spy* as examples. How rare is it that the former fails, and should fair weather set in about the blooming time of the *Northern Spy*, there is sure to be an enormous crop. A late spring, therefore, is not in reality detrimental to the careful and considerate fruit-grower. He suits his plans to the circumstances in which he is placed.

Another favourable condition to fruit-growing, and thus aiding the capability of fruit production, is the fact of the lengthened season for wood-ripening in the fall. The autumn in Nova Scotia is singularly favourable for the production of ripened wood and fruit-buds. There is not yet come within our knowledge, any case of harm being done by the severity of the winter to the tenderest spray of a commonly hardy variety of apple. This can scarcely be affirmed of any other Province of the Dominion. In Ontario it not unfrequently happens that several inches of unripened wood suffer by the intensity of the frost. Our observation and experience have presented no similar case in Nova Scotia. This is a favorable condition of fruit-growing not to be lightly estimated. It is an almost absolute guarantee for a good and abundant crop. It greatly enhances the capability of our Province in the production of fruit, and this not in the more favoured localities such as Annapolis Valley, and kindred sections, but in every section of our extensive Province. What is true of apple-trees is equally true of pears. In Pictou we cultivate the *Beurre Bosc*, which, in Western Ontario even, is found to be on the tender side. We have not yet found it too tender for the climate of the Eastern section of the Province. The tender tips of none of the twenty varieties cultivated in our patch have ever been scathed even by the winter frost. The lengthened fall season is a wonderful help to the fruit-grower. A favourable comparison can be truly made between Ontario and Nova Scotia in this respect. Your autumn weather is perfect and highly favouable to the production of ripened wood and fruit-buds. There are few facts connected with fruit culture that are more encouraging to the horticulturist than this. If a man knows from experience that he is likely to loose his labor from the dire effects of frost, it is a wonderful damper to his enthusiasm in fruit growing. Assure him that there is almost an admitted certainty that the ripening process of the fall will yield him an abundant crop in the spring, and his labour becomes light and joyous.

### THE SOIL

of Nova Scotia is well adapted for fruit production. It is largely composed of the debris of the primary rocks in many sections of the country, and has a sharpness peculiarly fitted for the growth of wood-fibre and fruit. Many fruit-growers overlook the wants of apple-trees in their progress of growth. They do not require the same

mode of treatment during their growth as when bearing. When first planted in the orchard nothing is better than barnyard manure, and the cultivation of root crops; but, when the trees begin to bear, and the head has attained its shape and partial fulness, leached or unleached ashes, with rough barn-yard manure mulching in summer ought to become the order of the day. The value of unleached ashes cannot be adequately estimated, affording as they do, the potash that goes to nourish and develop the fruit. Next in importance to ash application is that of grassy turf as an external mulch, with the grass undermost. Where fruit has a tendency to spot, these two applications will almost change the character of the fruit, and fair, unspotted, wholesome fruit, will take the place of the fungus spots and gritty specimens, the bugbear of the horticulturist. Nor is the effect on the bark and tree itself less apparent. The bark becomes smooth and glossy. The hide-bound appearance it is apt to assume gives place to a healthy and sound state, in which its health enables the tree, in a great measure, to rid itself of the barklouse pest, and others of a kindred nature. Abundant crops greatly depend on the suitable enriching of the soil. We know no better enriching than turf application. A systematic amount of top-dressing from year to year soon overtakes the whole orchard. The effect is wonderfully profitable, and the abundance of good, fair fruit gathered astonishes the fruit-culturist.

Much discussion has arisen in Western Canada about the propriety of cultivating the orchard or allowing it to remain in grass. Both plans have had their enthusiastic advocates. For ourselves we prefer cultivation during the whole period in which the tree is being prepared for fruiting. When the tree begins to be prolific, then, we think, is the time to lay the orchard down in grass. There must, however, be no failure, even then, of surface feeding and mulching applications. A great drawback to fruit-culture has been the dwindling down of specimens to the smallest size, and generally spotted and fungus-marked. Results these, which may be largely obviated, by the methods of recuperation already noticed, and the prevention of overbearing.

You ask, how is overbearing to be prevented? A sagacious old friend and enthusiastic horticulturist was in the habit of whipping his trees at the time of the full blossoming. The discipline had a double and beneficial effect, it prevented overbearing, and had the effect of securing an annual production, no unimportant item in the

consideration of fruit-growing for profit. We have tried whipping the blossoms on overbearing pear trees, and found the method accomplish all it was said it would do.

### EXPOSURE

is an important consideration in the growing of fruit-trees for profit. We have a thought or two on this point. In Nova Scotia, orchards in the Eastern section are almost invariably planted in the sheltered and rich meadow land, by the brook, or arm of the sea. Few things have been more detrimental to fruit interests. Early or late frosts are most inclined to linger by the sheltered bottom and lower levels, than on the hill side and exposed plateau. By all means let the orchard be planted on the hill side. Our experience goes to show that a north-east exposure is a good one for the planting of an orchard. Meadows and hollows are scrupulously to be avoided. Such an exposure as has been mentioned is intimately connected with a matter already mentioned in connection with fruit-growing. We refer to the late season of flowering. On a north-east exposure the tree does not develop itself so early in spring as in more sheltered situations, and as a consequence, the flowering season of the tree is more likely to take place in genial weather. Let the flowering season take place in a cold, drizzling, backward fortnight, and the chances are that the fruit *damps off*, perhaps never fructifies at all. Next to the import ance of exposure comes

### SHELTER.

All orchards should be sheltered. Wind-breaks are essential. We refer not to wind-breaks in certain directions around the northern or south-western fences, but across and re-across the orchard. This protection largely saves the fruit from being shaken, and frequently prevents immense losses in the shape of fallen fruit. The *White Pine*, formerly indigenous to this Province, though now it is almost stripped of the Pinus Cavadensis, makes an admirable wind-break. Its branches seldom break under the load of snow, and the spray is thick and beautiful when an adequate distance is maintained in planting. Our *Native Spruce* is just about as valuable as a wind-break as the White Pine of the country, and readily obtainable throughout the length and breadth of the Province. The *Balsam* is objected to, as it gets scraggy and bare just where protection is most

needed, near the ground. A deciduous variety outside the pine makes the shelter more complete and effectual, such as a Red Maple and Norway Spruce, or Tamarack of our swamps.

In a climate moist and humid like that of Nova Scotia, *draining* becomes a pressing essential. In portions of our Province the rain-fall is very great; in such circumstances the greater the need of drainage. We refer to under-draining. Whenever the tap roots reach the cold undersoil the fruit begins to deteriorate. Grumblers in reference to their poor crops of fruit, are little aware, at times, that they have themselves to blame for such consequences. A judicious course of drainage almost ensures a good crop of fruit. It warms and airates the soil and helps to mellow and enrich the ground. No Province needs drainage so much as our own. Our moss-covered trees, our summer greenness, our legion of streams, our superabundant springs, all testify to our need of drainage. In fact, the best land in Nova Scotia has yet to be brought under cultivation in many sections, the damp and wet nature having as yet prevented cultivation. Many means are available to prevent the bad effects of drouth, but draining alone can secure immunity from an overabundant rainfall, and naturally springy soils.

### VARIETIES

of apples for cultivation are a prolific subject of discussion. FEW, NOT MANY, *ought to be the motto of the fruit-grower.* Sir William Hamilton used to say to his students in directing their reading, "*multum*, gentlemen, *sed non multa.*" Few varieties pay best. I know of an orchard of 100 acres entirely Northern Spy, of another 100 acre farm of Rhode Island Greenings. They bring fifty per cent. more to the seller than an orchard numbering ten or twelve even good varieties. We venture to suggest to the Nova Scotia fruit-growers here present, that they might do worse than introduce into their cultivation a few of the choice varieties of apples grown on the Isle Montreal and neighbourhood. We submit a sample of what is termed the *Canada Baldwin*, an unfortunate name, we think, and a splendid apple it is. It cannot be a very bad apple, seeing it keeps good till the 6th of March; few apples keep good to this late season. Then there is the *Eau Sucre*, a superb seedling of the Fameuse. We have little hesitation in saying the finest apple we almost ever ate. It is extensively cultivated and greatly appreciated by the Hon. M.

Prudhomme, Cote St. Antonie, Montreal. Any enquiries in reference to this variety would find a ready response from Mr. Henry S. Evans, Secretary-Treasurer of the Montreal Horticultural Society—a gentleman favourably known for his urbanity and kindness. There is also the *Peach of Montreal*, an apple that claimed the attention and a large mead of praise from the committee on fruits at the meeting of the American Pomological Society held in Boston in 1881. Mr. C. Gibb of Abbottsford, Province of Quebec, showed it and other excellent varieties.

*Winter St. Lawrence* is well worthy of the attention of our fruit growers. We judge, if these varieties of superior merit stand the winter at Montreal, they are not unlikely to be suitable varieties for Nova Scotia. There is money in all these sorts, we don't exactly say, millions in them, but plenty of money to the careful horticulturist.

For export, perhaps the *Golden Russett* is A. I. It has an established value in the British market, which, of course, cannot be said of any unknown variety, but which, when known, might also take an acknowledged place.

*Decarie*, an apple raised by Mon. Decarie of Cote St. Antonie, and a near neighbour of the Hon. Mon. Prudhomme, is an apple of surpassing excellence, and well worthy of the best cultivation Nova Scotia fruit-growers can give it.

Were this the only benefit our paper on apple-growing was likely to confer on Nova Scotia apple growers, we are persuaded that a lasting boon would be bestowed on Nova Scotia were we in any way the means of introducing it into general cultivation.

The catalogue of profitable varieties of apples would be incomplete were the *Ribston Pippin* not to be mentioned. It is a first class apple in every respect. Did it not water-core it would stand perhaps at the head of all profitable market varieties. As it is, it stands high, if not the highest, in British markets, when shipped from Ontario.* In Ontario it arrives at a much larger growth than it generally does in Britain. Certainly it is a superb apple, and greatly in favour by the millions.

---

* Or from Nova Scotia either. [Ed.]

### SHIPPING.

The proper shipping of fruit is just as important as any other consideration connected with fruit-growing. Perhaps *a good price* depends as much on the mode of shipping as in the means of suitable production. *First*, as a parson would say, HONESTY *is a sine qua non* in the shipping of fruit. We know it as a fact, that a certain brand from Ontario in the Bristol market passes from hand to hand without the opening of the barrel, that brand is R. N. B. Niagara. This confidence has been attained simply and solely by honest shipping. Some fruit growers imagine that all, or any grades, may be packed in the same barrel. There never was, and could not be, a greater fallacy. Let us keep our culls *at home*, let us only ship first class fruit. If there be a need for selling second class fruit, let the fact be distinctly stated. Let there be no ambiguity—second class fruit, second class prices, and just, too, at that. It might seem hypercritical for me to say that TASTY packages are important. By all means let the fruit growers of Nova Scotia see to the exporting of their horticultural products in neat, clean, tidy packages or cases. A familiar illustration might be given you from the *Cape Ann Advertiser* in reference to packages for fish shipped from Gloucester. It is declared as an indubitable fact, that since the introduction of a better style of preparing the fish, and the use of *taking* packages, the export and demand have largely increased. The matter of *catching* packages to be used in the exportation of fruit is not to be overlooked by those of us who desire to advance matters horticultural in Nova Scotia.

### CO-OPERATION.

There must, of necessity, be co-operation among our Provincial fruit growers. In fact, we stand in need of a *fruit grange*. From the inception of the "Grange Institution" to the present moment, we have strenuously advocated grange societies. Whilst we act thoroughly on the principle of live and let live, we are strongly impressed with the fact that producers should derive the large amount of benefit from their honest and earnest labours. Middlemen thrive by the want of co-operation. They live by the solitary and isolated efforts of individual producers. Every sack should bear its own seam, and your own paid agents should dispose of your produce, whether in the Colony, or at home in Britain. One of not the least

important benefits to be derived from such a convention as the present in Halifax is to devise the economical and successful carrying out of fruit interests for every one, even though remotely connected with this important branch of industry. A strong pull, a long pull, and a pull altogether, and the labour will be lightened, and the benefits proportionately increased.

---

PROFESSOR GEORGE LAWSON, PH. D., L. L. D., of Dalhousie College, was then called on, and addressed the meeting substantially as follows :—The understanding with Mr. Starr was that I should occupy from ten to forty minutes, according to circumstances. Seeing so extensive a programme in the newspapers, I thought it would be quite unnecessary for me to say anything, and, therefore, I have not prepared an address. Had I prepared a paper the subject would have been

"SOME POINTS IN VEGETABLE PHYSIOLOGY BEARING UPON THE METHODS AVAILABLE FOR SYSTEMATIC IMPROVEMENT OF FRUITS."

I may briefly indicate someof these. At these exhibitions we are treated to a display of fruit not to be seen anywhere else. The fruit before us is very fine, and affords us a means of studying the different varieties in a way not available in any other place but Nova Scotia. More attention is given by our fruit growers to making money out of their orchards than to anything else connected with them,—and very properly so. The industry out of which money cannot be made should not be encouraged. The sooner such an industry is abandoned the better.

In regard to the management of orchards, the young men who intended to be orchardists or fruitists, should have a better training than they now have, especially in vegetable physiology. The object of vegetable physiology is to get at the principles that apply to everything concerning the life and growth of the plant. We have been told in the paper that has just been read, that the plant, during the period of growth, requires certain nourishment. When the plant arrives at maturity greater exhaustion follows. We have now not only to provide for growth, but also for the production of fruit. We must find out what the materials are with which this work is carried

on, and the forms in which these exist in the soil, or may be applied to it. We find that a large amount of potash, lime, silica and other materials are contained in the apple. These are taken away in the fruit, and, of course, they must be replaced. We cannot expect to raise the fruit if we do not provide materials for its production. The trees must also be grafted and suitable scions selected. Even in Nova Scotia there are very great differences of practice in this respect.

Then as to the best kinds of fruit to be raised in different localities. The apple that can be best raised in Kings is not the most suitable for Yarmouth, and the one that is the best in Yarmouth is not the best in Halifax, and so on. The Ribston Pippin does well in Halifax, it seems to be best adapted for our hillsides, and gives the best results. In growing orchards the health of the individual tree is an important consideration.

Then as to the original *habitat* of our trees. Most of them have come from other countries. The Gravenstein is extensively grown on the Rhine, and was grown there very many years ago. I have recently met with a journal of a European town, written by an old gentleman in 1822, a Dr. Neil, in which he says:—"There is an apple which comes down the Rhine in large quantities in vessels. It is called the Gravenstein. It is not a good keeping apple unless picked very early. It requires to be picked green." I do not know whether the Gravensteins on the tables here were picked before they were ripe or not. From what I have stated I presume that the Gravenstein must be a very old variety of apple.

A theory has been started by Knight, that particular varieties of apples after a time die out,—that is, that not only has the individual tree a certain period of life, but that the life of the variety ceases after a certain time. This doctrine is not now held by physiologists, but it is nevertheless necessary in the selection of scions for grafting, to take them from healthy and vigorous trees. Though the variety does not die out, individual trees and individual branches will die. The health of the scion depends on the health of the tree. Attention to all such matters is necessary for the successful growth of the orchard. There is one matter in which comparatively little appears to have been done in this Province. I am quite sure that fruit growers will take kindly my making this remark. A large number of new varieties of apples have been raised in different countries. I scarcely ever take

up an agricultural periodical in which I do not notice the introduction of some new variety of fruit. I observe that in France the number of varieties of pears appears beyond calculation. This is a matter in which the young men on our farms might very well occupy themselves; many persons find great pleasure in it, though it is a slow and often not a very money making business, but one having a most important bearing upon the permanent advancement of fruit culture in a country, and one which such Associations as this should seek to foster. The way to obtain new varieties is not to graft, but to raise trees from seeds. In sowing seeds of fruits the object is to raise new varieties, to get sorts differing more or less from the parent tree, differing not in mere form and colour, but in essential qualities, and in a desirable way so as to increase the value of the fruit, improve the habit of the tree, increase its productiveness or change the season of ripening. In order to accomplish this it is necessary to *hybridize*, as the process is called,—to mix and combine as it were, two different sorts of trees; in that way you are sure to get a variety that is not like the fruit of either of the parent trees. It will have some of the qualities of one parent, and some of those of the other. To improve varieties in a systematic way, or to introduce really new ones, this plan must be adopted, and it must be done carefully. My main object in addressing you is to explain this process. To save time and to render my explanations more intelligible, I will show the essential parts of the blossom concerned in this process. (Professor Lawson here exhibited a large diagram showing all the parts of a quince blossom, which he proceeded to explain.) Every one knows what a flower is, but every one does not know what are the various parts of a flower. The little cluster of leaves found at the point of the stalk, forming a series of what are called sepals, constitute the *calyx;* immediately within that is the *corolla;* inside that again there are a number of minute thread-like bodies. In some plants these are very conspicuous. In the Cactus we find them very large. These are the parts principally concerned in the production of the fruit, constituting all together in the apple or pear the flower or blossom. The parts in the centre of the blossom are of two sorts, or sets of parts, the *stamens* and the *pistils.* The stamens have at their points a little yellow bag called the *anther*, containing the *pollen* or fertilizing powder. The pistils rise up in the centre, and have at their base the seed vessels or *ovaries*, as they are called, containing the *ovules* or germs of the seeds. In

order to secure the production of a new variety of fruit, the method we adopt is to clip off the stamens in the blossom of one tree, and take the fertilizing powder or pollen from the blossom of another, and deposit it at the point of the pistil of the blossom in which we have destroyed the stamens. The blossoms had been previously, and is now again tied up in a little gauze bag to prevent the access of insects that might bring pollen from other flowers. Every particle of this pollen is a minute cell, and it sends out a tubular root-like process which passes down to the ovules. This root-like thread fertilizes the ovules and they become seeds. (If no pollen were deposited at the point of the pistil you would have an apple without a seed in it.) The seeds produced in this way do not represent either of the parent varieties all throughout. They represent partly the variety from which the pollen was taken, and partly that on which it was placed. In the systematic improvement of fruits we should not mix incongruous kinds, but we should, as we do in other cases, work with a definite object in view. For instance, we may have a fruit which is of a very superior quality, but we wish to make it ripen later than it matures now. We will then take a variety of fruit which is much like it but ripens later, and by treating the blossoms in the manner I have stated we will attain our object. Again, there may be something in the color or flavour of an apple that you wish to improve. By carefully selecting the kinds that will make a good combination, you may obtain almost any desired improvement. I would have liked to have gone more into details, but I have already occupied too much time.

I must close by expressing my great satisfaction in seeing this exhibition, and my regret that I have not had an opportunity of doing something more to promote the success of this meeting. (Applause.)

---

The Chairman here called upon Mr. T. S. Whitman, Annapolis, who said :—I did not come here to deliver a speech, but simply to make a few remarks on a special subject. We have heard very interesting observations as to the quality of apples. When we get the apples, the next question is what are we to do with them. Is there any money in the business? Where are we going to find a market for them? I have had something to do with that particular branch of the business for the last year or so. I think you will all

agree with me that the first requisite of export is to have a quick, safe, and cheap mode of transportation from the producing to the consuming market. With articles naturally perishable such as fruit, fish, and other like goods, it is not only necessary to have safe and cheap transportation, but it is also requisite to use extraordinary care in handling, storing and carrying, whether by land or sea.

I have been asked to make a few remarks on

"THE DEVELOPMENT OF THE APPLE TRADE WITH GREAT BRITAIN, AND ITS FUTURE PROSPECTS."

I left Nova Scotia in 1857, the memorable panic year, and took up my abode in New York. I remember something of the apple trade at that time. You would find a few fishing vessels at the Market wharf, Halifax, from Annapolis and the bay ports, and if the owners of the cargo got $1.50 a barrel for their apples they thought they were getting a good price. In Annapolis County four years ago 180,000 barrels were raised, and the best prices obtained for them there, even for Gravensteins, was 75 cents a barrel. I may be asked, what has this to do with the export business? It may be answered, if we cannot find a good market for our apples at home we ought to seek for it abroad, and we soon found that there was a market for our apples in England, if we could only reach it at the proper time. We first tried sailing vessels, and with comparative success. We have now tried steamers. Two years ago last fall the first ocean steamer came to the port of Annapolis for a cargo of apples, and some 50,000 barrels were sent to the English market. What has been the effect of this? We have now buyers from Glasgow and Liverpool who pay us $4 a barrel for our apples at our own doors. That is the result of cultivating a good export trade. There are a great many requisites for a good trade of this kind. There are numerous steamers to be had, but very few of them are suitable for the apple trade. We went to England to find steamers, and we were told at once that we must get capable fruiterers. We were referred to the steamers in the orange trade. We were introduced to a Mr. Collings, who began business in the fruit trade (oranges and other fruits) with two small schooners, and now owns six large steamers. We chartered two of his steamers and they are now carrying for us very successfully.

There is another most important requisite in this trade, and that is to have proper warehouses in which to store the fruit, as well as

proper steamers in which to carry it. Some grades of our apples have sold in the London market from 35*s.* to 38*s.* sterling a barrel. That was the effect of their being first carefully stored, and then properly carried across the ocean. It was at first supposed that any steamers would answer to carry apples. We, therefore, employed transient boats at a low freight, the result was that the fruit was landed in a poor condition, and brought ruinous prices. The ten days' storage in a heated and unventilated hold had seriously injured the fruit. It had become wilted from the high temperature in the hold of the vessel. Heat injures fruit more than frost. Even frozen apples can be brought back to their original condition by carefully removing the frost, but if they have been wilted by heat they can never be restored. Apples cannot be taken out of a cold, damp temperature and deposited in a ship's hold or anywhere else where the thermometer stands at 55 degrees, without being spoiled. We found then that ordinary steamers are not suitable for the apple trade. but that we must confine our apple export business to special freighters. We also ascertained that the fruit must be stored in a dark, damp place, with a temperature of not over 30, and not less than 28 degrees. Apples will not freeze even at a temperature of 25 degrees, but with a temperature below that there is a little danger of frost. That has been the result of our experience. Apples are an article of commerce that vary in price. There is sometimes a difference of from $2 to $3 a barrel, caused solely from the fruit not being properly carried across the sea. If the Halifax freighters will accept these hints they are welcome to them.

In Annapolis a company has been started which is only in its infancy. We have a prospect of exporting not merely 50,000, but 300,000 or 400,000 barrels a year, and we have the market within ten days of us. In some parts of Annapolis County you can almost shake the apples from the trees into the steamer. England imports annually from 4,000,000 to 5,000,000 barrels of apples, London alone importing 1,500,000. The exports from America to England in 1880–1 were 1,250,000 barrels in each year. Until last year Nova Scotia was not known in England in the apple trade. Until within a short period all apples from this side of the Atlantic were called American apples. After a little while two classes were recognized, American and Canadian; at last Nova Scotian apples became recognized as a distinct class. The classes stood American first,

Canadian second, and Nova Scotian third. Now this order is reversed,—the Nova Scotian apples are recognized as the first class, Canadian second, and American third. All this has been done within the last two years.

In the matter of transportation of produce, King's County is as much interested in potatoes as in apples. Great Britain is the natural market of our apples, but the United States is the natural market for our potatoes. In the transport of apples we have had good success, and we expect to be equally fortunate in the transportation of potatoes. The cellars of the farmers of King's County are filled with potatoes of a nominal value of 60 cents a bushel. Why do they not bring that sum? Because there are no adequate means of transporting them to their natural market. This state of things can be remedied. We now export about 35,000 barrels a year, but we expect in a year or two to raise the export to 60,000 barrels. The Acadia Steamship Company propose to embark in this business, and to carry the potatoes during the winter months to the United States.

I wish to make a few remarks about the present state of our freight and passenger trade. I do not desire to make a harsh assertion, but we are at least fifty years behind the age in the matter of steam transportation, both of freight and passengers. I am speaking now of the Maritime Provinces. We have thrown on us what I might call the *old clothes* of other people; the *broken-down nags*, so to speak, of other countries are sent down here to do our transportation business. If we cannot get a Mr. Plimsoll here, it is time that our Government took hold of the matter. It is time that Nova Scotians were not obliged to travel in coffins, and leaky ones at that. The time has arrived when, if we intend to invite tourists to our province, we should provide them with modern steamships in which to travel. In one week last summer 350 American tourists landed in the little town of Annapolis. They were much pleased with the country but the trouble was to get here comfortably.

As regards our apple production comparatively little is known about it even in the neighboring States. I was last fall in Bangor, a fine enterprising city in the state of Maine. I observed on a fruit stall a beautiful show of apples, and among them a little pyramid of Gravensteins. I asked the dealer if I could get a barrel of the

Gravensteins, and at what price. He replied that he could not let me have a barrel, that he had paid $7 in Boston for the barrel from which those on the stall were taken. I asked him if he had ever tried to get apples from Nova Scotia. His reply was, "You don't mean to say that they grow apples in Nova Scotia." (Laughter.) I enquired of him how long he had been in the fruit trade, and he told me that he had been in it from his boyhood. I then informed him, to his great astonishment, that one farmer in King's County, Nova Scotia, had raised over 500 barrels of Gravensteins in one orchard last summer. This conversation took place in a place within ten miles of the orchard referred to! (Loud and continued applause.)

Mr. R. W. Starr, of Cornwallis:—The gentleman who has just sat down has given you some idea of how Gravensteins are valued in Maine, and how little is known there of our apple production in Nova Scotia. When at the Philadelphia Exhibition in 1876 I met with several prominent fruit growers from Maine and other New England States, and I can remember the looks of astonishment and, in some instances, incredulity which met my statement that "the Gravenstein was not only the best but the most productive apple we raised." I found that our neighbors over the border while ranking the Gravenstein high as a table apple, very generally condemned it for cultivation, as a shy bearer and unprofitable.

Mr. Starr then read the following paper:

## THE HISTORY OF FRUIT GROWING IN KING'S COUNTY.

I have been led to pen the following on the History of Fruit Growing in this my native County of Kings, from the fact that, although the production of apples has assumed very large proportions, and has become one of the leading industries, bidding fair soon to outstrip all other branches of Agriculture, but little is known of the very gradual steps by which this desirable state of things has been accomplished, or of the efforts of those gentlemen to whom so much is due for their heavy expenditure of time and money in introducing and testing for selection great numbers of Foreign Fruits, at a time when such work was subjected to many difficulties and disadvantages that do not now exist.

In the year 1761 when the Township of Cornwallis was settled by the New England colonists, and the vacant lands of the departed

French Acadians were re-occupied by the descendants of the sturdy Anglo-Saxon race, they found plentifully scattered throughout the old French gardens and homesteads both apple and pear trees. We may easily imagine that the sight of those trees growing in wild luxuriance and perhaps loaded with ripening fruit, would have much the same effect on the reports of the delegates who were sent to examine the country, that the grapes of Eshcol had on the spies that Joshua sent to view the Promised land.

Be that as it may, one of the first proceedings of the new settlers was to grow trees and plant orchards, and as grafting was then an almost unknown art, nearly all the good fruit was from chance seedlings. These were slowly multiplied by the sprouts from the base of the tree, which were planted in nurseries. In this way and by seedling trees the large old orchards of Annapolis, Kings and Hants Counties were originally grown. When in later years the art of grafting became generally understood, these vigorous trees were worked over into the more valuable sorts, some of which are even now considered to rank among our best standard varieties.

Col. John Burbidge, one of the grantees of the township, planted a large orchard and introduced several new apples, presumably from England, and was one of the first to practice grafting. Of the kind introduced by him two at least are among our most valued long-keepers, viz., *Nonpareil*, or more correctly *Nonpareil Russett*, and *Golden Russett*. Of these the first named was taken to Wilmot by the Rev. Mr. Wiswell, who removed from the mission of Cornwallis to that of Wilmot and Granville in 1789, and was by him distributed throughout the valley, and is now more generally grown in Annapolis than in Kings. The *Golden Russett*, which has had the prefix "English" added to distinguish it from the "American," is not as well known as it deserves to be, and is scarcely found outside a few old orchards in Cornwallis at the present day. Col. Burbidge was also successful in the culture of pears, one of his seedlings, called the *Burbidge*, has long been a favorite summer variety, and has only yielded its place of late years to the *Bartlett*. The original tree is still vigorous and bears heavy crops.

Dr. Samuel Willoughby, one of the settlers from Connecticut, also introduced several sorts from his native State. Among them was a large sweet autumn apple, known as *New England Sweet* or

*Sweet Pippin*, and a bright red winter apple, since called *Willoughby*, which I have understood is still cultivated in some parts of Connecticut, as *Red Brister* or *Bristowe*.

Mr. Ezekiel Calkin, who settled in West Cornwallis, is one who deserves something more than a passing notice for his efforts to originate new and better sorts. Starting from the seeds of a large autumn or late summer apple, presumably summer Pippin, that he received, or brought from his old home in Connecticut, he grew two trees, which he planted in his garden, one known as *Calkin's Early*, and the other as *Calkin's Sweet*. Both of these were multiplied by sprouts and spread through the township. Later on he succeeded in raising from the seed of *Calkin's Early* a large, handsome apple that will keep until midwinter and is quite extensively grown as *Calkin's Pippin*, and several other really good sorts that were never propagated, perhaps because they did not throw up sprouts, and grafting was yet considered a gardener's secret.

The next step was with the advent of Dr. Inglis, first Bishop of Nova Scotia, who somewhere about the close of the century imported the *Yellow Bellefleur* from his old home in New York State, and planted it on his estate (Clermont) in Aylesford. Later on this apple was widely spread throughout the valley, and is universally known as the *Bishop's Pippin* Through the efforts of the Fruit Growers' Association, the true name has been made widely known to the growers of this fine fruit, but dealers and consumers are so wedded to the name by which they have recognized it for generations, that it seems impossible to change it now in the markets of the province.

About the year 1812 the late Hon. Charles Ramage Prescott removed from Halifax to Cornwallis, and commenced planting orchards and gardens on what was then considered a large scale. Having considerable wealth, and being enthusiastically fond of horticulture, he spared no pains or expense to get the best and most approved sorts of apples, pears, plums and other fruits that could then be imported from the nurseries of both the old and new world; and he continued, throughout the whole of a long and active life, to import and test new varieties likely to be of value. His labors in this department of Pomology are almost entitled to be called Herculean, when we consider the difficulties under which he labored, and none but a man of wealth, possessing a large share of determina-

tion and perseverance, combined with love for his occupation, could have accomplished the work that he did. His first importations were altogether nursery stock ready for planting, but after many trials and failures, he had recourse to scions, grafting them upon bearing stocks, thus ensuring earlier fruiting. The first imported tree set on his grounds was a specimen of *Ribston Pippin*, from the gardens of the London Horticultural Society, and he used to point to it with pride as the parent of all the thousands of *Ribston* trees throughout the Province. He shortly after introduded *Golden Pippin*, *Blenheim Pippin*, *King of Pippins*, *Keswick Codlin*, and many others from England; and in 1835, he got *Emperor Alexander*, and last, but not least, *Gravenstein*, which he fruited in 1838, and gave scions in the following spring to Dr. C. C. Hamilton and to Charles Starr, claiming for it thus early a first place among dessert apples. He also imported from Montreal, among his first trees, *Pomme Gris*, *Snow* or *Fameuse*, and *Bourassa*, and from the United States *Early Harvest*, *Early Bough*, *Baldwin*, *Rhode Island Greening*, *Gloria Mundi* and many others. And only a few years before his death, which occurred in 1859, he received *Northern Spy*, *St. Lawrence*, *Talman Sweet*, *Lyscom*, and the apple afterwards known as *Chebucto Beauty*. His list of named varieties of apples grafted and tested was over one hundred, of pears nearly fifty, and of plums about as many. Cotemporary with Mr. Prescott were Charles and Richard Starr, owning the adjoining farms.

About 1828 James Byrne established a nursery at Town Plot, and introduced the *Baldwin* and other prominent varieties.

Later—Benjamin Woodworth of Church Street, Cornwallis, did valuable work in propagating such varieties as had been proved standard sorts, and as a consequence the orchards planted with trees from his nursery have been among the most profitable.

Further down the list should be placed the names of a host of others, and among them the late Dr. C. C. Hamilton, whose name is so intimately connected with the history of the Fruit Growers' Association that further comment on my part is unnecessary.

I have thus imperfectly traced the history of this important industry from the first settling of the country down to the formation of the Fruit Growers' Association, a period of over one hundred years. I do not presume to have mentioned all whose names should appear

on the roll of honor, only a few of the more prominent among them, and they have all, with one exception, joined the Great Majority, leaving their works as their monuments.

Meeting adjourned to 7.30 p. m.

---

## EVENING SESSION.

The Convention re-assembled for the evening session at 7.30 P. M.

Rev. J. R. HART of Bridgetown occupied the Chair, and called on Mr. T. H. Parker of Berwick to address the meeting on the special subject of the proper mode of shipping apples.

Mr. PARKER said :—In the interest of fruit growers as well as of shippers, there are four important points to be considered, viz., picking, sorting, packing, and marking, which should be better understood by both classes. My method for picking is to take the barrel under the tree for convenience, pick the apples with care, place them in the barrel without sorting, and when filled head the barrel without pressure. Then wheel it into the fruit house, and let it remain there during the sweating or curing process. When ready to make a shipment the process of sorting commences. I have a large table in the fruit house and on it I empty the barrels, two at a time. You can select the apples much better in this way than if you were picking them from a *heap* on the floor. I aim to select none but perfect apples, but from the fact that apples of every variety possess different degrees of perfection in size, form, and color, I make two classes and mark them accordingly. Then as to the barrels in which the apples are to be packed, I endeavour to obtain as good and strong a barrel as I can get for a reasonable price. I prefer a hardwood barrel, and I have it thoroughly hooped in order to carry the apples with safety. In packing or filling the barrel the object to be obtained is to get into the package the greatest quantity with the least injury to the fruit. Apples are very easily injured by too much pressure being applied to them in packing, and also by being packed too loosely. When the barrel is properly filled then, instead of putting the proper head on the barrel in the first place and applying pressure to it, I first use a false cushion head which will play loosely in the barrel. This cushion head is lined, and I find a piece of an old reefing jacket answers very well for the lining. Con-

siderable pressure can be applied to this cushion head without injury to the apples. I then use this cushion head, place it upon the apples, and apply the press with a pressure sufficient to set the apples together throughout the barrel. I then remove the false head and place the head proper, apply the press and complete the work. If I had a barrel of apples at hand I could illustrate the matter much better. I think that apples if properly managed can be packed without using the *excelsior*. Then as to marking, from the fact that none but first-class apples should be placed on the English market, I would discard the use of the No. 1 and 2 to indicate the class of apple, and use instead the words "Choice," or "Medium," as the case may be, stencilled in small letters on the barrel, accompanying the name of the apple. Then on each package let the name of the party who packs them be stencilled in full, as a guarantee of the uniformity of the package throughout. (Applause.)

Mr. C. R. H. Starr of Port Williams, Secretary of the Association, said:—I think this matter is of great importance and interest to fruit growers generally. Mr. Parker's method, I think, is original with him, and I have no doubt that if adopted generally when packing for local markets it will save a great deal of trouble. The *excelsior* has been used by the advice of our agents in London with most satisfactory results, but the employment of it involves some trouble. There is danger also of using *too much excelsior*, and giving the barrel the appearance of not being full. In the first prize barrel which we have here, packed by Mr. Parker, the barrel is full right to the top, and the apples are not bruised in the slightest degree. If Mr. Parker's plan is a good one, and I think it is certainly worth trying, it is a great advantage to fruit growers to know it. Now in reference to barrels, Mr. Parker recommended hardwood barrels, but not very strongly. I would say from my own experience that hardwood barrels have become almost indispensable. The apples packed in the hardwood barrels invariably turn out much better and fuller than those packed in softwood. Softwood barrels appear to absorb more moisture, and a shrinkage of the apples must, therefore, take place. Hardwood will not apparently absorb as much moisture as softwood.

Mr. Dickie said:—The explanations given by Mr. Parker are very plain, and I think his method a good one. I propose to make

a few remarks on the first introduction of Nova Scotian fruit into the English market. It is well known that some few years ago the fruit growers of Cornwallis, finding that their apples were only worth seventy-five cents a barrel, began seriously to consider what they were to do with their fruit. Two of my neighbors and myself entered into a sort of speculation. We loaded a vessel with some five thousand barrels of apples, and I was deputized to go to England to look after the cargo. On my arrival in Liverpool I was introduced to a fruit broker. He said that he understood I had a thousand barrels of apples. I replied that I had not only 1000 but 5000 barrels. He observed, "Do you think you can get rid of them?" I said I mean to try. I discovered that most of the persons who came from this side of the Atlantic with fruit introduced themselves as Canadians or Americans. I determined to introduce myself as a Nova Scotian, and my apples as Nova Scotian apples. The brokers got out catalogues, in which they advertised my cargo as *Canadian* apples. I sent the catalogues back, and told them that I intended to introduce my fruit as Nova Scotian fruit. They sent me a second lot of catalogues, in which the fruit was advertised as American. I returned that lot also, and told the brokers again that I wished to have my fruit advertised as Nova Scotian fruit. To please me they at last got out catalogues in which the fruit was advertised as Nova Scotian. That was the first cargo of Nova Scotian fruit that entered the port of London as such. The catalogues were posted up with the fruit described distinctly as Nova Scotian fruit. A man who was passing along read the catalogue and said to the bystanders, "Nova Scotian apples—what are they?" and after examining them said they looked like Canadian fruit. Another person remarked that they were as good as American fruit. The upshot was that the whole cargo was sold as Nova Scotian fruit and realized a good price. This occurred about two years ago, and thirty cargoes of fruit from Nova Scotia have since been sold as Nova Scotian fruit, and there has since been no difficulty in disposing of Nova Scotian fruit in England under that name. I sold a cargo of three thousand barrels between eleven o'clock at night and one in the morning just before Christmas last year. It may be said that this was a queer time to sell apples, but I will explain how it occurred. The night of the sale was just before Christmas and there was a very large quantity of apples in the market. As it would not answer to keep my apples

over Christmas; they had to be sold at night, after the others were disposed of, and nearly my whole cargo was sold within the hours I have named. This proves that there is a good market in England for our apples.

Now as to the mode of packing. I may say that I have never used either the excelsior or the cushion head. I just press the apples in with the head proper. As to barrels, I have had considerable experience in the use of hard wood barrels. I tried to get the English dealers to say whether they preferred hard wood barrels, but I could not get them to express any preference. They said they did not care anything about the kind of barrels used, if the fruit turned out well. They objected, however, to the use of second-hand flour barrels, as has been customary in the shipment of American apples.

Mr C. R. H. Starr:—The gentleman who has just sat down spoke about fruit being sent in second-hand barrels. Some years ago, in Cornwallis, we were accustomed to pack our fruit in second-hand flour barrels. We used to get bakers' barrels from St. John, and they were usually very well cleaned out. We found, however, from actual experience, that it was not of the slightest use to pack apples in flour barrels, put them on board ship for a long voyage, and expect them to turn out in good order and condition. The dampness of the vessel created mould, and that went all through the apples. Of late years improved machinery has been adopted, and we have been able latterly to get a first-class soft wood barrel in King's County, as also a good hard wood barrel. The time has arrived when the demand for first-class barrels creates the supply generally, though of course at an increased expense. My impression, however, is that the use of the hard wood barrels, though costing more than those made of soft wood, will pay well.

As to the methods of packing, most of you are aware that our method in Cornwallis has been to use the excelsior, pressing it in on the apples. I was told to-day by a gentleman from Annapolis County that his mode of packing is very similar to Mr. Parker's. The gentleman to whom I refer told me that he used a table prepared for the purpose; that he took this table into the orchard, and placed the apples on it as they were taken from the trees, and there selected the different sorts, and put them into the barrels. The barrels were then filled, and the head put in, so that he did not

require to sort the fruit again. That method, as will be observed, is much like Mr. Parker's. A combination of the two methods might be the best mode of packing this delicate fruit. The packing must be done with the least amount of handling, in order to preserve the bloom of the fruit.

With regard to the use of hard wood barrels, it is not always practicable with the large quantities that many dealers have to handle. The only indispensable requisite, as already observed, is to handle the fruit as little as possible. Of course as to the particular mode in which this is to be done, we must be guided by the circumstances of each case. If a man has an orchard of twenty acres, he must employ a large amount of help to secure his crop, and it will be impossible to examine minutely every barrel of apples as the fruit is taken from the tree. In such a case the fruit grower will probably be obliged to deposit the apples in bins, and keep them there till he packs them in barrels for shipment.

Orcharding is a business that is rapidly increasing. Apples will be handled by thousands of barrels instead of by hundreds. When that time arrives, orchardists must be prepared to handle their apples with system and order. Provision must be made beforehand for proper buildings in which to store the fruit,—suitable barrels in which to pack it,—and proper means of applying the pressure required in packing. It will be necessary also to have proper cars in which to run the apples over the railways. To carry fruit over the roads in weather such as we have had this winter, it will be necessary to have frostproof cars. The ordinary box cars that we have been obliged to use will not answer, unless they are placed in a much better condition than most of them are at present. (Applause.)

Mr. T. S. Whitman said:—As to the manner of packing the fruit, I have only to say that I know nothing about it. I perfectly agree with the last speaker that if the business is to be properly carried on, we will require a different style of car from that which we have hitherto used.

As I have already intimated, we have learned this winter that apples will stand more cold than we have previously thought, and that more apples are damaged by heat than by cold. I have made several tests which have proved this fact, and I will relate one of these. I keep my fruit and vegetables in a cellar entirely separate

from that under my house. I keep my fruit in a cellar with a temperature ranging from twenty-eight to thirty degrees. Where my potatoes are, the temperature is a little higher. I opened a barrel of Nonpareils in February, 1882, took half a dozen out of the barrel, and laid them aside in my bed-room where the temperature was fifty-four degrees. Out of the balance of the apples I filled a firkin, which I deposited in my ice house on the sawdust. Within a week the apples which I placed in my bed-room were shrivelled up and spoiled by the heat. They were entirely ruined and could never be restored. I opened last October the firkin which had been deposited in the ice-house, and the apples in it were in perfect order, and looked as if they had been just taken from the trees.

The Nonpareil is our best keeping apple, though I have eaten Gravensteins in April as handsome, luscious and perfect as in the previous October. They had been kept in a dark, damp cellar with a temperature ranging from 30 to 35 degrees. I have been told that in Montreal thousands of barrels of apples have been frozen, and by being gradually thawed have been restored to so perfect a condition that they have been shipped to Liverpool and sold at a good price. This seems almost incredible, but it is corroborated by the fact that I have picked up apples in perfect condition in my orchard in the spring, which had dropped there in the fall. They must have been frozen before the snow fell, and lain under the snow all winter, and been gradually thawed.

Carrying out this theory of having cool, damp places for the storage of apples we are now having warehouses constructed, in which the temperature will not vary throughout the whole winter. In the warehouse under my control at Annapolis the temperature ran down at the first cold to thirty-two degrees, and it has not varied one degree during all the changes we have had this winter. At one time we had nine thousand barrels in this warehouse, and all the apples kept perfectly. The floor is nothing but clay, and the warehouse is kept perfectly dark. I visited this warehouse just before I came down here, and found the fruit in perfect condition. If we can only retain the present temperature we shall probably be able to keep these apples until June or July.

Many of our city friends condemn the quality of the apples with which they have been supplied, when the fruit has in fact been injured by their own carelessness in keeping it in too high a temperature.

We have the best climate in the world for keeping apples, not over twenty per cent of our winter days being too severe for the handling of them.

We have loaded three or four steamers at Annapolis this winter. The vessels can lie at our deep water pier, but as there is a beautiful smooth beach adjoining, the captains prefer to run the vessels up on the beach, where they are out of water two-thirds of the time. Under these circumstances the holds of the vessels become intensely cold, unless you give the vessels quick despatch. The steamer *Balcaries* loaded at Annapolis in January last when the weather was very cold. I tested the temperature of her hold myself, and found it 26 degrees. We loaded her with six thousand three hundred barrels while the thermometer stood at that point. There were snow and frost in her hold when we loaded her, and yet the cargo was landed in London in better condition than any that had been sent from here, the whole selling at an average of 22/3 per barrel. In shipping in the ordinary freighters we have taken our apples out of a temperature of thirty degrees and placed them in a temperature ranging from fifty to sixty degrees. This change to a higher temperature has seriously injured the fruit, and thousands of barrels have been lost to our farmers and shippers by this means. We are brought to this point that we must have vessels expressly constructed for this trade, and that we must exclude certain vessels from it. (Applause.)

The Chairman asked:—As to the kinds of barrels, have you found any difference between hard wood and soft wood barrels?

Mr. Whitman:—We have made a point of handling our fruit very carefully. Our friends in the Eastern part of King's County pack their apples in hard wood barrels, and for my own part I would be willing to pay ten or fifteen cents extra for a hard wood barrel. I admit that they are the best kind of barrels in which to pack apples. I would give them eight hoops, and have the chime and bilge hoops carefully nailed, and it would be better to have the hoops nailed before the apples are put in. I would also advise the use of the nails that are now being made, that do not go through the barrel. I would also recommend the use of lining hoops. Barrels treated in this way will carry the apples safely to Van Dieman's Land, unless there is gross carelessness in handling.

Mr. C. R. H. Starr :—One word in reference to barrels. I endorse Mr. Whitman's recommendation of hard wood barrels. I would advise our fruit growers to use hard wood barrels, even though they cost more, not only for the reason that the fruit packed in them always turns out better than that packed in soft wood barrels, but there is a demand in London, particularly, for empty hard wood barrels for the early potato trade with Jersey. Flour was formerly sent from America to England in barrels, but it is now sent in bags, and consequently hard wood barrels are in greater demand than formerly in England. A gentleman recently came from England to Nova Scotia to look after potatoes. He said he required a thousand hard wood barrels next spring for the trade of his firm alone, and he did not know where he could get them. The barrels are worth a shilling each in London after the fruit is taken out.

Rev. J. R. Hart observed that Mr. Parker had spoken of two kinds of apples, *choice* and *medium*. A large number of apples would be left after these two kinds were selected, which might be called No. 3's.

Mr. Parker explained that he culled out about ten per cent. of small apples, and he thought it paid him to do this, as the small apples could be sold as a distinct class, and the larger ones brought a better price from not being mixed with small ones.

Rev. Mr. Hart enquired if small apples could be sold in England, if they were perfect.

Mr. Parker remarked that he had had some experience in that matter also. He had sent to England barrels marked *medium small*, and he had obtained more money for them than for overgrown Baldwins.

Rev. Mr. Hart :—I suppose that with medium apples if the size is uniform throughout the barrel, it does not matter much whether they are large or small.

Mr. Parker :—Just so.

Mr. T. S. Whitman :—There is a class of buyers in London called hucksters who do not want large apples. They sell their apples

singly, and there is more profit for them in small apples. I think it is advisable to mark the apples No. 1, 2 and 3, according to their quality and size. There are buyers for each of these classes, but there is no market for mixed fruit. A No. 3 buyer will only give a No. 3 price for a barrel of small apples, even if there are larger ones among them. As an illustration of this I may state that a Mr. Armstrong of Lower Granville, who is in the habit of shipping fruit to England, raised a crop mostly of Nonpareils. He divided them into three classes which he marked No. 1, 2 and 3, and they realized in England the following prices: No. 1's, 28/; No. 2's, 26/; No. 3's, 24/. If he had mixed these apples he would not have obtained more than 24/ for any of them. The reason why there is a market in England for small apples is that the chief supply of apples for the English market comes from the Continent, and the Continental apples are invariably smaller than the Nova Scotian, Canadian or American. When the Continental crop is light, we can calculate on a good price for our small apples. When the Continental crop is large, then our small apples will only command a small price. For our No. 1's and No. 2's the market in England is almost unlimited.

The Chairman then called on Mr. John P. Lyons of Cornwallis to address the meeting.

Mr. Lyons said that he was much interested in the matters under discussion, but he was only a small fruit grower. For the last ten years he had never picked his apples over the second time. He selected them directly from the trees, and wheeled them immediately into the fruit house. There he deposited them forthwith, the No. 1's in one barrel, and the No. 2's in another. He had used the cushion head for the last two years, and thought the employment of it a great improvement on the old method of packing. The apples packed with the cushion head had always turned out well in his experience. He had always sold his apples in the city of Halifax, and they had invariably given pretty good satisfaction. Some people said that there would be shrinkage if certain kinds of barrels were used, and the apples packed in a certain way. He had never found any difficulty when the barrels were tight. He would like to have the barrels air tight, if he could get them. He had never had any trouble with shrinkage of apples, except in the case of

two barrels of Gravensteins. Some of them were picked from the south side of the tree, and they ripened several days before those picked from other parts of the same tree. Some trouble and some expense were involved in the proper picking of Gravensteins. He believed that Gravensteins should be picked at different times; that those first ripe should be picked first, and the others allowed to remain on the trees a few days longer. The Gravenstein was a tree which required to be closely watched at picking time. In his opinion an apple that had laid on the ground twenty-four hours was not fit to be put on the market. They might be laid away by themselves for immediate use. He marked them windfalls, and he found that such apples would not keep well. Farmers were some times blamed for that of which they were not guilty. He thought that truckmen sometimes did their best to knock fruit about. One year he employed a strange truckman to draw his fruit. He (Mr. Lyons) complained of the rough way in which the man was treating the fruit. The man remarked to a bystander, "The fellow wants his apples handled as if they were eggs." He (Mr. L.) said, "That is just what I want; I wish my fruit handled as carefully as eggs." At one time in his fruit room a barrel fell from the top of the room to the floor. He marked that barrel, and on examining it afterwards he found that every apple in it was bruised, though the barrel was full. He had come to the conclusion that a great deal of fruit was damaged by careless trucking. A year ago last October he had sold to a friend in the city two or three barrels of King of Tompkins Co. He called on his friend last fall to inquire if he wanted any more apples. The friend replied that he thought he would not take any, as the last he got had not kept very well. He further said that he had kept them in a good warm place, and overhauled them once a fortnight, and that if he had not done that he would not have had a single apple left. (Laughter.) He (Mr. L.) told him he could not have done a worse thing. He mentioned these facts to show that there were some things connected with fruit for which the farmers were not always to blame. (Applause.)

Mr. Dickie observed that Mr. Lyons had spoken of two seasons for picking Gravensteins. He (Mr. D.) had a conversation with a Mr. Rand who had sold a lot of Gravensteins in England at a large price. Mr. Rand told him that he had allowed these apples to remain on the trees until they dropped, and that he picked them

immediately after they fell, and they turned out as sound and firm as any apples he had ever handled. That was the fruit that yielded Mr. Rand forty shillings a barrel. Mr. T. S. Whitman had spoken of No. 1, 2 and 3 as a mode of marking apples. He (Mr. D.) thought that the use of letters was a preferable mode of marking. He found that No. 2's were considered in the English market as something inferior. No. 1's they considered first quality, but No. 2's they thought must be bruised or *queer*, as they called rotten. Let every barrel be uniform throughout. You require to sort not only in size but also in color. He had some experience in this. He had had four barrels of Baldwins, some of which were green and some red, and they were mixed throughout the barrels. A buyer remarked that if he were sure that the most of the apples in any one barrel were red, he would give a great deal more for it. If any of the barrels had contained all green apples it would have brought its value, though the red apples would have brought a better price. The object desired was uniformity in color throughout the barrel. Perhaps X, XX, XXX would be good marks to use.

Mr. T. S. Whitman approved *generally* of the observations made by the last speaker as to marking. The marks used should call the attention of the shipper to the distinct qualities of the fruit. He thought however that to use marks such as they were in the habit of putting on beer barrels in England would be very confusing. The desirable point was to have some definite mode of estimating our fruit, and some mark made to designate it which would intelligently convey to the buyer an idea of the sort of fruit he was buying. He found that in receiving our goods for shipment a dozen different shippers had the same shipping marks. For instance the mark "N. L." was used by ten or fifteen shippers. If the fruit growers put their own marks on the barrels, besides those made by the shippers, then the agents in England could tell whose any particular barrels were,—otherwise it was impossible for them to do so. Under the present system the man who shipped inferior apples was likely to get the benefit of the shipment of the one who sent a superior article. From a conversation with a friend from Bermuda, where they carried on an immense trade in tomatoes and onions, he found that they had a very good plan of marking their boxes and barrels. Every man had his own particular number, and the boxes and barrels were marked accordingly. Unless, however, this system

was universally adopted it would still create confusion. In Bermuda they were compelled to adopt it by law.

Mr. C. R. H. STARR:—An allusion has been made to one particular brand, "N. L.," in which I happen to be interested. I may state that the difficulty which Mr. Whitmar. fears has been anticipated and provided against. In the majority of instances the apples he speaks of have been shipped by private individuals, and every shipper has put his own name on the barrel as well as the mark "N. L." One of our dealers uses Y in a circle as his private mark in addition to N. L. The advantage of having a distinct mark for each consignee is seen when the vessel is discharging and sorting cargo.

Mr. R. W. STARR observed that a few minutes might profitably be devoted to some remarks on the cultivation of fruit. We might discuss the different grades of apples, and the kinds best suited to the English market. My experience has been limited, but I have had a little to do with the shipment of apples for the last two or three years. My experience last year was confined to one shipment by the *Cedar Grove*. From the experience that I have had I consider that the kinds best suited to the English market are first, Blenheim Pippin, second, King of Tompkins, and third, Ribston Pippin. There is a difference in value of two shillings a barrel between different barrels of the same grade. As to the value of apples to the growers my own experience for thirty years would lead me to say that the Ribston Pippin pays the best of these three kinds. It is an apple that you can depend on for a crop every year if you give it proper cultivation. I am satisfied that we cannot overstock the London market with Ribston Pippins, if they are landed in good order and condition. If so landed they will always find a ready sale.

Mr. C. R. H. STARR observed that he would not recommend the growth of the Ribston Pippin on sandy soil, nor on a soil that was deficient in moisture or lime. It was an apple that required lime, potash and an amount of moisture which many apples could do without. He did not mean to say that the Ribston Pippin could be grown on undrained soil, but it required sufficient moisture to keep it in a healthy state. It was an apple which was very susceptible of

a severe drought. That could be seen by its foliage, which was thin and small. The best Ribston Pippins were grown on the limestone hills of Hants County, the soil being rich and also having the natural drainage of the side hill. He had seen trees on these hills loaded almost to breaking year after year. These apples also grew well in the valleys of Kings and Annapolis where the soil was strong and well drained. There was no difficulty in growing Ribston Pippins to perfection. The trees yielded a reasonable crop every year, and they were seldom so overloaded as to cause much waste. He considered the Nonpareil also one of our most profitable varieties. He would recommend the cultivation of these two varieties to every fruit grower who had a soil sufficiently deep and strong, and he would advise him to add lime and unleached ashes to his soil.

Mr. Dickie fully agreed with the last speaker. Some kinds of apples were difficult to handle, and we wanted an apple that was easy to handle. Apples were easily injured by heat, and the dealers in England could tell in a moment whether an apple was hurt by heat or natural decay. If a really good apple was merely a little injured by natural decay the dealers did not seem to object to it; but those that were injured by heat they would not buy at all. He considered the Nonpareil the best and safest apple to grow for shipment. He did not know much about the Roxbury Russet. Some persons spoke of Nonpareils from the United States. He had never seen a barrel of apples from the States marked Nonpareils, but he had seen thousands of barrels marked Roxbury Russets, and he had almost come to the conclusion that they were the same apples as the Nonpareils. He had shipped 400 barrels of Nonpareils to London in May last. They were all disposed of shortly after his arrival there. A few days afterwards he went over to Paris, and found some of the same apples selling in the streets there. The Nonpareil is a variety that takes hold of the soil readily. It is an apple that can be safely sent to the continent of Europe or any part of the world, and there are few apples of which that can be truly said. The Rhode Island Greening is an old English (?) apple well known to the London dealers, and there is no difficulty in selling it. The King of Tompkins is too large an apple for the London market. The London market generally requires a smaller apple. The Spitzenberg is a good apple for our export trade, and so is the

Baldwin. Our Baldwins, however, cannot compare with the American Baldwin. The American Baldwin is a fine, nicely flavored apple. As for the Northern Spy he had never seen a good barrel of that variety in the London market. There was some peculiarity about them,—the skin too thin or some other defect which rendered them unfit to stand the ocean passage. They were apt to become specky and rotten after the sea voyage. He remembered the first cargo of apples shipped from Cornwallis for England. They were 4000 barrels and 400 different kinds of apples. The late Dr. C. C. Hamilton had 50 barrels in that shipment, and there were 15 different kinds among them. Among the rest were two barrels of Calkin Pippin. When these last were turned out after their arrival in London there was nothing to be seen but skins, cores and stems.

Mr. T. S. Whitman observed that it should be borne in mind that this whole question was a matter of dollars and cents. The important consideration was, what kind of apple will bring most money. In the spring we had to compete with the fruit growers of Ontario and the Western States. An advantage we had was that we raised in this province an apple that was better keeping than any that could be raised on this continent. That apple was the Nonpareil. The apple growers of Ontario had to dispose of their apples before October, as they could not depend on water carriage after that time. The growers of the Western States were in much the same position. Their apples were also short lived, and had not the keeping qualities of the Nova Scotian apple. He found that as a rule the safest and most profitable apple was the Nonpareil. As an article on which to advance money or in which to invest capital he thought it as safe as a cargo of coffee or sugar. This apple, however, should not be placed on the English market too early. It should be kept until February, when there was no competition from Ontario and the Western States. The Russet also was a class of apple that seemed to be well liked in England.

The Chairman observed that the Rev. Mr. Axford, who had carried off the prize for the best 10 barrels of Ribston Pippin, offered by the London firm of Nothard & Lowe, was present, and no doubt could give the meeting some valuable information.

Rev. Mr. Axford remarked that he had not much to say, as he was chiefly a learner as to the mode of growing and packing fruit.

The kinds of apple that he had shipped which had brought the most money were Ribston Pippin, Nonpareils and Blenheim Pippin, which had realized a very good price—33/. Others such as Vandevere and Baldwin brought a good price, but not to be compared with that received for the Ribston Pippin and Nonpareils. He agreed with Mr. Starr's remarks as to the kinds of soil in which the Ribston and Nonpareil should be grown. The soil for these apples should be heavy rather than light. It had been said that the Ribston dropped from the trees very readily. That had been his first year's experience. He had taken some interest in the Kentville Exhibition, and had spent fourteen days in connection with it. On his return home he found that half of his Ribstons had fallen from the trees. The next year he began the picking of his Ribstons a little earlier in the season. Last year he had 21 barrels of them, and they had grown very well. To pick these apples well, they should not be taken from the trees very rapidly. He had pruned his Ribston trees very severely last spring, and they had paid him well in the quality of fruit they yielded last autumn. He had obtained the prize of $25 offered by Messrs. Nothard & Lowe of London, but he felt it to be his duty to state that for that prize there was only one competitor beside himself, though that gentleman at exhibitions generally takes the lead in prizes. As regards classes of apples he considered Nonpareil the first, and Ribston second. They were apples that would always realize good prices in the English market. He had received in the English market 33/ a barrel for No. 1 Blenheim Pippin. They, like the Ribstons, were an apple that required a heavy soil, and he found that they also dropped from the trees very readily, and consequently needed careful watching at picking time. They would bear being picked early, but the difficulty was that when picked early they did not color very well. The Russet was a good marketable apple, and a good keeper.

Mr. Edward McLatchey of Grand Pre observed that as a general thing Baldwins had not turned out well with him. Last year he had realized more on the King of Tompkins. He had not been quite as fortunate with his Ribston Pippins. The prices of apples in England varied according to the time they were put on the market.

## FRUIT CULTURE IN EASTERN NOVA SCOTIA.

Mr. C. R. H. Starr said:—There are certain sections of the province well adapted to fruit growing, in which the farmers do not seem to be well educated as to orcharding and handling fruit. How are we to reach these sections, so as to enable them to rival the more favored parts of our province? The idea which I shall now advance has occurred to me, and I wish to get an expression of opinion on it from this Association. Would it not be advisable for the Government to employ a commissioner—or call him by what name you please—who would be capable of instructing the people to whom I have referred in everything connected with fruit culture. He might visit in the summer season every locality in the province where there is any probability for the raising of good fruit. He could ascertain as far as possible the capabilities of the soil, and he should be able to judge as to the kind of fruit best adapted to any particular section. He might return to these localities in the winter season, and deliver lectures to the farmers on this important subject. I have no doubt that there are many sections of the province that are equally as well adapted to fruit growing as Kings and Annapolis, —that is for certain varieties of apples. A gentleman from Antigonish informed me that he had seen Gravensteins grown in that county which were equal in colour and beauty to any to be found elsewhere, though not quite so large as those grown in the Western Counties. This gentleman also stated that the Gravensteins from Antigonish County would keep in a marketable condition from ten days to a fortnight later than those grown in the Western part of the province. If that be the case, there is no reason why this variety should not be profitably grown in Antigonish. The great difficulty with Gravensteins is to get them to market before they become *queer*, as in London they call a partially decayed condition. The dealers there require an apple that will *snap* under pressure. They must have it before it becomes soft. When we consider an apple fit to eat they say it is *gone*. Apples can be grown in Eastern Nova Scotia which are much harder and firmer than those we raise in the West, and, as already intimated, all that the people of that portion of the province require is instruction in fruit growing to enable them to raise first-class fruit. Some of them perhaps have failed in raising an orchard. But why? In many instances simply

from ignorance of the first principles of fruit growing. They have dug a hole in which to plant the tree like a post hole, and they have made it simply a basin to hold water. In many cases they have turned the cattle into the orchard, and the trees have been destroyed by them, if by nothing else. It is the aim of the Fruit Growers' Association to extend the knowledge they have obtained from practical experience to the districts I have mentioned. I would like to have the views of the gentlemen present as to the practicability of the idea I have suggested.

MR. R. W. STARR:—I think there is no way to instruct the farmers successfully in fruit growing except sending a practical man among them to educate them practically. You may write for them as much as you please, but it will not have the desired effect. If you can get at the farmer and talk to him you can make an impression. I do not say this to depriciate farmers, but I say it feelingly. There is too much truth in the remark that many of the farmers of Nova Scotia do not read as much as they should. I believe that the best way of reaching them is that suggested by the Secretary. We want the man and the means. I think that if the Government were to spend in the manner suggested, a portion of the money which they have to expend on agriculture, that there is no way in which the money could be expended so well; in fact I do not see how else the matter can be accomplished. Perhaps the Fruit Growers' Association might do something themselves, and instead of spending money on an exhibition like this, with nobody to see it, (laughter,) expend fifty or one hundred dollars for the services of a lecturer for the Eastern part of the Province. This, perhaps, would be a better way of spending the money of the Association, than in educating the people of this city by showing them fruit which it seems they do not care to see. (Laughter.) I am satisfied that with a little pressure during the day, driving round from house to house, and talking with the farmers, an enthusiasm can be worked up which can be obtained in no other way.

MR. C. J. PITMAN observed that he was not a member of the Association at present, though he intended to join it. He might say, however, that he considered the idea of sending a man to lecture to the people of the eastern part of the Province on fruit growing a first rate plan. He had known many instances in which farmers had been visited by parties anxious to sell them trees,—parties who understood

the business of planting trees and taking care of them. The County in which he had spent the early part of his life (Yarmouth) was not celebrated for fruit culture. The people of that county had thought that in their moist, foggy, salt air, it was impossible to raise fruit with success. By following, however, the directions of the parties who sold them trees, very good results have been reached. The Secretary had suggested an appeal to the Government; it might be as well not to expect anything from that source with our present depleted treasury. Could not a person be employed to sell trees, and directed to instruct the people to whom he sold as to the preparation of the ground, planting the tree, manuring it, etc., etc. It seemed to him that this Association might compete successfully in this way with the parties who came from abroad to sell trees. If the man sent was a real practical nurseryman, his sales would pay his expenses, and he would confer an immense advantage on the farmers to whom he sold. If a competent person were employed he could judge from the trees he saw growing in the districts he visited, whether, with proper cultivation, good fruit could be raised there. On a recent visit to Pictou County he had been driven out by a Mr. Matheson to see some orchards. Though the ground was covered with snow, there were evidences of healthy growth and hardihood to be observed in the trees, from which he judged that fruit could be grown there very successfully. The person employed to sell the trees might visit from time to time the districts in which he sold them.

Mr. James Halliday stated that since he had taken up his residence in the city he had not given much thought to fruit growing, his time being occupied with matters not connected with agriculture. He had, however, given some consideration to the matter under discussion, and had conversed with the Secretary about it. He had an opportunity last spring of mingling with the farmers of the Eastern districts of the Province, and he found that they were not so forward in matters connected with fruit growing as the people of Kings and Annapolis Counties, where he had formerly resided. He found, though, that there was an increasing desire among the people of Pictou, Antigonish and Cape Breton to propagate good fruit. They were, however, to a great extent ignorant of the proper modes of planting and taking care of fruit trees. When the Secretary had spoken to him last year of the proposition he made this evening, he (Mr. H.) had thought the suggestion a good one. He believed that

if a person such as had been described were sent to the eastern districts of the Province, they would soon compete favorably in fruit growing with the western counties. The exhibition before us had proved that the eastern counties were capable of giving good fruit. Antigonish was a fine farming county, standing third or fourth on the list of the best agricultural counties in the Province. As to its being hilly, that was an advantage, as fruit trees grew best on hillsides.

He had seen a great change in the production of apples in the Province within the last twenty years. He had come originally from Granville Ferry, in Annapolis County. The *Nonpareils—Russetts* they were called when he was a boy—were the principal apples grown there twenty years ago. These apples were then small, and the orchards neglected. Now there was a great change in the quality of those apples. Since this Association had been formed, and various kinds of fruit from abroad had been introduced, a great improvement had taken place in the apples raised throughout the western counties. A few years ago such a display of fruit as we had before us to-day could not have been produced in the Province even in October or November. He regretted that more of the citizens of Halifax had not come to see it.

A Voice.—The admittance fee is too high. (Laughter.)

Mr. T. S. Whitman.—A remark has been made by Mr. Pitman about American fruit tree peddlers. The country is being overrun by sharp peddlers of that class. If there is any place where an orchard can be set, they are there, and I give them credit for it. We neep not give ourselves much trouble as an Association, about instructing the people of the eastern counties in fruit growing. The yankee peddlers will tell them all about setting out the trees, taking proper care of them, &c., &c.

Rev. Mr. Axford would like to ascertain the sense of the meeting as to the distance apart at which young trees should be set out. Would not 60 feet be the proper distance to secure cultivation of the land when the trees attained a good size?

Mr. Starr suggested that the Chairman call on Mr. John G. Byrne, of Cornwallis, to answer this question. That gentleman had an orchard of 14 acres, and there was not an imported tree in it.

Mr. Byrne observed that twenty-seven years ago he had bought a farm near Kentville, sowed some apple seeds on part of it,

and subsequently planted an acre with young trees grown from these seeds. He cultivated these between the rows and they grew pretty well. He found a sale for them as fast as he could raise them, and he allowed his customers to pick for themselves. The best trees were thus culled out, and a good many rough, crooked ones were left which the customers would not look at. He thought that he would set those trees out in another place for himself. He continued to do this year after year. To some he attached a stake, others became straight without it. In this way he at last had a field of 10 acres pretty well filled with those rough trees. Some customers came to buy and they complained that he was planting all the best trees for himself, and giving them the rough ones. (Laughter.) In this field he had set out the trees in rows 21 feet apart; he had followed the books in doing this, as, although he had had considerable experience, he thought that the authors of the books knew more about the matter than he did. In setting out some trees subsequently he *broke joints* to save land. He found his mistake in having done this, when he began to cultivate the land. He could only plough in one direction, he could not run the plough between the trees *cross-wise*, as the trees in that way were only about 10 feet apart. Last year he had raised 400 barrels of apples from these trees, the seed of which he had sown twenty-seven years ago.

As to varieties from abroad, he had planted six young trees of the King of Tompkin's variety; they had grown too fast. He examined them just before he left home and found large cracks in the limbs. In four or five years more he thought that they would be entirely ruined.

He had planted other orchards since those to which he had referred, and had followed another system in setting out the trees. He had planted them in squares, and 30 feet apart each way. Bishop Pippin, King of Tompkins, Esopus, Spitzenburg, and Gravenstein required larger space between them than trees of other kinds.

Mr. R. W. Starr thought that on dry, sandy soil the trees might be placed 25 or 30 feet apart, but that on heavier, stronger soils they required the full distance apart of two rods each way. Some varieties of apples grew much larger than others on strong land.

The Chairman asked Mr. P. Innes, Manager of the W. & A. Railway, to address the meeting.

Mr. Innes could not speak with authority in the presence of gentlemen whose practical experience was greater than his. He might, however, make a few remarks on the transportation of apples.

The Charman asked whether better cars could not be provided for transporting apples,—cars that would not shake the fruit, and would prevent it being frozen on the journey during cold weather.

Mr. Innes observed that an improvement could no doubt be made in the present cars by double boarding them, but as to preventing the fruit from being shaken on the passage, he did not think that much could be done. Stoves might be placed in the cars, if there were proper warehouses in which to store the fruit on its arrival here.

Mr. R. W. Starr was pleased that Mr. Innes was present when the convention was discussing this matter of warehouses. It was one of the many tokens of assistance that Mr. Innes had given them.

The Chairman.—It is probable that the Association will send a delegation to Ottawa in reference to the frost-proof warehouse at Halifax.

Mr. Innes was pleased to hear this, and, if the delegation succeeded, he promised to box up some cars specially for the carrying of fruit. He had frequently brought the matter of fruit warehouses under the notice of Sir Charles Tupper, the Minister of Railways, and of the Chamber of Commerce and the Members for the County of Halifax, and also of Mr. Schrieber. Unfortunately the Intercolonial Railway officials did not look on the matter in the same way as we did. They considered it rather as a matter referring to the Windsor and Annapolis Railway. The Minister of Railways had always spoken very pleasantly, but he referred to his subordinates. The conclusion he (Mr. Innes) had arrived at, was, that the construction of frost-proof warehouses at Halifax by the Dominion Government could only be obtained by outside pressure—pressure of a public and political character. He thought the proper step was for a delegation to go to Ottawa and wait on the Minister of Railways on the subject.

Mr. Mitchell had found from experience as a fruit dealer in Halifax, that the fruit growers were not very particular in packing apples for the Halifax market. The success of the sale of apples depended on their being properly assorted. Their not being so assorted was the reason that apple sales in Halifax were not more successful. If the apples sent here were properly assorted there

would be as ready a sale for them as in the old country. There were private families here who were willing to give a good price for a good article. The apples that were sent here now were, generally speaking, trash. Enough good apples were not sent to ascertain whether the market was limited or not.

M. T. S. WHITMAN observed that the apples would always be sent where the best price was to be obtained for them.

MR. PARKER asked Mr. Mitchell to state what he considered the value in Halifax of his (Mr. P's.) prize barrel of Baldwin's in this exhibition.

MR. MITCHELL.—Five dollars and a half.

MR. WHITMAN.—That barrel would bring $7.50 in England.

MR. C. R. H. STARR thought there should be some acknowledgment of Mr. Innes' kind letter to the Association. The Association was much indebted to Mr. Innes for information which he had readily given, at their request.

The CHAIRMAN remarked that Mr. Innes had afforded great assistance to the Association in giving them figures which would aid them materially in laying this matter of the construction of a frost-proof fruit warehouse at Halifax before the proper authorities.

The Convention then adjourned.

---

## APRIL QUARTERLY MEETING.

The April Quarterly Meeting of the Association was held in the Court House, Bridgetown, on Tuesday, the 17th inst. President Avard Longley, Esq., in the chair. There was a very gratifying attendance of the orchardists of Annapolis County, and quite a number from Kings were present.

The President said he was glad to welcome the Association to Bridgetown, was pleased to see so large an attendance, regretted that so little interest had been taken by the farmers of Annapolis Co., in the work of the Association, and expressed a hope that this would not be the case in the future.

The Secretary read the minutes of the last meeting, which were approved, and also made a brief report, chiefly having reference to the

recent winter exhibition and convention at Halifax. The show of fruit was remarkably good and in every way satisfactory—there being nearly 800 plates on exhibition, including collections from Cape Breton and Eastern Counties, Lunenburg and Yarmouth, also Annapolis, Kings and Hants Counties. He was sorry to have to report that the attendance of the Halifax people had been very limited, and consequently the expenditure had been about $145 over and above receipts.

The Convention had been very successful, and as the services of a reporter had been secured, the whole of the matter would appear in the next annual reports, and would no doubt add very much to the interest and value of the next volume.

The Secretary also made a statement of the financial status of the Association, showing a healthy state of the finances, but a noticeable fact brought out in this report, and one much to be deplored, was that the membership of the Association was not nearly as large as was desirable. He urged upon fruit growers generally the importance of uniting with the Association, and furthering the interests of this, our great natural industry.

A lengthy and valuable paper upon "Fruit Culture," prepared by W. H. O. Haliburton, Esq., of Wolfville, was presented, and by vote was ordered to lay upon the table for the present.

*Resolved*, That an evening session be held, and the public generally be invited to attend. R. W. Starr, C. B. Whitman, W. Miller and Robert FitzRandolph, were appointed a Committee to arrange a programme for the evening meeting. This Committee subsequently reported, which report was adopted.

The President here gave an intermission of five minutes for persons wishing to sign the roll, when some 14 gentlemen received certificates of membership.

Mr. A. H. Johnson gave notice of motion at the next annual meeting to alter the constitution, so as to admit ladies to full membership upon payment of 50 cents annually.

A general conversation was held in reference to exhibitions of fruit at the Dominion and Provincial Exhibitions next autumn.

A. H. Johnson said that if such fruit as we raised could be exhibited at Covent Garden Market, London, much more could be done to advance the interests of our fruit growers than any showing of them in our Provinces.

*Resolved*, That a Committee be appointed to consider what course best to pursue in connection with the forthcoming exhibitions, and report at the evening session.

The following were named as a committee:—Robert Marshall, A. H. Johnson, R. W. Starr, J. R. Hart and the Secretary.

This Committee subsequently made the following report, which was adopted:—

Your Committee recommend that the Fruit Committee be empowered to make such display of our Nova Scotia fruit as they think best, at the Dominion Exhibition in St. John, N. B., next autumn, to communicate with the Secretary of the Dominion Exhibition in reference to space and accommodation, etc., and that the sum of ten dollars be appropriated toward making such collections.

We further recommend that at the Provincial Exhibition diplomas be offered for such purposes as the Council may recommend.

(Sgd.) R. MARSHALL, *Chairman.*

A. H. JOHNSON gave notice of motion to be presented at the July meeting as follows:—

That this Association invite the co-operation of the fruit growers of the Province in making a good exhibit of Nova Scotia apples in London, next autumn or winter, by contributing specimens of fruit. The Association to take charge of the exhibit, and the fruit to be sold, and the proceeds to go towards paying expenses.

The Secretary laid upon the table the transactions and reports of the Association, just published, a pamphlet containing 100 pages and an excellent portrait of the late President, C. C. Hamilton.

It was resolved that in future the reports of the Association be published annually, if the funds of the Association would permit.

The Secretary requested the members to report to him during the year any matter bearing upon the work of the Association, or any clippings from papers or periodicals that would be of general benefit and assistance in carrying out the objects of the Association.

*Resolved*, That a Committee of three, in each county, of whom, the Vice-Presidents shall be one, be appointed to communicate with the Chairman of the Fruit Committee in reference to fruit culture, &c., in their respective districts.

The following were appointed :—For Annapolis County, T. S. Whitman, Vice-President, W. Miller and C. B. Whitman. For Kings, T. H. Parker, Vice-President, W. H. O. Haliburton and C. F. Eaton; the appointment of further Committees was deferred till the Vice-Presidents could be consulted.

Adjourned till 7.30 p. m.

## EVENING MEETING.

At the time appointed the seats in the Court House were well filled with ladies and gentlemen all more or less interested in the objects of the Association.

President LONGLEY called the meeting to order, and the Secretary read the minutes of the previous session, which, after some slight alterations, were approved.

The first subject suggested by the programme was the picking, packing and shipping of apples, and also the style of package for the English market.

MR. JOHNSON having recently returned from London, was called upon and said he had been engaged in raising, packing and selling apples from boyhood. Had visited London to gain a further knowledge of the business. Previous to going to London he thought he knew all about packing apples. He took with him some fruit of his own packing, but when he opened it in London he found he had still something to learn, although he had packed very closely and pressed well. Every barrel, except those packed with excelsior, was *slack* and more or less bruised all through. He saw none of those packed without excelsior that turned out well, except one lot that had stood in the warehouse at Annapolis about four weeks and were refilled just before shipping, while those packed with excelsior opened bright and full. In London they stow all barrels in the warehouse on end, and this is considered the best method. He found that if a barrel of apples would rattle, it would not sell readily, even if it only required five or six apples to fill, it would have to be sold for 2*s*. or 3*s*. less. Buyers say apples that rattle are liable to be bruised all through.

Purchasers pay little attention to the barrels, whether hard or soft wood, but hard wood barrels are less liable to be broken. The

porters are quite willing to have barrels broken and a hatful taken home to their families, which made many less in the barrel, often causing a difference of from 6*s.* to 8*s.* when sold. He should use hard wood barrels exclusively in future on account of greater strength. He went over in the *Delta* and found there was no way to ventilate, excepting by the hatches, and as the weather was bad they could not be removed. Apples were stored in tiers of 9 barrels, and the bottom ones looked like a bad hat. Dealers say send your apples every week. Apples landed three weeks are called stale.

The first requisite is to have the barrel full, second, to have the fruit crisp and firm. He had nice red Baldwins, which looked well, but the dealer asked, "Have you none greener?" The reply was "Why?" "Because," he answered, "they will probably be harder." His impression is our Gravensteins should go as soon as picked, Ribston Pippins next, then King of Tompkins. The best markets are before Xmas, then comes a flat time. He found Gravensteins much asked for, and the demand increasing every year. Bishop Pippins, (Bellflower) are liable to turn black, and people there are little acquainted with them. They may become better known and command good prices if got over in good order. Greenings are well known and sell readily. Vandeveres are getting dangerous, and few are sold in London, but are mostly sent to the country. Northern Spy well ripened and nicely colored brings good prices. Golden Russetts and Pomme Grise are used almost entirely for dessert, the others for cooking. If you ship shortly after packing, by all means use excelsior, put two handfuls on each end, then press very tight. If you wait say four or five weeks the excelsior may be omitted. As a rule our small apples keep the best, hence may bring a higher price being harder. Makes little difference how barrels are marked, provided it is done neatly with stencil and not red chalk. Apples look better in tight barrels, and those with paper linings better still. Was invariably told that Nova Scotia apples are more highly prized than either American or Ontario apples, the reason given being that our apples keep more crisp and firm. Was told that Nova Scotia apples are improving every year. American apples are apt to be wormy. Found no complaint in London as to size of our barrels.

During Mr. Johnson's remarks he was asked many questions which elicited much valuable information, and just such information as all fruit growers are seeking.

A number of paragraphs from Mr. Haliburton's paper were read and discussed, but as the paper was a lengthy one, there was not time to discuss the whole, and it was ordered to be placed on file for future use, and a vote of thanks passed to the author for his valuable paper.

Mr. Wm. Miller says, without doubt our apples should be crisp and firm when they reach London. Another thing, apples should be stowed with head downwards, so that slack barrels may be filled up. Happy to know that no fault is found with Nova Scotia apples, and that no trouble has arisen from badly packed fruit. Our soft fruits should evidently be placed in London before Xmas., as the demand then is almost unlimited, but when customers are supplied there is little demand for several weeks—say till February or March.

C. R. H. Starr claims to have been the first to have used excelsior, and is glad to find that its use is proving so beneficial. He was asked by his friends in London to devise some packing to take the pressure off the fruit—tried hay and paper shavings, but finds that excelsior keeps fruit in good order, while hay moulds. Mr. Starr told of the doings of the Canada Fruit Exporting Co., who pack fruit in perforated cases, similar to the egg cases so extensively used. In addition to packing in these cases an absorbent is used to take up the carbonic acid gas generated by the fruit. Tomatoes so treated arrived across in perfect order. Apples put up in this way sell in England for about the same per case, containing about a bushel, as per barrel. The manager expects to visit Nova Scotia in the autumn, and perhaps establish a house in this Province.

Mr. Hart stated that he had been in correspondence with the manager, who had promised to send him a sample case shortly, and he would then show it to any parties wishing to see it.

The President stated that Mr. Johnson had been much distinguished for the size and color of his apples at the exhibition of the Association, and that taking Mr. J's. remarks all in all they seemed to meet our requirements more fully than any statement he had ever listened to, and that the meeting should feel itself deeply indebted to Mr. J. for his valuable information. A vote of thanks was accordingly moved by B. Miller, Esq., seconded by R. Marshall, Esq., and unanimously passed.

Mr. J. acknowledging the vote of thanks, said it gave him great pleasure to give any information in his power.

The next subject on the programme was "The best varieties adapted to the English market."

Mr. Miller said all the varieties which may be sent are the best in their proper time. Ribston Pippins are certainly bringing the best price, and they should, for his experience was that when a Gravenstein tree has turned off ten barrels, a Ribston Pippin produced but three. Thought King of Tompkins would be a ruling variety. They are, however, easily blown off—hence we must consider not only the price of the apples, but the productiveness of the tree. Thus we can get double the quantity from Baldwins and Gravensteins that we can get from Ribston Pippins and King of Tompkins. It is not well, however, to confine ourselves to any one or two kinds. Spitzenburgs (Æsopus), he advised grafting very sparingly. Mr. Miller considered that if one dollar a barrel can be cleared for our apples, it is the best paying business in which we as farmers can engage.

Robert Starr said in his experience the Ribston Pippin was the best paying apple. If well cultivated it can be made to bear every year. Nonpareils, Blenheim Pippins, King of Tompkins, Gravensteins, Golden Russetts of N. Y., and Northern Spy, are all good varieties, and if placed on the London market in proper season will realize large prices.

Solomon Chute said Nonpareils have brought highest prices and Ribston Pippins next. He set out Nonpareils twenty years ago, which were first to come into bearing. Six trees when eighteen years old gave over twelve barrels of fruit, or an average of two barrels each. He sent, this year, ten barrels to London which brought 27*s.* all round.

A. H. Johnson said apples want to be large and well colored. Some large ones brought 40*s.*, while small ones sold for 16*s.* to 18*s.* The Golden Russett did not seem to be holding its own, Baldwins did better so far, but the Golden Russett would doubtless come up. The Northern Spy would, without doubt, sell very well, and would outstrip the Nonpareil. In Kings County more Northern Spys can be grown than Nonpareils from older trees.

A vote of thanks to the press for their efforts in securing so large an attendance, passed unanimously.

The Secretary regretted that the lateness of the hour would not permit the discussion of other subjects, and one particularly, "How

Best to Extend the Usefulness and Influence of the Association," Whether or not it would be advisable to institute auxiliary or branch societies in the newer fruit districts of the Province, or to hold meetings more frequently, and sometimes in the outlying sections. This would give the Association more of a Provincial character, which was necessary, if they would attain the best success, and closed by asking for suggestions as to where it would be best to hold the next quarterly meeting. The President suggested that the subject mentioned by the Secretary be discussed at the next meeting. Hants Co. was named as the place for the July meeting, and the matter left with the Council to arrange. Adjourned.

C. R. H. STARR, *Secretary.*

---

NOTE.—The Secretary desires to acknowledge with thanks, the valuable assistance rendered by the Rev. J. R. Hart, in taking the above minutes.

---

## REPORT OF SPECIAL COMMITTEE ON FROST-PROOF WAREHOUSE AT HALIFAX.

The above Committee met at Wolfville on the 1st February, 1883. Present: President Longley, W. H. Blanchard, Esq., Rev. F. J. H. Axford and C. R. H. Starr; also J. T. Wood, Esq., Delegate from the Halifax Chamber of Commerce.

The SECRETARY read a letter from W. H. Allison, M. P., regretting his inability to be present but wishing every success in the promotion of the object of the Committee. Also a communication from P. Innes, Esq., Manager W. & A. R., containing valuable information relating to the subject under consideration.

Mr. WOOD gave an account of the action of the Chamber of Commerce and of their desire to assist the efforts of the Association in procuring the necessary warehouses at the Railway terminus.

Moved by Mr. AXFORD and seconded by Mr. BLANCHARD, and Resolved, that the Secretary communicate with the Prov. Grange P. of H., soliciting their co-operation in the endeavours to obtain a Frost-proof Warehouse in connection with the Railway at Halifax for the protection of produce intended for export during the winter months.

It was also Resolved unanimously, that this Committee recommend the Association to send a deputation to Ottawa during the Session of the House of Commons in order to lay before the members and the Government the urgent necessity of providing Frost-proof Warehouses in connection with the Railway, and to co-operate with delegates from other bodies in reference to the same matter, provided it can be so arranged as not to draw too heavily from the funds of the Association.

The following is a copy of the Memorial addressed to the Hon. Minister of Railways :—

WOLFVILLE, N. S., *Feb'y. 1st, 1883.*

HON. SIR CHAS. TUPPER, C. B.,
*Minister of Railways and Canals.*

SIR,—The undersigned beg respectfully to represent to you that urgent necessity exists for the erection of a commodious Frost-proof Warehouse at Richmond or at the Deep Water Terminus of the Intercolonial Railway at Halifax for the safe storage of apples and potatoes especially, and other perishable produce designed for foreign shipment.

The apple trade with Great Britain has already assumed important dimensions, and potatoes are also being extensively exported from various parts of the Maritime Provinces to the United States, and these branches of trade are year by year expanding.

The facilities offered at Annapolis seem to be about all which could be reasonably asked for in that direction, but, except for the Western part of Nova Scotia, Halifax is the natural outlet for the rest of the Province and of the district of New Brunswick intersected by the Intercolonial Railway.

The undersigned learn from the Manager of the Windsor and Annapolis Railway that on that R. R. alone were carried during the year ending 30th June, 1881, 101,000 bbls. of apples and 65,000 bbls. of potatoes, and to June 30th, 1882, with a very small crop, 75,000 bbls. of apples and 100,000 bbls. of potatoes; and these productions are unquestionably annually increasing.

The undersigned have not the information as to the quantities of these productions passing over the I. C. R., but they believe the quantities transported by that R. R. is largely on the increase.

The absolute necessity for having a proper Frost-proof Warehouse in Halifax is evident from the fact that of the apples and potatoes passing over the W. & A. R. R., only 25,000 bbls. of apples and 33,000 bbls. potatoes were transported during the months of December, 1880, January, February and March, 1881, and 15,000 bbls. of apples and 30,000 bbls. potatoes during the same months of the

following year, (and of these comparatively few were sent via Halifax, for want of safe storage on arrival), notwithstanding that during the months named is the season in which these products should be chiefly shipped, if advantage is to be taken of the best markets.

The undersigned believe that it only requires proper arrangements for transporting, and storage in Halifax, awaiting shipment, to increase the above productions to an almost unlimited extent; and the material prosperity of the Maritime Provinces, and especially Nova Scotia, will be greatly advanced by the erection of suitable storehouses at Richmond or the Deep Water Terminus at Halifax.

(Sgd.) A. LONGLEY, *President*, C. R. H. STARR, *Secretary*, } Nova Scotia Fruit Growers' Association.

Committee adjourned.

C. R. H. STARR, *Secretary*.

---

## REPORT OF DELEGATE RE. FROST-PROOF WAREHOUSE.

In accordance with the resolution passed at the meeting of the Association held at Halifax, your delegate proceeded to Ottawa, and after several days delay, succeeded in gaining an audience with the Hon. Minister of Railways, in which he was supported by the Hon. Messrs. Richey, Daly, Woodworth and Allison.

The Minister at first did not seem disposed to entertain the subject favorably, but later requested your delegate to interview Mr. Schreiber, the Chief Engineer, and discuss the matter fully with him. He accordingly did so, and found in Mr. S. a strong opponent, as he considered it was a matter entirely in the interest of the W. & A. R. Co., but in view of the facts set forth in the memorial from this Association, which were endorsed by the Provincial Grange P. of H. of Nova Scotia, and also the Halifax Chamber of Commerce, together with such further information as he was enabled to lay before him, Mr. S. consented to give the subject his favorable consideration, and suggested that the more important arguments not set forth in the memorial should be briefly submitted in writing, in order that they might not be overlooked when the opportunity offered to discuss the matter with the Minister.

The following note was accordingly addressed to the Hon. Minister of Railways :—

"THE RUSSELL HOTEL,"
OTTAWA, *March 29, 1883.*

TO THE HON. SIR CHARLES TUPPER, C. B.,
*Minister of Railways and Canals.*

SIR,—With reference to our recent conversation and at the request of Mr. Schreiber, I beg herewith to submit for your further consideration a few of the more important points in connection with the required Frost-proof Warehouse at Halifax :

*First*—The necessity for such accommodation in view of the rapidly increasing productions, and the benefit it would be to the Railways, and the Province generally, is unquestionable, as at present there is no place available when a single carload of potatoes or apples can be protected from frost for a single night.

*Second*—Suitable warehouses would attract the great bulk of the apple and potato shipments to Halifax during the winter months, and thus largely assist in providing the light freight required to make up full cargoes for grain steamers.

*Third*—The additional traffic and a small charge for storage would, I have no doubt, pay a fair interest on the expenditure.

I would beg leave to suggest that what is required for the accommodation of this traffic is a Frost-proof Building at Richmond, alongside which ocean steamers could lie, and from which they could be loaded direct. It should have a capacity of about 10 or 12,000 bbls., and in connection with it a warm shed capable of holding 10 or 12 cars, under cover of which carloads could be placed immediately upon arrival.

Or the building of a simple train shed at the inside of the yard at Richmond for the protection of carloads until they could be shunted to the Deep Water Terminus, where a storehouse might be erected in a second storey upon the present freight shed, utilizing the present elevated track to gain access thereto.

Either of these suggestions if carried out would, in my humble opinion, meet the present requirements of the trade. The latter would add much to the facilities for local business, as a train shed at Richmond could be placed where it would be accessible to teams from the city, and a warehouse at the Deep Water Wharf would tend to concentrate the shipments from one point, and often save steamers changing berths.

I am, Sir, your obedient servant,
C. R. H. STARR,
Delegate N. S. F. G. A.

At a final interview with the Minister, his words in substance were as follows:—

"I have discussed the subject of Frost-proof Warehouse at Halifax with Mr. Schreiber, and in view of the statements presented, the Chief Engineer recommends the appropriation of $12,000 for the erection of such warehouses as seem necessary. *This sum I shall put in the estimates for that purpose.*"

The thanks of your delegate is due for the courtesies received at the hands of the Hon. Minister of Railways, also to Messrs. Daly, Richey, Allison, Woodworth, Forbes, and other members, for valuable assistance rendered; also to His Worship the Mayor of Halifax, and the other gentlemen comprising the Halifax Dry Dock deputation.

(Sgd.) C. R. H. STARR,
Delegate.

The Secretary of the Fruit Growers' Association desires to acknowledge with thanks the following contributions toward the expenses of the above deputation to Ottawa:—

| | |
|---|---|
| W. C. Silver, Esq., Halifax | $10 00 |
| James A. Frazer, Esq., M. P. P., Goldenville | 5 00 |
| G. A. S. Crichton, Esq., Dartmouth | 5 00 |
| P. Innes, Esq., Manager W. & A. R., Free Pass over W. & A. R. and | 10 00 |
| C. F. Eaton, Esq., Canard | 5 00 |
| W. H. Chase & Co., Port Williams | 5 00 |
| Wood & Co., Halifax | 5 00 |
| Pickford & Black, Halifax | 5 00 |
| S. Cunard & Co., Halifax | 5 00 |
| T. A. S. DeWolf & Co., Halifax | 5 00 |
| R. E. F. Randolph, Esq., Bridgetown | 2 00 |
| Caldwell & Murray, Wolfville | 1 00 |
| Geo. C. Johnson, Esq., Wolfville | 2 00 |
| Edward McLatchey, Esq., Grand Pre | 1 00 |

---

## QUARTERLY MEETING.

COURT HOUSE, WINDSOR, *July 12th, 1883.*

President LONGLEY in the chair.

SECRETARY read minutes of last quarterly meeting at Bridgetown, also report of delegates to Ottawa *re.* frost-proof warehouse at Halifax, which showed that there was every reason to believe the mission had been successful as the Hon. Minister of Railways—Sir Charles

Tupper—had promised to put the sum of $12,000 in the estimates for that purpose, but unfortunately when the item came up for approval, owing to illness and consequent absence from the meeting of the Cabinet of the Hon. Minister of Railways, the item was struck off.

The SECRETARY said he had an interview with Sir Charles just previous to his sailing from Halifax for London, when he made the above explanation, but requested that the matter be brought to his notice previous to the next session, when he would use his utmost endeavours to secure the necessary appropriation. The following resolution moved, seconded and passed unanimously :—

*Resolved*, That this Association regret that the efforts put forth to secure the much needed frost-proof warehouse at Halifax have not proved immediately successful, but express the hope that in the near future this very necessary accommodation will be provided ; Also,

*Resolved*, That President Longley, W. H. Blanchard, and the Secretary, be a Committee to make what further efforts were necessary with reference to the above.

J. O. KING, of Windsor, and ANDREW SHAW, Falmouth, were added to the Fruit Committee.

*Resolved*, That a further sum of $15 be added to the $10 voted at the April meeting for the purpose of making an exhibit of fruit at the Dominion Exhibition.

The SECRETARY read a letter from Messrs. Nothard & Lowe, again offering prizes as follows :—A prize of £5, and a second prize of £1 for the best 20 barrels Baldwins ; also, a prize of £2 for the best 10 barrels Ribstons, to be consigned to them, and arrive in London not before the first of December, and not later than the 16th. Fruit to be packed in hard wood, flat hoop barrels, and to have a layer of excelsior top and bottom, other conditions as before. Also advising an exhibition of Nova Scotia apples to be sent to London, which they kindly volunteered to take charge of, if the Association wished.

A vote of thanks was unanimously given Messrs. Nothard & Lowe for their generous offer of prizes.

*Resolved*, That a collection of apples be sent to England for exhibition in December.

R. W. Starr, A. H. Johnson, Otis King, Robert Marshall, William Miller, Andrew Shaw, and D. Henry Starr, be a committee to look after said collection.

*Resolved*, That not more than one hundred dollars be expended for this purpose.

Judge DeWolfe spoke of recent visit of the Maine Press Association, who were equally surprised and delighted with our country, and thought we did not appreciate and extol our own country sufficiently.

R. W. Starr read a communication from Vice-President C. E. Brown, Yarmouth, requesting the Association to nominate some one from Nova Scotia to be a member of the Fruit Committee appointed by the American Pomological Society.

*Resolved*, That Mr. Brown be requested to continue in the above capacity, but should he decline to act R. W. Starr be nominated as his successor.

The President suggested that the Fruit Committee of this Association be requested to assist Mr. Brown or his successor in supplying information to the American Pomological Society.

*Resolved*, That the President, Vice-President, Secretary, Dr. Burnet, and any other members of this Association who might find it convenient to attend the meeting of the American Pomological Society in September, be accredited delegates from this Association.

The President asked for reports of the Apple Crop, and said the Leaf Roller was destroying what fruit they had in Annapolis County.

Mr. Andrew Shaw said there was prospect of very small crops in Falmouth.

R. W. Starr said as far as he had an opportunity of observing he thought Nonpareils were a scant crop, Ribstons and Bellflowers, Gravensteins and Tompkins fair, Baldwins and Northern Spy almost none.—Plums, where any trees had escaped the black knot were bearing good crops.

Mr. Hunter said crops will be very light indeed—apples were dropping off. The general expression was about one-third of an average crop of apples.

A vote of thanks was passed to Dr. Haley, M. P. P., for securing the Court House for the meeting.

Adjourned.

C. R. H. Starr, *Secretary,*
*N. S. F. G. A.*

## MEETING OF COUNCIL.

PORT WILLIAMS, *December 27th, 1883.*

Present:—Vice-President T. H. Parker in the chair; Isaac Shaw, J. B. Bowser, Capt. Tuzo, C. Y. Johnson, R. W. Starr, Wm. Sutton, T. E. Smith, John G. Byrne, and the Secretary.

The SECRETARY stated the principal business was to decide whether we should have a dinner in connection with the annual meeting, or not.

R. W. STARR moved that arrangements be made to have a dinner, and spoke in favor of the resolution; seconded by Capt. Tuzo and supported by Mr. Bowser and others, and passed unanimously.

Moved by C. Y. JOHNSON and seconded by J. B. BOWSER, that the Secretary be instructed to issue twelve or more invitations to the Governor, Representatives of the Government, the Local S. S. Cos., the Railway, the Press, and others.

Moved by MR. SHAW and seconded by Captain TUZO, that the services of a short hand reporter be secured to report proceedings of Annual Meeting.

The SECRETARY made a verbal report of the exhibit at Dominion Exhibition, and also of the fruit sent to England, which reports will be presented in full at the Annual Meeting.

It was decided that the Annual Meeting should be held on or about the 15th of January.

Meeting adjourned.

C. R. H. STARR, *Secretary.*

---

## ANNUAL MEETING.

WOLFVILLE, *January 15th, 1884.*

Association met in Witters Hall, pursuant to notice, at 2 o'clock, p. m.

At 2.30 President LONGLEY took the chair, and in calling the meeting to order expressed his gratification at seeing so large a gathering of representative and intelligent men. He had not seen anything like it before in the twenty years history of the Association.

Among those present were Major-General Laurie, J. W. Longley, M. P. P.; T. L. Dodge, M. P. P.; L. D'V. Chipman, Ex M. P.; J. B. North, Ex M. P. P.; Prof. Higgins, D. Sc.; T. H. Rand, D. C. L.; C. F. Eaton, Esq., Warden of Kings Co.; Revds. F. J. H. Axford and J. R. Hart; Richard Starr, Leander Rand, J. B. Bowser, Peter Innes, Manager W. & A. Railway; T. H. Parker and about eighty other leading fruit growers of the country.

Minutes of the last quarterly meeting were read and approved, as well as the minutes of the Council meeting.

The President then delivered a lengthy and interesting address referring to many facts and circumstances in reference to the crop of 1883—which, he said, was only one-third of an average crop, and even this was greatly diminished by the great gale of August 29th. In fact the crop of the season was not worth talking about when compared with that of some previous years, but despite all this quite a quantity had been exported. The crop in England the past season had been an extraordinarily large one, while ours had been correspondingly small. In the nature of things, this may be expected to be reversed the next season. This was a matter for encouragement to Nova Scotia fruit growers. Fruit growing was as profitable as it was a most enjoyable occupation. He hoped we were about to enter upon a distinguished career as a fruit growing country—a country that occupied a position, as regards climate and soil, well adapted to fruit growing, and surpassed by no other in the world.

It was admitted that Nova Scotia could beat the world in the production of the harder kinds of fruit, and he trusted that this meeting would result in renewed efforts to maintain and enhance the reputation already won.

A collection of some 30 varieties of our leading commercial apples was sent to England, and through Sir Chas. Tupper, Canadian High Commissioner, it was exhibited at Birmingham in connection with the great Cattle Show, and elsewhere, where it attracted unusual attention. This collection, together with the private collection sent by our Secretary and shown at the great Apple Congress in London, would doubtless prove a great advertisement for Nova Scotia fruit. The President concluded his remarks by referring to a letter received from Sir Chas. Tupper respecting the above collection of apples, which he requested the Secretary to read:

OFFICE OF HIGH COMMISSIONER FOR CANADA,
9 Victoria Chambers,
LONDON S. W.,
*5th December, 1883.*

DEAR MR. LONGLEY,—I am much obliged for your letter of the 27th October, but have delayed answering it until the arrival of the apples which you so kindly arranged to send me in compliance with my request. The Ribston Pippin and King of Tompkins County varieties which you forwarded arrived in excellent condition, and have been distributed among the different agents of the Government in this country. They will, I am sure, attract considerable attention. The numerous varieties sent by the Nova Scotia Fruit Growers' Association were also received in splendid condition, and just in time to enable us to make a display of them at the Birmingham Cattle Show. I have myself been down to this Show, and am pleased to tell you that the apples received much notice and commendation. They will also be exhibited at the Smithfield Show next week. I am quite sure that more beautiful specimens have not been seen in this country, and I am greatly indebted to yourself and to Mr. Starr for the trouble that has been taken in the matter. I beg that you will convey my thanks to Mr. Starr for what he has done.

With kind regards, believe me,
Yours faithfully,
CHARLES TUPPER.

A. LONGLEY, ESQ.,
Paradise, Nova Scotia.

The SECRETARY then read his Annual Report as follows:—

## REPORT OF SECRETARY.

JANUARY 15TH, 1884.

*Mr. President and Members of the Fruit Growers' Association:*

In presenting the customary Annual Report, it is very gratifying to note the large increase in the membership of the Association during the past year, and a much greater interest in promoting the objects of the Association than has been evinced during the previous few years; this may be attributed mainly to the publication of the Transactions and Reports.

Your Publication Committee had a large amount of labor in connection with the accumulated mass of manuscript from which the

reports were compiled, and the thanks of the Association, or something more tangible, is especially due to the Revds. Messrs. Hart and Axford for the large amount of valuable assistance rendered by them.

The publication of the portrait of the late Dr. Hamilton seemed a well earned tribute to his memory, after some 17 years service as President of this Association.

These Reports have been circulated throughout our own Province, and a number sent abroad, and it is pleasing to note that our little volume has been met with favor, and received many flattering encomiums from friends and the press.

The publication and mailing of these Reports, together with the issuing of some 500 Prize Lists for the winter Exhibition, in addition to the ordinary work and correspondence, amounting to some 250 letters, besides a greater number of post cards and circulars, has necessarily caused a large increase of office work.

Of meetings there have been three of the Association and one of the Council, since the last Annual Meeting. The first of these, a Special Meeting held in connection with the Winter Exhibition in Halifax on the 7th of March, was well attended and business of importance transacted. The Convention of Fruit Growers on the afternoon and evening of the same day was a great success. The Association is largely indebted to Drs. Burnet and Lawson, Messrs. T. S. Whitman, R. W. Starr and other gentlemen, who contributed so much to the success of this meeting by their addresses. The services of a stenographer were secured and a full report of the proceedings at this meeting will appear in the next volume of the Transactions.

The April meeting held in Bridgetown was most successful, and a number of the fruit growers of Annapolis County manifested their interest in the Association by adding their names to the roll of members. Mr. A. H. Johnson, who had just returned from London, added much to the interest of this meeting by his reference to Nova Scotia apples in England. The discussions were well sustained until a late hour in the evening. Extended notes of this meeting were published in the *Bridgetown Monitor*, which will reappear in due time.

At the July meeting held in Windsor, there was but a small attendance, owing probably to the busy season, but it was worthy of note that nearly all who took sufficient interest to attend the meeting united with the Association.

It is much to be regretted that there was no Autumn meeting, but the absence of the President from the country, and the busy engagements of several of the most active members, seemed to conflict with any arrangement contemplated.

A hurried meeting of the Council was called for the 27th December, to arrange business in connection with this meeting. Notes of the business transacted at these meetings have already been presented.

The Winter Exhibition held in Halifax on the 6th and 7th of March last, was a great success as an Exhibition, there being some 500 plates of fruit on the tables, much of which was very superior; but, financially, it was a serious failure, and the funds of the Association had to be drawn upon rather heavily to make up the deficit.

The collection of Fruit exhibited by the Association at the Dominion Exhibition, St. John, in October last, was very satisfactory, and the following, taken from the St. John *Sun*, will perhaps convey the best idea of what was thought of it:—

"The exhibit of the Nova Scotia Fruit Growers' Association is one of the most attractive in the building, and consists of 118 different varieties of Apples, 10 varieties of crab apples, 36 varieties of pears, 16 varieties of grapes, (13 of which were grown in the open air with ordinary vineyard cultivation), and two varieties of quinces."

And, from the same article, we quote:—

"This Association was organized in 1863, and its object is to hold Exhibitions and disseminate information on fruit growing. It has been productive of a large amount of good in the fruit-growing districts of Nova Scotia."

It is much to be regretted that the contribution from Annapolis County toward this collection was delayed on the way for some days, and arrived too late to be of service, otherwise the collection would have been much larger.

The Association is indebted to R. W. Starr, John G. Byrne, I. & T. Lingley, A. S. & R. E. Harris, T. E. Smith, G. C. Johnson, C. F. Elderkin, Dr. McLatchy, Prof. Higgins, Geo. V. Rand, Isaac Shaw, James N. Borden, and others, besides friends in Annapolis County.

I have much pleasure, Mr. President, in informing you that a silver medal has been awarded the Association for this collection.

The Association, at a very short notice, also sent a collection of some 30 sorts of our leading commercial apples to London, at the request of the Canadian High Commissioner, which collection was exhibited at Birmingham during the great Cattle Show.

It is a matter for regret that the Association had not a representative at the meeting of the American Pomological Society, held in Philadelphia, in September last, as no doubt a report from such a delegate would be of great value to this Association. Up to the present I have been unable to obtain a copy of the Rules which passed at this meeting, for regulating the naming of fruits, the conducting of Exhibitions, and the guidance of Judges, and other matters of equal importance, for the government of which there has never before been any standard regulations. These rules are the result of much labor by leading pomologists in the United States, and will doubtless be of great value. Alluding to the naming of fruits, President Wilder, the venerable father of the American Pomological Society, in his address, said: "Let us have no more Generals, Colonels, Captains, Presidents, or Governors; no more Mammoths, Giants or Tom Thumbs, Nonsuches, Seek-no-furthers, Sheepnoses, or Ironclads. Let us have no more long, unreasonable, irrelevant, highflown, bombastic names to our fruits, and, if possible, let us dispense with the now confused terms of Beurré, Doyenné, Pippin, Seedlings, Favorite, and other like useless and improper titles. The cases are very few when a single word will not form a better name than two or more. Thus shall we establish a standard worthy of imitation by other nations; and, I suggest that we ask the coöperation of all pomological and horticultural societies in carrying out this important reform."

I am pleased to be able to announce that arrangements are being made for a Great International Fruit Show, in connection with the World's Exposition, to be held in New Orleans next winter, when all fruits in season will be placed side by side in competition for valuable prizes. The propriety of making an extensive exhibit of Nova Scotia fruits on such an occasion, will doubtless be conceded by every one, and it must necessarily devolve upon this Association, in conjunction with the Government, to put forth extraordinary efforts, in order that Nova Scotia may be represented in proportion to the importance of her fruit industry.

We regret the efforts of this Association to obtain Frost-proof Stores in connection with the Railway at Halifax, have not proved immediately successful, but there is every reason to believe that before another season, this very necessary addition to the Halifax Terminus will be completed; but I would urge the Association not

to lose sight of this very important matter, and to continue their efforts in this direction until they are consummated.

General Laurie made some remarks as to the importance and value of the report of the Secretary, and referred especially to the publication of the reports last year which he considered an important step in the right direction.

Mr. A. H. Johnson said he was particularly gratified at the success of the exhibits sent to England. During several weeks stay in London last winter he became convinced that Nova Scotia could make a much better fruit show than either the United States or France. This it would seem, had now been proved. He thought exhibits of this kind should be sent to England and Scotland every year. He contended that the exhibit of fruit sent over by Secretary Starr had done more good to Nova Scotia than all the talk indulged in by this Association for twenty years. The fruit growers could meet and talk, and the people of London would still remain in ignorance of the magnificent quality of our fruit, but the sight of that exhibit would be a practical conviction of what Nova Scotia could do. Mr. Starr deserved the best thanks of the Association for his enterprise.

The Secretary here remarked that the collection alluded to was made about the first of October, before many of the high colored varieties had matured, but he thought they must have colored on the voyage, judging from the reports in several English papers which characterized them as remarkably fine specimens very highly colored; and read extracts from English and American papers. The *London Post* spoke of it as "the finest lot of apples ever staged at an exhibition in England," and the *Times*, the *Garden* and other papers, in equally high terms. That exhibition had already resulted beneficially. Enquiries came from all parts of Great Britain for Nova Scotia apples, and when it was found there were none in the market an order had been promptly sent out for 200 barrels.

On motion of Mr. A. H. Johnson a unanimous vote of thanks was presented to the Secretary for the services rendered to Nova Scotia fruit growers, in sending his private collection of apples to London, and for the keen interest he takes in the prosperity of the Association.

The Secretary, in acknowledging the vote of thanks, said he was gratified to know that his efforts in this direction had, in some degree,

been successful, but the success of the exhibits of apples at the Great London Apple Congress was largely due to his friend, Mr. Lowe, who had gone to a great deal of trouble and expense in connection therewith.

Later, Mr. Lowe, of the firm of Nothard & Lowe, London, was unanimously elected an Honorary Member of the Association in recognition of his efforts to introduce Nova Scotia fruit in London.

The Treasurer's report, with the report of the Auditors attached, was laid on the table, shewing a balance of $617.61 in favor of the Association. The Auditors report finding the books and accounts correct, and congratulated the Association on the satisfactory state of the books and finances of the Association. Both reports adopted.

In reference to fruit coloring on the passage to England, R. W. Starr remarked that his own experience confirmed the opinion that apples would, under favorable circumstances, color up after gathering.

The President endorsed the remarks made by the last speaker.

Gen. Laurie said he thought it better to keep back the apples until about the time they would be actually wanted for use, as they ripen up more quickly in the English atmosphere than here.

The President asked for reports of Committees.

## REPORT OF FRUIT COMMITTEE.

The season of 1883 has been remarkable for a general shortage of the apple crop throughout the whole of the fruit districts of the Atlantic slope of this continent. Various theories have been put forth to account for this singular fact, but perhaps none of them will answer for all localities. There is no doubt but that the most general cause of failure may be attributed to the excess of cold rain, or high wind, or both combined, which appear to have been prevalent at the time of blossoming and which may have served to prevent the necessary fertilization of the fruit, as it was generally observed that the blossoms remained a very short time on the trees.

In certain localities in King's County a cold shower of rain fell one afternoon, just when the blossoms were fully developed: this was succeeded by a *cold* night without actual frost. The next morning was still, with a bright, hot sun, but at about 2 P. M. a brisk wind arose, and the air of the orchards was filled as if with a snow storm while the ground was whitened by the falling petals.

On the following morning the trees were comparatively bare of blossoms. A portion of the writer's orchard which was protected on the North and West by belts of woodland, and which came into blossom several days earlier than the rest, gave a fair crop, but all the rest was lacking fruit.

Although we have had a short crop, the quality of the fruit has been fully up to the average. This was proved by the fruit shown at the Provincial Exhibition held at Truro, also at the Dominion and Centennial Exhibition in St. John, where it was generally conceded by good judges who have followed the exhibits of fruit for years, that for colour, form, and size, the fruit was at least equal to anything before exhibited in the Provinces. This excellence of quality, together with the high prices obtainable, have had the tendency to throw a much larger quantity of apples on the market than was anticipated. The consequence is that the markets have not been as buoyant as expected, and speculators and middlemen have had to put up with small margins or in some instances with actual loss.

The English markets having been flooded during the autumn, owing to the immense apple crop in Europe, it seemed that there could be no opening, at paying prices, for our apples there, and *Gravensteins*, *Ribstons* and *Kings* were very generally sent to Boston or New York where they found ready sale. But the fact of some collections of fruit sent from here to London and Birmingham for exhibition having attracted more than usual attention by their excellence, caused some London dealers to send an order for a few hundred barrels to supply an imperative demand for the Christmas market. The result proved that our apples, when properly selected and packed, need fear no foreign competitors, and that there will *always be paying prices for strictly first class Nova Scotia apples when put on the English markets in first rate condition.*

It will be well to recognize this fact at once, as it is well known that the present apple crop of the Province is largely in excess of the requirements of our local markets, and is rapidly increasing. We must therefore depend on foreign markets to get rid of our surplus, and to pay, it must take a leading place in those markets. How important is it then not only to secure a first class character for our apples, but to be able to maintain it against all competition in the future

We have taken from the census returns, and thrown into a tabulated form, a statement of acreage and amount of fruit of all sorts grown in each County of the Province in the years 1870 and 1880. This will give, in a concise form, the position of the Fruit crop in the different Counties and the advance being made by each.

| Counties. | 1871. | | | | 1881. | | | |
|---|---|---|---|---|---|---|---|---|
| | Acres. | Bushels of Apples. | Bushels of other Fruits. | Lbs. of Grapes. | Acres. | Bushels of Apples. | Bushels of other Fruits. | Lbs. of Grapes. |
| Inverness | 311 | 3384 | 711 | ..... | 407 | 3730 | 913 | 6 |
| Victoria | 123 | 2988 | 256 | ..... | 259 | 3635 | 186 | ..... |
| Cape Breton | 247 | 3163 | 553 | ..... | 427 | 6457 | 549 | 43 |
| Richmond | 127 | 290 | 10 | ..... | 219 | 402 | 14 | ..... |
| Guysboro' | 176 | 1733 | 159 | 20 | 166 | 890 | 23 | 4 |
| Halifax | 411 | 4707 | 240 | 1329 | 697 | 12310 | 988 | 2584 |
| Lunenburg | 802 | 24238 | 571 | 606 | 1672 | 72235 | 945 | 3007 |
| Queen's | 407 | 11427 | 358 | 66 | 805 | 23615 | 690 | 646 |
| Shelburne | 203 | 2569 | 30 | 6 | 404 | 10182 | 551 | 1311 |
| Yarmouth | ..... | 6020 | 337 | 100 | 797 | 12099 | 711 | 947 |
| Digby | 705 | 15241 | 436 | 905 | 1302 | 39636 | 1698 | 3014 |
| Annapolis | 2241 | 188608 | 762 | 820 | 3329 | 318159 | 2656 | 4368 |
| King's | 2916 | 81223 | 3817 | 3498 | 5179 | 283133 | 4435 | 11309 |
| Hants | 1105 | 25982 | 1633 | 617 | 1960 | 62268 | 1872 | 7056 |
| Colchester | 463 | 7611 | 473 | 64 | 863 | 10138 | 470 | 241 |
| Pictou | 773 | 14833 | 1278 | 125 | 1286 | 20649 | 1004 | 447 |
| Antigonish | 272 | 1896 | 391 | 7 | 432 | 3801 | 171 | 19 |
| Cumberland | 862 | 16600 | 666 | 4 | 1420 | 26182 | 609 | 13 |
| Totals | 13614 | 342518 | 12736 | 8167 | 21624 | 908519 | 18485 | 35015 |

So great has been the impetus given to apple growing by the opening up of the English markets, that we may safely calculate the increase of the next ten years at double that of the last.

### SORTS MOSTLY GROWN FOR MARKET.

In King's the *Baldwin* leads, *Gravenstein* following very closely. *Ribston Pippin*, *Nonpareil Russet*, *King of Tompkins* and *Yellow Bellflower*, or, as it is more generally known *Bishop's Pippin*, standing about in the order named. In Annapolis *Nonpareil* will stand at the head of the list and *R. I. Greening* next. These are considered as standard varieties and are found in almost every orchard. In addition to these, *Northern Spy*, *Blenheim Pippin*, *Golden Russet of*

*W. N. Y.*, and more lately *Ben Davis*, have been quite largely planted and are by many growers considered as profitable as any of the others.

### SORTS BEST LIKED IN LONDON.

Judging from prices received during the past three years *Ribston Pippin* will head the list until the Christmas holidays, followed closely by *King of Tompkins* and *Blenheim Pippin*. *Gravenstein* is rapidly coming into favour if put on the market in October and November while it is yet crisp and firm. *Baldwin*, *Greening*, *Spy* and *Golden Russet* are best for mid winter shipments, and *Nonpareil Russet* for spring. *Ben Davis* is not yet sufficiently well tested to be assigned a place. *Yellow Bellflower*, although a favourite in our local markets, is not liked in England, and of the many other varieties that have been sent over, only those possessing the characteristics of good form, high colour and firm crisp flesh have paid for the venture.

### SELECTION, PACKING AND PACKAGE.

For the English market it is absolutely necessary that great care be taken in selecting uniform fruit for each grade both as to size and colour, and that none but perfect apples be taken for any grade. When packed, the name of the apple, the name and address of the grower or packer, and the quality or grade of the fruit should be plainly and neatly stencilled on the head of the barrel.

The barrel is, and must continue to be, the only reliable package for shipment in large quantities to foreign markets. Hitherto barrels have been generally made of spruce, but it is found that hard wood is much better material for the purpose. It has also been found advisable to have the barrel as tight as possible, and in order to that end, and to protect the fruit in other ways, it is found best to line the barrels with paper, and to mat each end with a thin layer of "Excelsior," (the fine wood shavings used by upholsterers) covered by the paper. This is done not only to prevent bruising the fruit when pressing in the head, and to provide an elastic cushion at each end of the barrel, but the substance itself expands with the moisture thrown off by the fruit and thus compensates for the shrinkage, and keeps the barrel full and tight.

STORING AND KEEPING WINTER FRUIT.

The main requisite seems to be a good frost-proof cellar, the atmosphere of which shall contain a sufficient degree of moisture to prevent shrinking or shrivelling of the fruit, and remain at as low a temperature as is possible to keep it and be safe from frost. If the fruit is packed ready for market the barrels should be stored on end head end down, on planks elevated two or three inches from the ground to allow air underneath and thus prevent any earthy flavour being imparted to the fruit. By storing the barrels bottom up in this way, there is no possibility of displacement of the fruit in the head end in case of shrinkage, and at shipping time if the slightest movement is observable in the barrel the bottom should be taken out and enough more fruit put in to make all tight again.

These suggestions are given as the result of the experience of some of the most successful shippers of apples to the London market, and we are confident that, if carefully attended to, the best results will follow.

We must not close this report without some reference to fruits, other than apples, for although they may not be of as much commercial importance to us as a people, yet they are an important factor in the economy of every household, and should find an appropriate place on every farm and in every garden, and should be found at least once a day in some form or other on the table of every family in the land.

STRAWBERRIES.—The first in the order of ripening is the luscious strawberry. It is not too much to say that the average of families in the Province do not use one quarter the amount that they would if this fruit could be bought at reasonable rates when required. In the country every man who occupies land, be it much or little, can have his strawberry patch and at least raise enough to supply his own family. With good cultivation, mulching in summer, and wind breaks to prevent snow from blowing off in winter, and exposing the vines, we may reckon upon full returns with as much certainty as from any other farm crop.

CURRANTS, GOOSEBERRIES, RASPBERRIES and BLACKBERRIES should all have a place in the farm garden, and with a proper degree of attention will be found to pay a heavy per centage on the outlay in addition to the gratification of having them fresh and in profusion.

CHERRIES can be grown as successfully as apples, and should find a place on every farm, the principal drawback being the birds who seem to think they have a first claim on them. We should be willing to grant them a share, however, in consideration of the benefits derived from their services in destroying the insect enemies of other fruits, and we must remember that if cherries were more generally planted, the per centage claimed by the birds would be relatively less.

PLUMS.—The crop of the past year has been a very variable one. The trees as a rule blossomed full, but only in few localities did a full crop of fruit ripen. The crop was considered very short and prices ruled high, especially for choice table varieties. The coarser varieties were more plentiful, large quantities having been sent into market from Cape Breton. This we are glad to note, as we were led to believe that the cultivation of the plum had been abandoned in that section of the Province, on account of the "Black knot," but we hope that this *disease* is being at last thoroughly understood and stamped out. Whether it be on wild cherries or plums, in the forest, by the roadside, or in the garden or orchard, wherever this pest appears, cut, and *burn*, every particle of affected wood if you would save the still healthy trees.

PEARS.—In most localities the crop has been an average one, and the quality good, with less of "sun cracks" and "mildew" than on previous years, in the case of most sorts. *Flemish Beauty* is an exception and appears to have "gone back on us altogether," as in spite of all the care and skill of our best cultivators it is hard of late years to get a single dish of this variety free from mildew and cracks. *Bartlett* still heads the list for profit. *B. Clairgeau* and *B. Hardy* are probably next on the list. *Clapp's Favourite* is good but rather "shy" as a standard. *B. D'Anjou*, for early winter, is not surpassed. *Souvenir du Congress*, while yet on trial, is giving promise of a good record, while for hardiness, vigor, and productiveness, *Howell* seems to hold its own with the best. These are all "Farmers' Pears," and can be grown in most portions of the Province with the same care and attention that would successfully raise apples in the same situation.

GRAPES.—The grape crop of the last season has been an exceptionally good one, and well ripened wherever properly cultivated and cared for. This should stimulate growers to greater exertions in

this department of fruit growing. It is now a well established fact that the grape can be successfully grown in the North-West, where only the hardiest varieties of Russian apples and crabs will stand the winter. If we then plant the early ripening sorts and cover the vines in winter, the only localities in the Province in which we may not expect to be successful in ripening the fruit is among the sea fogs of the Atlantic coast, where the summer heat is not sufficient to mature the fruit. Anywhere in the interior, or where fogs are not prevalent, the vine may be planted and grown with success, even in those portions of Colchester and Cumberland Counties where from climatic influences the apple and pear are failures.

The advantages of this Province as a fruit growing country have already begun to attract the attention of strangers and foreigners. Our own people should better appreciate their goodly heritage, and give increased attention to the cultivation of fruits, and they will be abundantly rewarded for their labours.

Rev. Mr. Axford, referring to the proposed Frost-proof Warehouse at Halifax, recited the steps taken in that connection by the Committee appointed for that purpose, and requested the Secretary to read the resolutions passed at the July meeting of the Association, after which he continued his remarks, impressing forcibly upon the attention of those present the importance of this addition to the shipping facilities at Halifax, and moved the following :—

*Resolved*, That this meeting heartily endorse the resolution passed at the July meeting of this Association with reference to the Frost-proof Warehouse at Halifax, and we urge the Committee to continue their work and take every legitimate means in their power to bring about this most important improvement in the railway accommodation at Halifax.

Spoken to by General Laurie, who said that in this most important matter, writing letters to Ottawa did not amount to much, and advised again sending a delegate.

Mr. Innes followed, endorsing General Laurie's views and said he had pressed this matter himself, but thought the Secretary should be again sent to Ottawa on this behalf, he would contribute and do all he could to facilitate this movement.

Rev. Mr. Hart made further remarks on this point.

The SECRETARY made explanation of what had been done, and read copies of correspondence with Minister of Railways.

The PRESIDENT thought we might depend upon the promised grant for the purpose without further delegation.

Resolution passed unanimously.

On motion, it was resolved that the Secretary be requested to continue the correspondence and enclose copies of the foregoing resolution to Government and members.

The SECRETARY read correspondence with Parker Earle, President Miss. Valley Horticultural Society re. Worlds Exposition at New Orleans next winter, who requested that a list of Nova Scotia fruit be forwarded immediately to be incorporated in their prize list. The Secretary laid on the table a prepared list, and asked for a committee to examine and report upon it. R. W. Starr, Isaac Shaw and Andrew Johnson were appointed a committee, and subsequently reported favorably on the prepared list, with a few additional names adopted.

The following resolution was moved by R. W. Starr and seconded by M. G. DeWolfe :—

*Whereas*, This Association has learned with pleasure of the preparation being made in New Orleans for a great International Fruit Show during the winter of 1884-5 ;

*And whereas*, it is of the greatest importance that Nova Scotia should make a show worthy of her fruit Industry ;

*Therefore Resolved*, That we urge the Government to take active measures to secure a continued exhibit of Nova Scotia fruit, and we pledge ourselves to render the necessary assistance in procuring such exhibit, and to take measures to have the Association suitably represented.

The mover of the resolution made some remarks, and advised that the full consideration of the matter be taken up at the next quarterly meeting.

The PRESIDENT then announced the programme for the evening session.

Moved by Rev. J. R. HART that a committee be appointed to nominate officers for ensuing year. Seconded and passed.

R. W. Starr, D. B. Newcomb, J. W. Longley, Thomas Tuzo and T. H. Parker were appointed nominating Committee.

SECRETARY laid on the table letters and telegrams from Lieut.-Governor Richey, Dr. Burnet, Hon. Premier Pipes, Hon. Provincial Secretary, Mayor Fraser and others, expressing regret at their inability to attend this meeting, and a warm interest in the doings of the Association. Also, a letter from Mr. Inches, Secretary of the Dominion Exhibition, which stated a Silver Medal had been awarded this Association for the collection of fruit exhibited at the recent St. John Exhibition. The Secretary was requested to make suitable acknowledgment to Mr. Inches. An opportunity was here given to pay dues, when over thirty persons received certificates of membership.

The CHAIRMAN of the nominating committee then presented their report.

President LONGLEY made some remarks and suggested the name of Richard Starr, who had been connected with the Association since its organization—as President.

MR. STARR replied, referring to the early history of the Association when they only numbered about a dozen men, and was gratified beyond measure at seeing this splendid meeting of representative men from all parts of the country here to-day, but owing to the infirmities of old age (being in his 85th year) he should be compelled to decline the honor suggested by the President.

After the correction of a few omissions, the report of the nomin ating committee was adopted and the following officers elected:—

*President*, Avard Longley, Paradise, N. S.; *Vice-Presidents*, Rev. J. R. Hart, Bridgetown, Annapolis Co.; Gen. J. W. Laurie, Halifax Co.; D. B. Newcomb, Esq., Cornwallis, King's Co.; George C. Wiggins, Esq., Windsor, Hants Co.; Charles H. Morse, Esq., M. D., Weymouth, Digby Co.; Chas. E. Brown, Esq., Yarmouth, Yarmouth Co.; John H. Dunlap, Esq., Liverpool, Queen's Co.; Judge DesBrisay, Lunenburg, Lunenburg Co.; Israel Longworth, Esq., Truro, Colchester Co., T. A. McDonald, Esq., Durham, Pictou Co.; Chas. Atkinson, Esq., Maccan, Cumberland Co.; J. C. Jackson, Esq., North Sydney, C. B.; W. F. McCoy, Esq,, M. P. P., Shelburne Co.; T. M. King, Esq., Antigonish, Antigonish Co.; James A. Fraser, Esq., M. P. P., Goldenville, Guysborough Co.; *Secretary and Treasurer*, C. R. H. Starr, Port Williams Station, N. S.

Rev. J. R. HART asked for information and instruction concerning the work of the Publication Committee.

The SECRETARY referred to the standing order to publish the Transactions and Reports of the Association annually, provided the funds would permit. The last Report had cost more than the sum voted for the purpose; but the present Report would not be likely to cost as much, owing to the matter being in better shape for publication.

Prof. HIGGINS suggested that the matter be left to the discretion of the Publication Committee, and that they could be depended upon to guard the interests of the Association.

On motion, it was resolved to place the sum, not to exceed $150, at the disposal of the Publication Committee for the purpose of publishing the Annual Report.

Rev. Mr. AXFORD referred to the peculiar phenomenon of orchards bearing quite well in some places, and in other neighborhoods not far distant, there was no fruit. His opinion was that the extreme variation was caused by very heavy showers of rain at the time the trees were in bloom; these showers passing over certain sections, beat the pollen from the blossoms and destroyed their fertility, and asked for the opinion of others on the subject.

The PRESIDENT suggested that the subject be deferred until evening and called upon Gen. Laurie, who spoke at some length, referring to his experience in shipping apples to England. He had been accustomed to send small lots for distribution among friends since 1862, but last year had shipped 526 barrels and 46 cases to the London market. Mr. Morton, from whom he bought the apples, proposed the experiment of putting them in boxes equal to half barrels—so they could be carried and not rolled—thus saving the apples from bruising. The experiment was not a success, as the boxes brought considerably less than half the price of barrels of the same varieties. Fifteen years experience had taught him it was necessary to put on extra hoops, and nail more firmly to fit them for the rough handling. A doubt seemed to exist as to whether apples are best preserved by full exposure to the external air, or by being put into packages as nearly air tight as possible. He was not prepared to decide between these contending advocates, but thought it was desirable to give them either a full supply of fresh air or to exclude it as much as possible, to get rid of

any gases that may form, or prevent their formation. Referring to his catalogue of sale he found prices ranged from 32s. to 18s. per barrel, but in this lot there were 37 barrels open "on view," and the prices of these ran down as low as 10s., whilst the expense and the fruit cost were alike for all. Had all sold for the highest figure, the profit would have justified a venture on a much larger scale. Ribston Pippin brought the highest price—King of Tompkins and Seek-no-further followed at a distance, 4s. or 5s. less—then Golden Russet, Greening and Baldwin at a further drop of 2s. to 3s.

English people are very conservative in their tastes, and his conclusion was we had better ship only what they wanted, and not waste our means in endeavoring to educate them to what we think they ought to like. Fruit salesmen urged him to send his apples before the end of February, when rhubarb and other green stuffs begin coming from France and the Channel Islands. Choice, long keeping varieties will, however, find ready market later in the season. Apples should be kept on this side till nearly ready for market, as they seem to mature much more rapidly in England, probably owing to the damper and warmer climate. John Bull will pay a high price for a good article, but poor stuff will not pay transit cost. It rests with our packers to guard the interests of the fruit and establish a reputation well guaranteed that will really command sales. He believes in getting all the export trade of the North West, if we can, but it was of more importance to stimulate the productive powers of our own province, and provide for the shipping of hundreds of thousands of barrels of apples, and thousands of cattle. It is but a want of knowledge of the capabilities of our province that leads men to depreciate and under-value its resources. The members of the Fruit Growers' Association are doing their share towards its development, but it should not rest with them alone to put the goods in the worlds market.

Mr. A. H. Johnson explained how apples were handled in London, and said the loss on the open barrels, alluded to by Gen. Laurie, was occasioned by sending his consignment to auction men, where this was the custom.

After a general conversation, during which the subject of packing and marketing was discussed, the meeting adjourned to the Village House, where they partook of dinner, and spent a most enjoyable and profitable evening.

## ANNUAL DINNER.

At seven thirty p. m. the members, with their guests, sat down to an excellent spread at the "Village House." President Longley presided, supported on his right by Richard Starr (the veteran fruit grower) and Dr. T. H. Rand; on the left by Major-General Laurie and Rev. F. J. H. Axford. Vice-President D. B. Newcomb occupied the vice chair, with J. W. Longley, M. P. P., and Dr. Higgins on his right, and P. Innes, manager W. & A. R., and L. D. V. Chipman, ex M. P., on the left. After doing ample justice to the good things provided, the following programme was carried out, the toasts being drunk in nature's beverage.

The first toast proposed by the chairman was "THE QUEEN," the company responding by singing "GOD SAVE THE QUEEN."

The CHAIRMAN next proposed "*The Governor-General and Commander of the Forces*, coupling with this toast the name of Major-General Laurie.

The toast was enthusiastically drank, and Major-General Laurie in responding said: Mr. Chairman,—We know but very little of our new Governor-General, as he has been but a short time with us, but I think those of us who have followed his history must feel that we have just the sort of man we need as Governor-General of this country. Lord Dufferin was certainly a capital Governor-General, and one who deeply interested himself in all that concerned the political and social welfare of the people. Lord Lorne in his turn,—though perhaps without the brilliant talents of his predecessor, especially as a speaker,—devoted himself earnestly to furthering the interests of this Dominion during the whole period in which he filled the position of Governor-General, and since he left us has gone about England and Scotland singing the praises of Canada. He has not praised us indiscriminately but has discussed our condition in an unbiassed manner and given a fair and reasonable description of our country, such as might induce men who wished to find a new home to come amongst us, and I sincerely hope he will be successful in his endeavors in this respect, because you know there is room for not one man, but thousands, aye, millions, to settle in this great country. We do not know as much personally about Lord Landsdowne as we do of his two predecessors, but at the same

time we know from his late past political history that he is a man of thorough independence of character and one who is willing to sacrifice anything rather than principle. He was—as most of you are no doubt aware, a member of the Government of England some time ago, and rather than support a measure which he conceived to be unsound and prejudicial to the best interests of his country, he resigned his seat in the ministry and remained an independent member of Parliament until appointed to his present position. I am sure that you—being yourselves interested in the subject—are all glad to know that our new Governor-General takes a great interest in Agriculture and is the owner of some first-class stock, manifesting great interest in this connection also, and this fact will certainly serve as another link to bind him more closely to us.

I desire to thank you, Mr. President and gentlemen, for the kindly manner in which you have listened to my remarks and for the enthusiastic manner in which this toast has been received.

The next toast proposed by the Chairman was "*The Dominion Parliament*," the name of L. De V. Chipman being coupled with this toast.

That gentleman in his usual happy style responded.

The next toast proposed by the Chairman was "*The Local Legislature*," the name of J. W. Longley, M. P. P., being coupled with the toast.

That gentleman in responding said:—I desire, Mr. Chairman, through you to thank this assembly for the very cordial manner in which they have received this toast of "The Local Legislature." It is a matter of gratitude I think to all right-thinking people that the Legislature of Nova Scotia is what it is. (Laughter.) I believe, sir, that there is an eternal fitness in things, and that fitness is illustrated in the political events of our Legislature. We do not hold our present position from any seeking of our own. Every one knows that we have been forcibly compelled,—dragged against our inclinations,—by the universal tumult of popular will to occupy the positions that we now hold, and the only thing which now agitates us is how soon will the people let us off, and take us from the cares which harass public life. (Laughter.) We bow to the inevitable and we accept the situation, in fact we accept any situation that comes along providing there is a proper salary attached. (Laughter.)

But, Mr. Chairman, I must not dwell too long on this point, "Distance lends enchantment to the view," and I will not make you too familiar with the processes of that body, as familiarity might breed contempt. (Laughter.) But, sir, I rejoice as an humble member of that Legislature in having the opportunity of being present at this gathering to-day. I think I might justly state that rarely have I ever looked upon a more representative audience than was gathered together transacting the business of your Association to-day, and who now in great numbers surround this festive board. It was representative, not only in the sense that almost every man was endeavouring himself to work out an important problem which appertained to the welfare of our country, but representative in the sense that these men coming together as they did to promote the interests of this Association, were representative men in the sense that they were engaged in an occupation, pursuit or calling, upon which all other occupations rest and depend in this country. You may call together mercantile men—to use the language of Howe—"Men who think in millions, and whose daily transactions would sweep the product of a Greek island," but these men are dependent in every particular in all their ventures, for their success, upon the substratum of the agricultural country to which they belong, and therefore when I see a gathering of independent farmers coming together from all sections of the country not only in the elevation of the interests of their own country but in the elevation of their own selves, I look upon it as one of the most interesting gatherings that can possibly take place. I am not in a position to do justice to the uppermost theme which should be present in our minds, but I do state that I have had in past years in matters relating to agriculture and fruit growing a feeling which gives me a lively interest in this Association. I have for so long a time considered matters in connection with this Association that I have long sought for an opportunity to be present at one of its gatherings, and as it was possible for me to be present on this occasion I especially came up for the pleasure of attending this meeting and of becoming a member of this Association. Fruit growing unquestionably is one of the most important industries in the country. We hear of all sorts of interests being developed in these days of great prosperity, progress and taxation (laughter), but we must come back to these industries which are of vital moment and we find that fruit growing is one of

the great sources of wealth in this Province. During the last twenty years (I think this Society has been in existence more than twenty years, as it seems more than twenty years since I attended a meeting at Bridgetown) since that time immense progress has been made, and I regard this progress as being largely developed by this Association, and this Society has revealed the fact that money is to be made in Agriculture, and as they have demonstrated that, they have furnished the strongest lever which in this cold, practical, nineteenth century will induce men to take interest in anything. Farming in Nova Scotia within the last twelve years (that is about the period since I bid my farewell to it) has undergone a most radical change. At that time there was very little to start ambition in this country in that direction, because it seemed as if the markets were limited exclusively to our country and the Provinces immediately about it, and therefore as Halifax, St. John, and some towns in Prince Edward Island, and possibly Newfoundland, could only in the nature of things consume a certain quantity of apples, it was considered that if we were to grow many more the market would be glutted,—but all this is changed. The same difficulty then struck the mind in relation to meat. One would only raise a certain quantity of stock, because the market was considered to be a very limited one,—but all this is changed. We have developed a steady, most natural, legitimate and promising trade with European countries, with their millions of people ready to consume all we produce. Under these circumstances greater funds have been placed in the banks by the farmers, and I believe that never in the history of Nova Scotia have there been three such prosperous years with the agricultural population as during the years just past. I think we have been blessed with every natural blessing for the past two years. We have had magnificent crops and good markets abroad. Under these circumstances it was to be absolutely expected that this occupation would be a profitable enterprise, and that men who in previous years had merely grubbed along should at length be able to wipe off old debts, and that we should find more money invested in the savings' banks, for it was only in the nature of things that where you had a great body of consumers, abundance of money as a result of good markets would follow, and business to a certain extent be revived. That I regard as the cause of prosperity among the agricultural population of this country, and if our crops continue good we may expect a series of prosperous years.

I have only to add one remark more, and that is that I feel on this occasion that we should not confine ourselves particularly to our own calling and advantage. It is surely right and justifiable of any man, in facing an audience of this character, to endeavor to suggest mildly and modestly that it is the bounden duty of every man to look at times beyond his personal interest, and regard the country to which he belongs. If there is any quality that ought to be developed it is patriotism. We have a country with magnificent possibilities before it. We have a country with all the advantages of soil and other hackneyed forms of natural wealth, but we have not always fully estimated our privileges. We have not often been able to rise to the full stature of recognizing that we have to-day a great nation in Canada, that we have a population developing wealth, and that we have a capacity for population whose future greatness few can determine. No person can calmly look at this country without recognizing the fact that within fifty or eighty years Canada must be greater in population than Great Britain itself, and when such a condition of affairs arises we shall have on the Northern half of America as great a power as there is at the Southern half of it. I feel, sir, that we ought to be inspired with a confidence in each other and in our future, and that we should foster those qualities by the exercise of which other nations have become progressive and prosperous.

The Local Legislature, so far as its limited resources will permit, grants regularly a donation to the funds of this Society, to be used by the Association in the way which would best promote its interests; and I assure you, Mr. Chairman, that in connection with this coming Exhibition at New Orleans, the Government will strain to the very last dollar to assist in enabling this Association to make such an Exhibition in that market as would be a credit to this country. (Applause.)

The CHAIRMAN then called upon Dr. Rand to respond to the next toast "*Our Fair Acadia—The Land of the Mayflower and Apple Blossom,*" observing that he considered it would be a pleasure for Dr. Rand, who had been reared in this vicinity, to respond to this toast.

Dr. RAND said :—In responding to this inspiring toast I must first express my regret that the chairman had not given me some little notice that this honor was to be put upon me. I believe this is the

first time I have had the pleasure of attending a meeting of this character; and I congratulate the Association, Mr. Chairman, upon the admirable status to which it has attained, both at home and abroad. While the gentleman who last addressed us was speaking in reference to patriotism, it occurred to me how very applicable and true were these observations in respect to those who have been born in what we call Old Acadia, the Maritime Provinces. To me, Sir, there is a charm about these Lower Provinces that I have failed to find anywhere else in my travels. We have a wonderful variety both of climate and scene within the limits of the Old Acadia. At Fredericton one can have the heat of the tropics any day in summer, while three hours ride by rail will bring one into the delicious fog with which St. John is almost sure to be enswathed during the hot season. Only those who have known the enervating effects of heat can appreciate fully the luxury of walking under a canopy of mist medicated with all the virtues which invites top-coats by day and blankets by night. Into this climate annually crowd our over-heated American cousins, and find refreshment and health. From St. John one can cross the broad waters of the Bay, and wind and weather permitting, he can find as much sea-sickness as will be good for him, ere his eyes rest on the old capital of Annapolis Royal, at the head of the superb and unique Basin, which Pontrincourt coveted from the French Crown. Thence by rail through the orchards of the famed valley of Annapolis and Kings, past scenes of quiet, rural beauty, hardly to be matched elsewhere, and the fine old historic City of Halifax is reached in twelve hours from Saint John. Clear skies, and cool air, and picturesque beauty all its own, renders Halifax the delight of all who can spend some leisure there. Then the railway invites through pleasing, rural country to the black diamonds of Pictou, and thence the steamer bears one away to that peerless gem of the sea, the Island of Prince Edward, and thence in good time, if you desire, to Shediac, and soon by rail through the beautiful valley of the Sussex to the City of the Loyalists again,—a city whose very existence to-day testifies to a pluck and energy in its people which is full of promise for the future. From St. John one can sail inland two hundred and fifty miles, on the bosom of the finest river east of the Hudson, the River St. John—the most striking physical characteristic of the Lower Provinces. The whole valley of the St. John is a scene of great and varied beauty, and is destined to vie, in future years, with this valley in the production of fruits.—In short,

we have a country in our fair Acadia which challenges the world for variety of climate, and quiet beauty of scenery, within an equal area of territory. While General Laurie was speaking to-night in terms of deserved compliment of our volunteer militia for their aptitude in acquiring soldierly discipline and ways, it occurred to me there was one very good reason for all this, which he did not refer to,—I mean the intelligence and *morale* of our people. I do not believe he can get together more intelligent men in their respective callings of life than are to be found in the land of the Mayflower and Apple Blossom; and this intelligence and ready tact which characterize our people, must serve them in great stead in soldierly affairs.

And in respect of the institutions of this country—this fair Acadia—I think the history of our civil life will compare favorably with that of any other country. We have always shown a love of liberty and of popular rights, and an ability to work free institutions, —making fair provision for the great interests which cluster about the institutions of a free people. Such an interest has always been manifested, is creditable, and reads well in history. All this indicates that there is a future for us. The great struggle at this present and in the immediate future will be to retain our population. We have a great North-West beckoning our young men away by holding out great inducements to them. I have often thought that no country can expect to retain all the adventurous spirits within its borders; and it must be remembered that much of English colonization and triumph have come of these restless and pioneer spirits. Here is some compensation, historically viewed, and it is fair to consider that those who go from us to the far West will carry into new communities there, somewhat of the blessings which they have enjoyed in their native land. These are our restless spirits, young men overflowing with physical and mental energy, and who crave, it may be, a feverish and excited life and society. But for us, if we can cultivate simplicity of life and those quiet pleasures which ever wait upon such pursuits as are followed by the great majority of the gentlemen around this board to-night, we shall have done something towards rendering attractive to an increasing number this fair land. The more intelligence there is put into rural occupations the greater will be their holding power over our young people. There is no doubt that the fever which has carried away to the West many of our young men is demoralizing in its tendency

here, as well as depopulating in its effect. We can not compete in respect of furnishing such exciting stimuli with the great West, but we can offer those priceless advantages of well ordered communities, and social and religious privileges, which in order that one should prize one need only to be deprived of. The simple life and tastes which characterize our fair Acadia ought to give, will give, must give a charming society such as those who roam the far West, fighting their way among the gathered selfishness of the world, can never find during this generation. Mr. Chairman, I know of no population on the face of the globe among whom I would sooner live. It is true we are not closely allied to the moving centres of political, social, or commercial life, but we are not too remote from them. Steam, the telegraph, the newspaper—these have condensed the world and done much to render available to our people that which otherwise would have been lacking. But we have that which is better than the heated centres of life can give us—better for us and for our children. We have a calm, virtuous society, free from over-stimulation, having at our hands almost every pleasure, and a fair country in which we can be partakers in all the great movements which characterize a true civilization in this nineteenth century.

I cannot but express my gratification with the hearty manner, Mr. Chairman and gentlemen, in which this toast has been received, this toast to the land which is very dear to us all, not only for what it has been and what it now is, but also for what it is destined to be in the fair annals of the future. (Applause.)

The CHAIRMAN then said: Mr. Vice-Chairman and Gentlemen,—The next toast I desire to propose is "*Our Railways and Steamboats,*" and I wish to couple the name of Mr. Peter Innes with this toast. His operations, it is true, have been largely confined to the management of Railways, but I am confident he can speak almost equally well on the subject of steamboats.

MR. INNES, on rising to respond to this toast said :—Mr. Chairman and Gentlemen, I have to thank you very heartily for the manner in which you have drunk this toast of the Railways and Steamboats of this Province. You are especially fortunate in your railways—apart from the Windsor and Annapolis Railway—and you are equally fortunate in your steamboats also. In the Intercolonial Railway you have one of the best railways on the continent, and you have fares and rates on it which no private companys' line can afford to give.

Regarding your steamers, you have now from Annapolis a first class line of steamers sailing to Boston and taking your fruits and roots to a ready market there, and you have various lines from Halifax to Great Britain competing for your business and affording cheap and regular communication with what is after all your principal market for apples.

Perhaps on this occasion, and in responding to this toast, I may be pardoned for referring to the Windsor and Annapolis Railway and its management, and I hope you will therefore excuse me if I talk "shop" a little.

Notwithstanding the prejudice that exists against it, the Province of Nova Scotia is under great obligations to the Windsor and Annapolis Railway, of which it has no adequate conception. For the sixteen years of its existence this Railway has saved the Province of Nova Scotia, in interest alone, over one million dollars, and has given fares and rates from ten to twenty per cent. cheaper than any other Company's road in Canada. I challenge contradiction to that statement. And this has been done at the expense of a number of gentlemen in England. These gentlemen who had put their money in this road have never got any return from it until last year, when they received only about two per cent. on their investment. I would go further and say that not only did they get no money, but that all the money drawn in this country has been spent in it,—all the money that they have drawn from the people has gone towards maintaining and improving the road. That is a record which no other Company can give. Probably the management of this Railway is not so popular as it might be, but of course every one has his peculiarities, and it is not by any means an agreeable thing when men come right and left asking for reduced fares and rates to be compelled to refuse them. It is very trying to refuse such requests, but it is absolutely necessary in order to get something like a paying rate. I assure you, sir, that all the money drawn from the people by this Railway is spent again for its improvement and equipment, and therefore the Windsor and Annapolis Railway should command the support of the public to a large extent. The prosperity of the Railway is dependent no doubt on the prosperity of the country,—your interests and ours are largely identical, and when the country prospers this Railway is benefited by that prosperity.

As manager of that Railway, I am always ready and willing to meet the people in any reasonable request, and last year when the question of the transportation of apples was discussed at Halifax, it was suggested that the Railway should furnish better and warmer cars, and accordingly since then five thousand dollars have been spent in procuring such box cars. I trust that the prosperity of the country in the future may be such that the Railway may reckon on a more prosperous course than it has experienced in the past.

I must heartily thank you, Mr. Chairman and Gentlemen, for the manner in which you have listened to these observations, and for the cordial reception you have given to this toast.

The next toast proposed was "*Our Guests*," the name of Dr. Higgins being coupled with this toast.

That gentleman on rising to respond, said: Mr. Chairman, I cannot help believing that you must have made a mistake in calling upon me, as I supposed I was here to listen, and did not imagine that you expected a speech from me, as you certainly understand that I don't make speeches. However, I can say that I am very glad to have the privilege of being here as the guest of this Society, and of listening to the able addresses of those who have preceded me, and I suppose I ought to be willing to make some compensation by attempting to say a few words myself.

I have been a member of this Association for a number of years, and I have endeavored to profit by the opportunities which I have had from time to time of meeting with this Society at their annual gathering, and once or twice before on occasions like the present.

I have been interested in observing the increase in the growth of fruit that is going on in this country, and which is becoming more noticeable every year.

I was impressed to-day when I went into your meeting to see such a well attended and representative gathering, and I could not help contrasting it with the little handful that I remember seeing there six or seven years ago. If the increase in attendance does in any fair way indicate the growth in these interests represented by this Association, then I think we may fairly assume that we are progressing at a decidedly rapid rate. I have no doubt that to a large extent that is the case, and that the interest in the growth of fruits has largely increased. Now that it has been found out that we are not confined to our local markets, but that the world is open

to us for the disposal of our fruits, we should increase our efforts in the development of the interests represented by this Association. I am a fruit grower myself by mere accident, that is to say, the trees grow the fruit and I look on, and I am trying to learn the interesting process by which the fruit developes itself, and also to ascertain the best methods for facilitating such development. But of course you understand that my chief interests lie in another direction, and that while you are giving your minds and thoughts to the cultivation of fruits, I am giving my thoughts mainly to cultivation of quite another kind, yet I believe that the cultivation of the mind is acting some part in promoting all other kinds of cultivation, including fruits. I assure you I like to feel that in advancing intellectual culture we are doing something indirectly to promote fruit growing as well as the other industries of the country. But we can only indirectly and imperfectly meet your wants in this respect. Mr. Chairman, I think the time is coming—and if it has not already come certainly will come very soon—when the agriculturists and horticulturists of this country ought to set themselves to work to obtain educational institutions of their own (applause), so that they may be able to give their sons the training and education that they shall need to properly qualify them to successfully carry forward and develope the material prosperity of the country. I desire to thank you, Mr. Chairman and gentlemen, for the hearty reception given to this toast.

The next toast proposed was "*The Press*," the name of the indefatigable Mr. Dennis being coupled with this toast.

Mr. Dennis said: Mr. Chairman and Gentlemen,—Speech making is not at all in my line, and all that I can do is to thank you, and to promise that I will do anything that I possibly can towards making the aims and objects of this Association more familiar than they are to-day. In listening to the various interesting addresses delivered here to-day I have been impressed by the vast amount of intelligence and information displayed on the subject of fruit growing, and I would like to see every intelligent farmer in Nova Scotia know as much upon this subject as was indicated by those who have spoken to-day, and if the aims and interests of this Society have been successfully carried out in these Western Counties, I can see no reason why similar success should not attend similar movements in other parts of the Province.

Mr. J. W. Longley, M. P. P., also responded to this toast in a brief and witty speech.

Mr. A. S. Murray said :—As one of the guests of the evening I take the liberty of proposing as a toast "*The Fruit Growers' Association of Nova Scotia*," coupling with it the name of the President of the Association.

Mr. Avard Longley, in responding, said : Mr. Vice-Chairman and Gentlemen,—If some of you have been taken by surprise to-night when your names were announced, coupled with the several toasts that have been presented, I am sure that I among all of you have been most surprised. I was congratulating myself on the delightful position that I had enjoyed all the evening of placing other gentlemen in awkward positions, when lo and behold I find myself in a more awkward position than any of them. I am asked to say a word or two in response to the toast of "*The Fruit Growers Association of Nova Scotia*," and I can only say at the outset that I wish I had more eloquence in my composition, in fact I wish I could spread myself a little. It seems as if on an occasion like the present a little spread-eagleism was allowable, and yet perhaps the more modestly we speak the more successful and effective will be our observations. However, I feel that there need not be a word said to any of you gentlemen in respect to the good that has been accomplished through the instrumentality of Fruit Growers' Association. It has been my high gratification to have been connected with Associations whose special mission was the reform of the world; and in reference to the labor of many years in connection with these Associations, and in regard to what I may have said or done towards assisting in forwarding their respective interests, I must certainly say has been derived a large proportion of the pleasure and gratification which I have experienced during the various stages of my life, from youth up to almost old age. I believe, gentlemen, we have laid the foundation of wondrous prosperity in the future in connection with one of the most fruitful sources of income in Nova Scotia, and this has been largely brought about by those whose lot has been cast in the beautiful, and I may say celebrated valley of Annapolis, and those of us who have enjoyed this privilege should daily present our thanks to the Giver of all good for the fact that in this respect the lines have indeed fallen to us in pleasant places.

One great object of this Association has been to cultivate the best variety of apples,—not such as were valuable thirty years ago, but such as experience has proved to be those commanding the highest prices in the markets of the world, and it is no exaggeration to say that through the efforts and instrumentality of this Association have been achieved wonders in this connection. We have sent fruit to distinguished pomologists, sometimes we have sent different varieties to ascertain the true names of them, and sometimes we have sent them rather from motives of pride and ambition, with a view to show to older countries what we could do in little Nova Scotia. And it is gratifying to know that we have won encomiums of a high order in connection with apples sent over to the United States, and it is no little boast to say that when we have been brought in competition with other Provinces—even with Ontario—we have seldom if ever suffered by the comparison, and as a rule our apples have been larger and even as well colored and more worthy the higher meeds of praise than those in Ontario, not even excepting the choicer and more delicately colored fruit such as the *Clyde Beauty*, &c. Now we have eliminated a number of varieties which experience has shown us were not appropriate to grow, and sometimes failure has been found to result, and some of my worthy friends have attributed that to selfishness on the part of a sister county. Well now I have been connected with the institution since its inception, and I must testify to the fairness of our friends in this county who have contributed most in every way to place themselves on terms of equality with others, and as they have acted in the past, I am well assured they will continue to act in the future, and I may add that I cannot remember an occasion when they were not willing to concede anything demanded in fairness from the counties to the East and West. We have ascertained that it is not wisdom in a man when he plants an orchard to plant twenty or thirty varieties, but that obviously the best way is to choose two or three varieties and plant these, and by so doing the largest profit will be yielded. Before resuming my seat I must thank you heartily for the enthusiastic reception you have given to this toast.

The next toast was "*The Ladies*," responded to by the Vice-Chairman, (Mr. D. B. Newcomb), Mr. John E. Starr, and

Mr. O. Blenus, who said: Mr. Chairman,—With one exception, I am probably the oldest man in the room, but when you come to

speak of the ladies I feel my old heart stir, and perceptibly increase its throbbing for, Mr. Chairman, we all love the ladies, because our mothers were ladies; and again we love them because of the influence they exert over us. We love them for the manner in which they provide for our bodily comforts, and there is still another reason why we love and delight to honor them, because one of their number was commissioned to introduce the Redeemer of the world. And a further reason why we should do them homage is because one of their sex sways the sceptre and rules over the most powerful and the best enlightened empire in the world. She has become the pattern of her sex wherever they may be found, and her character is as pure as Albions chalky cliffs, washed by the surging waves which dash around them. Freedom! is the British watchword. Freedom!—as free as the bird with sportive wing, flying in the blue vault of Heaven! (Applause.)

The SECRETARY being called for remarked that notice of a motion was given at a late meeting that our Constitution be amended to enable us to admit ladies as members, and he did not know who was to blame for neglecting this matter; but it was only a question of time when this privilege would be extended to the ladies, and in all probability we might be honored by their presence at our next gathering.

The CHAIRMAN remarked that no reason existed why the motion referred to should not be put to the meeting immediately, and hoped that the notice of the resolution given by Mr. Andrew Johnson would in some way be endorsed by the Association, and that the ladies, having become members of this Society would, of right as well as by courtesy, be numbered among its most active and energetic members, so that thus united they could secure a larger measure of success in the future, for without the active co-operation of the ladies scarcely any cause prospered as largely as it did when their co-operation was secured.

Mr. ANDREW JOHNSON then said: Mr. Chairman,—I certainly intended to bring this matter up before the meeting to-day, but unfortunately overlooked it. I now beg leave to move that we amend our Constitution and allow ladies to become full members of this Association on the payment of FIFTY CENTS a year. The motion was seconded by Col. Tuzo, and was carried unanimously, the whole meeting signifying their approval by a standing vote.

The CHAIRMAN then said :—I feel desirous for one, and I am fully inclined to think that you all share in this feeling to participate in the pleasure of listening to a few words from our venerable friend, Mr. Richard Starr. There are a great many considerations in relation to that worthy gentleman in connection with this Association, with the early history of Cornwallis, and more especially with the cultivation of fruit, which renders it highly desirable that on this occasion we should listen to a few words of encouragement which he may be pleased to address to us, and I am sure we shall listen to him with delight. He may not be with us half a score of years more, but I only express the desire of all here present when I say that I hope that his life may be prolonged, to be as useful in the future as it has been in the past, and though he is now bending with the weight of years, there exists a disposition to bestow upon him as much honor as can be bestowed upon any member of this Association. (Applause.)

Mr. RICHARD STARR said : Mr. Chairman,—Your highly flattering remarks I am entirely unworthy of, and I do not feel prepared to make a suitable reply. I have arrived at n old age, I have been associated with this institution since it was first formed,—indeed I was one of the charter members. We, at that time, only numbered ten or twelve, but we have gone on increasing up to the present time. When I started with the intention of cultivating fruit, about 1828, I had the opportunity of associating with the first and perhaps the only fruit grower there was then in Cornwallis. I allude to the late Hon. C. R. Prescott. Since then I have devoted much time and attention to it. I have seen a very extensive Exhibition building erected for the purposes of this Association, and I have seen it crowded with people—all gathered together for the purpose of fostering and promoting the interests of the fruit growers of Nova Scotia. It is a source of great gratification to me in my old age to see this Association prospering in this way, but I can only say a few words now, my infirmity is such that I must be brief in my remarks, though a person arrived at the age of eighty-five could hardly be expected to come before a meeting of this character and make a speech. I must content myself therefore, Mr. Chairman and Gentlemen, with simply thanking you for the warm reception you have given to the kind remarks made concerning myself, and the little I have done towards forwarding the interests of this Association. (Applause.)

Rev. Mr. Axford then said :—The observations made by me on the subject broached this afternoon, were just thrown out to suggest a reason why the apple crop has been somewhat less this year than is usually the case. With regard to the peculiar phenomena mentioned this afternoon, I have been thinking the matter over in my own mind and might suggest as a probable reason—which might compare favorably with others—that the lack of the apple crop this year may have been *partially* on account of the sharp showers of rain when the apple trees were in full bloom. I reason it out in this way. The trees in one orchard bore very well, but other trees in an orchard a mile distant bore scarcely any at all. All the trees were in full bloom and gave a beautiful promise of a full crop, but during the full bloom, short, but heavy showers of rain fell, and the thought struck me whether the rain had not washed off the pollen from the blossoms in the one case, while the other escaped. This, I think, was indeed so, for the one orchard eventually was full of fruit, and the other almost empty ; so that I believe this may in some measure account for the subject we were discussing this afternoon.

Another thing I noticed this year was *the absence of bees*, for I have not seen in my orchard a single bee, and I think I may add also that I did not notice any large flies. I suppose flies eat honey, and we know that bees are fond of work in that direction. In fact it is a matter for observation that where there is an absence of bees there is not the possibility for abundance of fruit. I think it would be well in this connection to keep and rear bees.

G. V. Rand.—I would like to ask the Rev. gentleman a question. He made some allusion in the course of his remarks, to the fact of one orchard having fruit and the other not, and the question arose in my mind whether the showers were on the two orchards. And again I might say that many years ago there were no bees among us, but we had an abundant growth of apples, and I do not see why the same thing should not occur again. My idea is that the heat question has more to do with it. It takes a certain amount of heat to make anything productive. Onion seeds will germinate and grow where other seeds would be destroyed in germinating at precisely the same temperature, and that may be a reason why some trees will be productive under certain circumstances and others will not. I have observed in my own case that three days will make a difference. The year before last I remember particularly some Gravenstein trees

failed to produce fruit, but the fact that one had been grafted on a late-growing variety made some difference in its maturity, and then the weather was different, and that particular tree was abundantly laden with fruit. Last year I remember a man telling me that he had found two orchards that were protected from the north and west winds, the trees in which were eventually laden with fruit while all the others were bare.

Mr. J. W. Longley, M. P. P., proposed a toast to "*Our Sister Agricultural Societies*, or "*The Agriculture of Nova Scotia.*"

Gen. Laurie being called upon to respond said: Mr. Chairman, —This toast is so indefinite in its character that I may almost describe its scope as boundless—at least I so regard the possibilities of Agriculture in Nova Scotia. We can raise as large a crop here as can be raised in any temperate climate under similar conditions. I had often been told that we could not raise wheat, but I had 25 acres this last summer. I have threshed, up to the present time, 400 bushels, and we estimate at least one-third is still in sheaf, I believe I may fairly count on obtaining from twenty-five acres, *six hundred bushels*,—twenty-four bushels to the acre. I do not think that is a bad return; and this is as handsome wheat as I have seen anywhere,—as handsome as any that comes from the Prairie Province. You yourselves, gentlemen, have shown that you can beat the world in the best varieties of fruit. Coming to the question of raising cattle, I think you know our record in that respect. Quoting Dr. Forrester, "Can you raise turnips?" Six hundred and fifty bushels to the acre are often raised. Now we are coming to this new development—the question of preserving food green instead of drying it. I *have read* of sixty tons of corn stalks to the acre being raised. I own frankly I cannot compete with that record, but I must add that I do not believe the statement. Mr. Wolcott, who lives ten miles out of Boston, told me that he came to the conclusion that eighteen tons was as much as you could count on, as he had weighed it carefully. I found from a stretch of six acres, I had eighteen and one-half tons to the acre, whilst on another piece, of seventeen acres, I averaged twenty tons to the acre. Three tons of this food goes rather farther than one ton of the best hay. What does that mean? It means that we can keep two animals to every acre, and keep them well. I have about eighty head of oxen feeding now. I weighed two pairs hap-hazard when they came in, and again yesterday. In six

weeks one pair had gained two hundred and twenty pounds, and the other pair two hundred and ten pounds, and that was produced by green corn, ensilage, cut straw, and malt dust. I think we may consider that there are fair prospects, so far as feeding cattle is concerned, with such a record as that. I mention these things because you have thrown upon me the burden of responding to the toast of "*The Agriculture of Nova Scotia.*" Allusion had been made to the Board of Agriculture and as to whether it best satisfied the requirements for developing the Agriculture of Nova Scotia. Would you send a man into a field with both hands tied behind him and tell him to cultivate the soil? The Board of Agriculture is expected to carry on successful operations without the necessary requisites. Twelve thousand dollars were placed in the hands of the Board of Agriculture when I was on it. Of this $7,200 were allotted to pay $400 to the Agricultural Societies in each County (but we only received $6,000 for this purpose. Then we had $4,000 set apart for Provincial Exhibition, and there were sundry other items that came out of the remainder, and there was our $12,000, and we were expected to develop the Agriculture of Nova Scotia! The special burden thrown upon us was to try to make $6,000 pay amounts aggregating $7,200. That was the first problem, and of course we had to deal with these sums and check the accounts, and see that the money would go as far as possible. And I assure you the money was utilized to the best advantage.

But I do think that there is one great necessity, to which Prof. Higgins has just alluded, that is the question of Agricultural Education. (Hear, hear.) Of course, if you have plenty of funds there is no difficulty in putting up an Educational College, but it certainly means at least two hundred thousand dollars. I dare say Mr. Longley, the member for Annapolis, will tell you that it is one of the simplest things in the world to ask the Legislature for that sum, but it will be more difficult to find that two hundred thousand dollars out of the present revenue than it was for us to pay that $7,200 out of the $6,000 received. And now as to this important question of Agricultural Education. I may say that I do not believe the people of Nova Scotia are educated up to a point that they would tax themselves for this purpose; I do not know that they are prepared as yet to take a large sum and apply it specially towards endowing a college for this purpose; and I see great difficulties in the way. There is,

of course, the alternative of affiliating an Agricultural Faculty to one of the present Colleges,—though there are many objections to that proposition also. But if the question is,—shall we have that or nothing, I would say let us have that; and it is possible that as Dalhousie has affiliated Law and Medicine, and Acadia has taken up Education, so one of the other Colleges might make Agriculture its specialty. Let those who study this science be careful not to depend on theory alone, for we must have theory and practice go hand in hand. We want an Experimental Farm, for we farmers are hardly qualified to conduct the experiment,—a *Model Farm* connected with some institution where the theory can be obtained. We want a laboratory, and we want plant. That of course means money. I do not think we are, as a body, able to put our hands in our pockets and start such an organization; therefore, I think it is the possible, and in fact the only feasible plan, to associate such an organization with one of the existing educational institutions. I am perfectly well aware that this experiment has been tried in the United States, and large endowments have been given by the United States Government for that purpose, and I also know that in the cases where these organizations have been started independently, they have been successful, and where they have been associated with existing educational institutions they have not been prosperous. But the endowment was sufficient in these cases to start a college. Here in our case we are not possessed of sufficient funds for the purpose, and therefore, I cannot help thinking that we should be wiser to take the half loaf than go without any bread.

I should like to have the opinion of gentlemen in connection with this proposition. Might it not be possible to have the nucleus of such an organization in the neighborhood of a country college, where we could have an experimental farm and one professor, besides a thorough manager on the farm. And this so near the college, that a young man attending the agricultural school should have the advantage of attending classes in the existing college almost without expense.

The only expense would be the proper equipment of such an organization, including a sufficient endowment to support one professor. The professor of Natural Science, if a capable man, should give instruction in Chemistry to those who attended such a school. Such a faculty could be affiliated to one of our existing colleges, but of course this project is absolutely in embryo at present.

Our common interests turn in the direction of agriculture, and if we could find a George Munro who would help out to a modest extent this proposal, I think it would be a good beginning, and would be soon followed up and well developed. But in conclusion, I may say that I do not think the Province of Nova Scotia is prepared at present for a scheme on a larger scale than the one I have indicated, and this we cannot obtain without the sinews of war.

The meeting adjourned after singing "Auld Lang Syne."

---

Hon. Charles Downing, the veteran Pomologist of Newburg, N. Y., in acknowledging his certificate of Honorary Membership of the N. S. F. G. A., (which was found among the papers of the late Dr. Hamilton, where it had been mislaid,) writes to R. W. Starr:

"Please give my cordial thanks to the Fruit Growers' Association of Nova Scotia for the honor the Society has conferred upon me, and my best wishes for the success and prosperity of the institution. I am very sorry to hear that your Society has not funds sufficient always to publish your Annual Proceedings. I enclose six dollars ($6.00) which the Society will please accept from a friend who wishes it success and prosperity."

The following letter was received from Mr. Lowe in acknowledgment of his Honorary Membership certificate:

20 Tooley Street, London,
*February 13th, 1884.*

C. R. H. Starr, Esq.,
Secretary of F. G. A. Nova Scotia:

*Dear Sir,*—I have to thank your Society for the honor they have done me in making me an Honorary Member.

I assure you I much appreciate this mark of the esteem your Society hold of any small efforts on my part to introduce fruit from your side into our market here. *I am confident there is a great future before your Colony as regards the raising of fruit for the London market*—only let it be *honestly* packed, and sent by an expeditious route, taking due care as regards frost, &c.

Again, thanking the Society, and assuring them of my continued exertions on behalf of all my firm's supporters on your side.

Believe me to remain,
faithfully yours,
John Lowe.

# THE DEVELOPMENT AND CAPABILITIES OF FRUIT GROWING IN YARMOUTH CO.

The few old apple trees standing here and there in the County of Yarmouth to-day, with a height of forty to fifty feet, an equal spread of branches, and a girth of seven to eight feet, show that with the first settlement of the county, experiments in fruit culture began.

At that time the whole county was a dense forest, and the few clearings made in favorable locations, sheltered on all sides from the winds, offered much more suitable conditions for tree growth than exist now, when the winds, especially from the sea-board, sweep without obstruction over the county, cooling the atmosphere and considerably reducing the temperature. So these old trees, planted in virgin soil, and warmly sheltered, grew vigorously, standing erect, with the wide-spreading branches and the sturdy dimensions of the oak, the beech, the birch or other forest trees. Unless sheltered by hedges, trees planted now anywhere in the open ground, after a few years growth, start off towards the north-east, and upward growth ceases.

In memorial of the old settlers, we have four seedling varieties of the apple, named after their respective originators, the *Andrews' Sweet*, the *Gavel*, the *Holley* and the *Reynard*, all desirable varieties for us, and included in our prize list from year to year. Specimens of each of these varieties were in the Yarmouth County collection shewn by the Fruit Growers' Association.

The *Andrews' Sweet* is included by Mr. Downing in his third appendix, classed as very good; grown in a warmer district, it would no doubt be better in quality. It is a pleasant, tender, eating apple, medium in size, conical, yellow with a blush, in season from October to January. The *Gavel* is above medium in size, round, good either for the table or for the kitchen, in season November to February. The *Holley* and the *Reynard* are both *very large;* the former valuable for cooking, the latter is also esteemed for the table, the season for both is November to February. The *Holley* and the *Reynard* are now grown in King's County, and are occasionally shown at our Fruit Exhibitions, not only among the very largest, but of more symmetrical shape, with more color in the case of the *Holley*, and probably of much better quality than in the county of their origin. The *Northern Spy* grown in Yarmouth, is no better as an eating apple

than the *Reynard;* so the *Reynard*, if grown where the highest quality is attained, might equal the *Northern Spy* in excellence, while for average size, and productiveness, it would far excel it.

As recently as 1868, only fourteen years since, at the first exhibition in October of the County Agricultural Society, so little was known about apples, and so few varieties were then grown, that the prizes offered were as follows :—

| | | |
|---|---|---|
| Best collection apples, named, 12 each.. | $5.00 | $3.00 |
| Best dozen apples, named..... | 2.00 | 1.00 |

In 1880 there were eighty-two varieties grown in the County, nearly all of which had fruited, the prize list for 1882 offered prizes for collections of *not over* 25 varieties, (the large number of kinds shown in collections of previous years having proved objectionable) and for dozens of 26 varieties, which have so far proved most useful for us. In 1880, in a competitive test for collections with King's County, the first prize was awarded to King's, but *Baldwin, E. Spitzenburg, H. Nonsuch, King of Pippins, Nonpareil, Northern Spy, Porter, R. I. Greening, Ribston Pippin* and *Yellow Bellflower*, 10 kinds, were better in one of the Yarmouth collections than the same kinds from King's County In 1881, one collection from Annapolis County competed with three Yarmouth County collections, all four of 25 kinds, but was decidedly inferior to either of the three. In 1882 a collection from Annapolis County won first prize. Of late years our prizes, in all classes, are open to all, on equal terms.

Our apples mature slowly; in favorable seasons the long keepers are left upon the trees until the last of October, and many kinds, which are early or midwinter kinds elsewhere, will keep with us until spring. I have kept the Gravenstein in perfect condition until April.

It has long been a problem to me why certain kinds succeed to perfection inland, but fail near the coast. The *Red Astrachan*, for instance, is our most profitable variety inland; it grows vigorously, bears early and annually, and the fruit sells well in the market, being good either for eating or for cooking. Upon the coast it is utterly worthless; the growth of the tree is uncertain and defective, and the fruit is small, spotted, and fails to mature. So of many, indeed most other kinds; they succeed fairly inland, but fail on the shore. Only last season I observed that all the varieties that succeed have a thick, leathery leaf, that resists the withering influence of the salt

in the air, when we have a strong southerly wind from the ocean. Now I fancy that with my eyes shut, and by merely feeling of the leaf of an apple tree, I can pronounce whether it will succeed within the range of the ocean breezes or not, and it is a point that should be noted in the description of all varieties of apples what the leaf of the tree is like. Any one may confirm this, in the growing season, who lives near the sea coast. All the trees, and indeed all other vegetation, with thin, delicate foliage are blighted after a strong wind from the ocean, as if scorched by fire. No doubt a thick leaf implies a thick bark and other correlative, hardy organization, and no doubt also this is just one of those elementary facts in the experience of fruit growing, of which the publication of the materials accumulated by the F. G. Association would have advised us; it is the most important fact I know of in this connection, you might as well plant a bare pole or a granite post, with the expectation of its fruiting, as a *Tetofsky*, or any other thin-leaved tree, upon the sea coast. The few kinds that have so far proved successful upon the shore, named in the order of merit, are *Keswick Codlin, Duchess of Oldenburg, Wagener, Gravenstein, Northern Spy, Blenheim Pippin, Fall Jennetting and Golden Sweet* The *Ontario*, fruited in 1881, also promises to do well. Of these, *Keswick Codlin* is by far the most valuable; it is an early, annual and abundant bearer, and the fruit is not surpassed by any other for cooking purposes; may be used in September and lasts through November. *Duchess of Oldenburg* is an early and a heavy bearer, but a poor keeper, and the tree has a serious defect in a peculiarity of growth; a weakness at the junction of the limb with the main branches and body of the tree owing to which a heavy crop strips the tree sometimes to a bare pole. *Wagener* is an abundant bearer and the fruit keeps until April or May. The *Wagener*, from the best fruit districts in Ontario, is not surpassed in quality by any apple that is grown anywhere, but the quality, as with many other varieties, varies greatly with soil and climate. *Grimes' Golden Pippin* is one of the most successful of the kinds grown inland; the tree is a strong, healthy grower, and an annual and abundant bearer, while the fruit brings the highest price in the market. This variety is also most successfully grown in Annapolis County, and the quality as grown there is not equalled by any other variety grown in that County, in the judgment of Yarmouth consumers. I am at a loss to understand why *Grimes' Golden* has

not been more generally grown in King's County. Being a long keeper, and of medium, uniform size, it would seem to be one of the most valuable for the English market, where its fine quality would soon give it a reputation.

As an indication of increasing interest in fruit, I may state that the County is annually canvassed by nursery agents from New Brunswick and from the United States, who sell and deliver thousands of dollars worth of trees every spring; local dealers also order direct from the nurseries. One inland grower planted last spring 40,000 apple root grafts, with a view of supplying in the future a proportion of the demand for trees.

PEARS do not succeed upon the coast and are being gradually abandoned, after years of trial with many varieties, under all kinds of conditions; foliage too delicate to withstand the salt in the atmosphere; inland have not been planted to any extent, but so far as tried succeed fairly, especially early varieties.

PLUMS fail upon the coast in the open ground, but are fairly productive when trained on a wall with a favorable frontage, but the *Black Knot*, unknown a few years since, is now everywhere prevalent and threatens extermination of the plum trees. Inland, the plum succeeds in the orchard, and there are several very good seedlings, shown at our Exhibition, not named.

CURRANTS and GOOSEBERRIES are grown successfully, with abundant, annual crops, whenever good cultivation is given and the currant worm is kept under by Hellebore.

Many varieties of STRAWBERRIES are grown, the newer varieties by the young and enthusiastic amateurs, while the older hands grow *Wilson's Albany* exclusively; of this one variety, the crop exceeds the home market, and considerable quantities are shipped to Boston by steamer and bring fair prices. One of our seedling strawberries, the *Mary Fletcher*, is gaining in reputation in Ontario. The Fruit Growers' Report for 1881 says of it:—

"It is very hardy and of an improving turn, its flavor is superb, and it is an acquisition to the amateur who possesses an exquisite palate."

I have been pleased to observe in the last Annual Report of the F. G. Association that the historical portion of the Transactions had received attention; the experimental portion should follow with all

expedition. To place upon permanent record, in printed volumes the results of experience appears to me to be of more importance than the building of frost-proof warehouses, since in the Province at large many thousands of dollars are now annually wasted for want of an accurate knowledge of "*what kinds to plant.*"

CHARLES E. BROWN,
*Vice-President N. S. F. G. A.*

*Yarmouth, April 23, 1883.*

---

## REPORT FROM LUNENBURG COUNTY.

BRIDGEWATER, *March 26, 1883.*

*Dear Sir,*—I was glad to learn that the recent winter exhibition of fruit at Halifax was so successful.

Since my last report to the Society increased attention has been paid to fruit raising in this County, which is shewn to be well adapted for the purpose. Those here engaged in this branch of industry may feel justly proud of the place taken by Lunenburg fruit at several exhibitions.

I have no statistics from which to give the actual number of trees annually transplanted, but an immense quantity in different parts of the County are imported or purchased from Provincial growers. If the trees receive proper care, it will not be long before fruit—especially apples—can be largely added to yearly exports.

Were it not for early frosts, the smaller fruits would yield well. Grapes and peaches are grown successfully in the open air. In 1879 a half bushel of peaches were grown by Mr. Simeon Hebb, near Bridgewater, in a position open to the south, and sheltered on the north by spruce trees. Mr. Hebb was also successful in 1881, but last year frost again interfered. The fruit referred to was pronounced as good as imported fruit. Peaches were also grown by the late Abraham Hebb, Esq. Grapes of different varieties are grown by several farmers and others. They become well ripened in the open air, and command ready sale. Grape culture is on the increase. I asked Mr. E. B. Hyson, of Mahone Bay, for a statement as to fruit raising, which I am pleased to send herewith. Mr. Hyson has done much in helping to place this county in the right position in the

matter of fruit culture, and deserves all the thanks and encouragement that can be given to him.

The want of railway facilities, referred to by Mr. H., has been against us in the exhibition of fruit, as in other important respects, but we think (and hope not to be disappointed) that we can see the silver lining in the dark cloud which has been so long presented.

Yours truly,

M. B. DesBrisay,

*Vice-President F. G. A.*

*C. R. H. Starr, Esq., Secretary F. G. A.*

Mahone Bay, *March 2, 1883.*

*Dear Sir,*—I have for some years spent considerable time and money in endeavoring to grow the best kinds of fruit. Except in a few instances, I have ordered my trees and stock direct from the nurserymen, and not from tree agents or pedlars, and as a rule they have turned out true to names and kinds. The trees planted by me in the spring have grown much better, and were surer to live, than those planted in the fall. The spring planting suits my land best. It lies a little low, and is flat and under drained, and my trees are doing well. I have lost most of the trees I planted in the fall. A great drawback to fruit growing in this district has been the ordering of trees from agents, and failure, except in a few instances, to get the kinds ordered. One man in this district a few years ago ordered one dozen apple trees from an agent, two of a kind, and they were to be all hardy and long keeping fruit. They turned out to be all of one kind, soft, worthless apples—not an apple like the ones ordered. They were worse than any of our seedlings with which we feed stock, though the trees were on arrival labelled according to order given. Many others have been taken in, the same way. There is no doubt that as good fruit can be raised in this county as in any other county in this Province, and it might perhaps be added, in the Dominion. All that is wanted is for our people to give more attention to, and take better care of, the trees—keep the sod from them, and manure them properly. There are some persons who, in those respects, do their best, but a large number, after planting trees, let them look out for themselves. In some instances the cattle are allowed to browse on them, and to shorten the last year's growth. Another drawback is, that such a long time must

elapse before imported trees bear, coming as they do from a different climate and soil. I have grafted on three year seedlings with scions from imported trees, and they bore fruit before the parent trees. Of late years thousands of dollars have gone from this county for apple, pear, plum, and other trees, and for smaller fruits. If some men who have money to invest, and who own land they do not cultivate, would utilize the soil, and employ a good nurseryman—a man of experience—and plant nurseries of the choicest kinds of fruit, they would receive in a few years good interest, and fruit culture would be more improved than it can be with imported trees. If I had both means and land, I could establish a good business, and have excellent profits by selling young trees such as apple, for say twenty-five cents each, and less by the dozen. I would not require to have any of those high colored, painted books, with which agents introduce themselves to our country people when they are soliciting orders. I think I have only ordered through two agents since I have been getting fruit stock. So far I have never been taken in myself, as they always told me that they would do the square thing for me, and up to this time it has been done. I gave an order last fall to F. H. Bell, *agent for* Stone & Wellington, *of Ontario.* The fruit will be of some of the new kinds. The stock looked well when it came. The firm bears a good name, but it will take a few years before I can tell if all is correct with this lot. The agent promised to replace all that do not grow, nor turn out true to names given. I have started a small nursery of about two thousand apple trees. Most of the grafts on my seedlings are with scions I received from the F. G. A. of Nova Scotia and Ontario, which no doubt are from bearing trees; they grow well without any forcing manure. One drawback in growing fruit trees is, that after they are received they do not get as powerful manure as they had in the nurseries, and it takes a few years before they get a good start. Grow the grafts on fair soil and use fair culture, and after placing them where they are to remain, manure them well, and they will be all right. If trees are two or three times transplanted in the nursery, they will get plenty of fibers, and seldom miss growing to desirable fruit bearers. Every tree that I intend to sell from my Nursery will I think grow—if that care is secured which I direct purchasers to give, and if they miss on fair soils, and with ordinary seasons, I will replace them with the same stock, or better. One

hindrance to our people obtaining the best market prices is, that so many *shake the apples from the trees*, and put them in flour and meal barrels just as they fall, and without dividing them into ones and twos. In fact, I have bought some that had the leaves and dirt raked together and put in the centre of the barrels. The day is at hand when the folly of such work will be fully seen, and more care will be taken with the trees and the package of fruit, with a larger pecuniary result.

If a Society or Association could be formed in this County, and winter meetings with lectures held, or if some first class man were employed who has made the culture of fruit trees a study, a very great improvement might be made. Most of the fruit grown here is soft fruit—there is not enough of hard fruit. I have endeavored to get a collection for the winter exhibition of the F. G. A. at Halifax, which I regret I cannot attend. All that can now be had are mostly seedlings, and *Small Baldwins*, with a few *Russets*, &c. I trust I shall be able some day to attend the F. G. A. meetings. We hope for the completion of the railway, and consequent facilities for the proper moving of people and fruit, the want of which is so serious an interference with what we would like to do. I find that small fruits grow well with us. Grapes are among the number, though sometimes destroyed by early frost. I have had on my grounds Concord Grapes, weighing per bunch three quarters of a pound. The Burnett Grape, named after Dr. Burnett, Pictou, late President F. G. A. of Ontario, which I received from that Association, has done well under fair culture, and given good sweet fruit. I have now planted over forty grape vines, with about ten different varieties. Only a few kinds are yet bearing. There are localities in this county where grapes can be grown with shelter from wind and storm and escape injury from frost. It will pay to raise grapes, as they will grow where nothing else can be grown to much advantage, and they can be sold readily for at least ten cents per pound. I have sold them for ten cents per bunch of fair size, not a half pound. There is less trouble to sell grapes than to raise them.

It seems a difficult matter to bring plums to maturity, so many trees are killed by black knot. The bark louse is a great enemy to apple trees. A coat of oil will cure them for some years,

and seems to help the foliage and give a better color to the bark.* It must be put on very thin, for if too thick it will kill the tree.

I have found the Hellebore Powder a good article to kill the worms which infest gooseberry bushes. Three years after I had placed out thirty-six plants, I picked for sale one hundred quarts, wine measure. They can be grown under fruit trees with profit. The Currant and Strawberry wlll also pay well. Last season I had *Sharpless* strawberries *seven inches in circumference.* These are very prolific on low land.

When referring to apples I omitted to state that I find the variety known as *King of Tompkins* does best on my soil. They are good keepers, and have been kept into July, in which month I have been shown one raised in Mahone Bay by Azariah Zwicker, Esq., in his garden, which is open to the sea winds.

Yours truly,

E. B. HYSON.

---

## HOW TO DESTROY INSECTS IN ORCHARDS.

From observation and past experience I find the insect enemies on the increase. Their name is legion and they call for earnest vigilance on the part of the fruit grower. In this brief article I wish to direct attention to the seven following insects which prey upon the orchard.

CANKER WORM proves very destructive to the foliage. The moth appears both in spring and autumn. The females being wingless, are obliged to crawl up the stems, on which the eggs are deposited. The larva, which is ash colored or dusky brown, appears the first of June. The most effectual way of checking the ravages of this insect consists in fastening a band of coarse cloth covered with printer's ink around the trunk of the tree. The ink must be renewed every two or three days, as the dead bodies soon form a bridge across which the others could pass. Paris green and London purple dissolved in water, one part of the poison to seven hundred of water, applied with a force pump or syringe, is the most effectual remedy. If used too strong the foliage will be destroyed.

---

*We would advise *very great caution* in the use of oil. We have known trees to have been killed by the use of this unnatural remedy. An alkaline wash will prove quite as effectual and much safer.—COM.

Apple Tree Caterpillar *(or figure 8 moth which lays the eggs)* is another very common and destructive pest. The eggs are laid in rings on the young wood in the latter part of July, each ring containing about two hundred eggs. The first warm days of spring they hatch, even before the buds burst, and I have had thousands of them, which I had intended burning, but had neglected to remove, hatch in my pocket. This caterpillar when full grown is about two inches long, of a yellowish green color, with one dorsal and two lateral pale yellow stripes and a blueish head. In the latter part of June it weaves a brown cocoon on the fences or buildings, and in about ten days a large reddish grey moth comes forth to again lay its eggs. When not feeding, the worms cluster in large bunches along the trunk and larger branches of the tree, when they may be easily killed.

The Tent Caterpillar is somewhat similar to the above. These weave a white web or tent over themselves as they go, and strip a branch clean, but leave the tent behind them. Hand picking or the torch, is the easiest mode of destroying them.

Another insect pest is the Black Caterpillar (for want of a better name.) The eggs are deposited about midsummer on the young branches and the caterpillars hatch the following May. They feed voraciously on the foliage for six or seven weeks, often completely stripping the tree. They are about two inches long and as large as a lead pencil when full grown. Several feed on one leaf and can be easily removed by picking off the leaf. With the least jar or touch they throw the head and tail up; even lie in that position when not feeding.

The Apple Worm *(Carpocapsa pomonella)* is produced by a small grey winged moth, commonly known as codling moth, which appears in great numbers the first warm evenings in June and lays its eggs in the blossom end of the fruit. The little grub soon hatches and eats its way into and soon spoils the fruit, causing it to fall prematurely. As soon as, or often before it falls, the worm escapes either into the ground or under the rough bark of the tree, unless traps are set for its capture. It lies in the cocoon from seven to ten days, and comes forth a moth again. Thus three crops are produced in a single season.

How to destroy them :—

1st. Encourage the black cap titmouse and hairy woodpecker, which destroy the insect in the pupa state.

2nd. Light small bonfires in the orchard on dark nights, which will attract and destroy the moth.

3rd. Pick up wormy fruit as soon as it falls and feed the hogs, if they cannot be allowed to run in the orchard.

4th. Strips of woollen cloth tied around the trunk of the tree, and occasionally taken off and examined, or, what I have found an excellent plan is, lay two old barrel staves (these for economy) close together (the closer the better), and fasten them with a couple of screws to the trunk of the tree. The worms will crawl in between, where they will be found generally in a transformation state. By examining the staves once a fortnight, removing the worms, and returning the trap to its position on the tree, this troublesome pest can be nearly gotten rid of in one season.

Bark Louse or *mussel scale* is occasionally troublesome, but can be exterminated by scraping the old bark off and burning it. An excellent wash is made by dissolving 2 lbs. of potash in six or eight quarts of water, which may be applied with a mop about the latter part of May, or first of June. Large sums have been paid for this simple recipe.

The Apple Tree *Borer* is a fleshy, white grub, the larva of a brown and white striped beetle, which deposits its eggs during June and July in the collar and along the trunk of the tree. The eggs soon hatch and the worms remain just under the surface of the bark until they are strong enough to bore into the wood of the tree. Fastening up the entrance hole with a plug of hard wood is said to be a sure remedy. Lime and ashes piled around the base of the tree is a preventative, and the wash recommended above for the bark louse may also be used with advantage.

By contrasting fruit—in the one case fair and smooth, in the other gnarled and wormy—one is amply repaid for the labor required to produce handsome, perfect fruit.

T. E. Smith,

*Nova Scotia Nurseries, Cornwallis.*

## IN MEMORIAM.

Just as we are about going to press, the painful duty devolves upon us of recording the demise of the President of this Association. On the evening of the 22nd February the sad intelligence reached us that Avard Longley was no more. Death had that day laid his ruthless hand upon him, and with scarcely a moment's warning called him to the better world.

The Nova Scotia Fruit Growers' Association has sustained a severe loss in the death of President Longley, who has been intimately connected with the doings of the Association since its inception, twenty years ago; and we feel safe in saying, no man in Annapolis County has done more to promote the objects of the Association and the interests of the fruit growers. In this work, as well as everything that was for the benefit of his country and mankind, Mr. Longley was ever ready to expend his energies.

At the Annual Meeting held at Wolfville on the 9th February, 1883, he was unanimously elected President, which position he filled with great acceptance to the Association, and was re-elected at the Annual Meeting Feb., 1884.

His address at the last Annual Meeting and his impromptu speech at the dinner in connection with that occasion were, although laboring under severe physical affliction at the time, efforts worthy the statesman, and will now be recalled with sadness by those who then heard his voice for the last time.

Avard Longley was born at Paradise, Annapolis County, Nova Scotia, on the 22nd February, 1823, and died at his home very suddenly on the sixty-first anniversary of his birthday.

For the last twenty-five years Mr. Longley has been essentially a public man, and during that time held many important positions. In 1859 he was elected to represent his native county in the Provincial Legislature as the colleague of the late Hon. J. W. Johnston, and was re-elected in 1863 and again in 1867. He occupied the position of Chief Commissioner of Railways of Nova Scotia from 1864 to 1869, when he resigned.

During these years he took an active part in forwarding and advocating many important measures, among which were the Confederation of the Provinces and the Free School Act.

In 1878 he was elected to represent Annapolis County in the Dominion Parliament.

He was an active and consistent member of the Baptist Church and Association, and was twice elected to preside over the Baptist Convention of the Maritime Provinces.

He was also for many years one of the Board of Governors of Acadia College, and the President and members of that Board testify to the universal respect and esteem in which he was held by that body.

For over thirty-five years he was a consistent and active member of the Sons of Temperance and was Past Grand Worthy Patriarch of that Order, and a member of the National Division. On several occasions filled the position of President of Provincial Temperance Conventions.

The Chebucto Division of Halifax, to which he belonged for a number of years, have recorded their high appreciation of his worth as a man, a Son of Temperance and an able advocate of the cause.

The Local Legislature, in session at the time of Mr. Longley's sudden death, placed on record an unanimous expression of respect for him whose voice had so often been heard with marked effect within those halls.

His private life like that in public has been one of the highest character, and the Annapolis *Spectator* truly says of him :—

"In his death another light has been extinguished, but the effect of his social, christian, temperance and political character will live, though he is dead. The marks of a true man, a patriotic and loyal citizen, a consistent politician of excellent and statesmanlike abilities, will never fade, though he lies buried beneath his native sward. The worth and excellence of his acts in every sphere of life which it was his to fill will shine with unfailing lustre ; in whatever path of duty he was found he was useful and appreciated. It is not often that we find one who held so many prominent and responsible positions, in such perfect harmony in life as did Mr. Longley. Indeed he never could have attained thereunto, but for the marked and recognizable fitness which it was his in no small degree to enjoy. Honest in the highest sense, firm in his convictions, he never swerved from that which he believed to be right, and was always loyal and true to the cause which he espoused. All, be they political friends or foes, agree that a mighty man has fallen—that a gap has been made in the several circles in which he moved which will be hard to so worthily fill. His was an active life, the talents with which he was endowed were used to benefit his fellow man. The welfare of his countrymen and the land of his nativity were ever uppermost in his mind, and to that end were directed with unusual perseverance and courage, all

the abilities which it was his to command. He was magnanimous. In the hottest of political debate he never stooped to anything unbecoming the character of a gentleman, and always spoke with that plain, forcible fluency which claimed the respect of all. The County of Annapolis and the Province at large will miss him furthermore in connection with agriculture and fruit growing, in which he was always deeply interested. He made them a study and was never backward in making known to others the results of his research and experience in connection therewith."

NOTE.—The publication of this Volume has been delayed a short time in order to procure the excellent portrait which appears as a frontispiece, and which the Publication Committee feel confident will be highly appreciated and valued by the members of the Association and the hosts of friends of the deceased.

# THE SECRETARY'S DRAWER.

## NOTE.

In the preparation of this part of our little volume, it has been the object of the compiler, to collect and preserve for reference a few items of interest to fruit growers, that we frequently meet with, and many of which might be otherwise lost.

The permanency, or extension of this department, will depend upon the measure of approval which this small beginning shall receive from the individual members of the Association who, if they favor the continuance of this object, are requested to render assistance, by supplying notes of observation and experience, or clippings from any source, that may be of value in making this collection. Of course due credit shall be given, as to the source of such information.

SECRETARY.

## AS OTHERS SEE US.

The two following letters are from English gentlemen who, during about seven months of last year were travelling throughout the Dominion, with a view to ascertaining the most desirable localities for agriculturists:

ILKLEY, ENGLAND, *Jan. 29th, 1884.*

*Sir*,—Yours of the 17th has just reached me. It would have afforded me much satisfaction to have staid a longer time in Nova Scotia, and to have made the acquaintance of yourself and others of her truly hospitable people. I much appreciated my short visit, affording as it did, the opportunity of partaking of such true, genuine kindness from those to whom I had previously been a stranger; and of becoming personally acquainted with some whose friendship I shall ever prize. I may say that in Nova Scotia the Apostolic

injunction, "Be not forgetful to entertain strangers," is fully carried out.

I was also much pleased with what I could see of the country under its covering of snow, and formed the opinion that it was second to no part of the Dominion of Canada which it was my lot to visit—and I visited it pretty thoroughly. The produce of your orchards and fields are fully equal to anything I have met with in my *world-wide travels.* Would that I had now a barrel of your "beautiful apples," and another of your fine "mealy potatoes!" Your farmers appear thoroughly to understand the cultivation of both, and very good must be the soil which yields such results to their labours, and fine the climate, that brings all to perfection. If it ever fell to my lot to settle in Canada, I could wish for no more lovely or desirable location than the valley in which "Sheffield's Mills" is situated. May I some day see it again, and in its summer costume. Now I have written just exactly what I feel and think, and I leave you fully at liberty to make what use of it you please. If any of my friends ever propose emigration, I shall certainly recommend Nova Scotia to their notice! Like many Englishmen, I had previously a very incorrect idea of your country, thinking it so bleak and sterile that none would live in it if it could be avoided. I am glad to have had this idea corrected, and that from personal observation, I am, dear sir,

Yours truly,

ALFRED WRIGHT.

To C. R. H. STARR, ESQ.,
*Secty. N. S. Fruit Grower's Association.*

LONDON, ENGLAND, *14th Feby. 1884.*

C. R. H. STARR, Secty. N. S. F. G. A.

*Sir,*—In reply to your letter of the 18th ult., I have pleasure in saying that I have been much interested in reading the accounts of the N. S. Fruit Grower's Association. The objects of the Association seem to me very desirable, and the advocacy of them worthy of the support of any fruit growing country; but, for several reasons they seem especially commendable for that remarkable tract of country extending between the two ranges of mountains through the counties of Annapolis and Kings, in Nova Scotia, best known abroad, perhaps, as "the land of Evangeline." The complete natural protec-

tion afforded by the mountains, giving the necessary shelter for fruit trees, combined with the advantages of a suitable soil, have already made the valley famous as a fruit growing district. But the fact that its extent is limited, renders the question of its adaptability for fruit growing one of greater importance. Were it in extent like the vast prairie plains of the North-West, or, if the whole of Nova Scotia were excellent farming land, the case would be different. As it is, it seems every way desirable, if not absolutely necessary that it should be utilized to produce what it is naturally best adapted for, and that from the cultivation of which there would be the largest return. The comparatively small extent of land necessary for a fruit farm, and the usually large yield per acre, point to fruit growing as one of the most suitable industries for such a district. Indeed, I may say, that a seven months journey, extending through almost the whole of the settled portions of the Dominion of Canada, confirms me in the belief that (protective tariffs notwithstanding) the day is not very far distant when, with the increased facilities of communication, it will be everywhere realized that it is for the best interests of each country, as well as of the world, that each should be devoted to that for which it is best adapted. While the great North-West will probably stand unrivalled for wheat producing, it can never hope to compete with portions of Ontario and Nova Scotia. Climatic considerations settle that beyond a doubt. Nor do they place the British fruit grower under circumstances less peculiarly disadvantageous when compared with the Canadian and American. Another thing that must be apparent to any observer, who has had the opportunity to form a judgment, is that the consumption of fruit in England is yet very small to what it must be in the course of a few years, when the poorer classes, who now use it very little, if at all, have learned to know its value, and can procure it of a good quality, and at a price that will be within their reach. The position of Nova Scotia, obviating the necessity of a long railway transit, and its situation, as it is sometimes said, "stretches out a friendly hand to England," will, I doubt not, give it place second to none as a source of supplies for England in the course of time.

Wishing your Association success in its efforts to develope and promote the interests of the fruit growers of Nova Scotia, and thanking you for the papers referring to its work,

I am yours truly,

WM. KING BAKER.

# FRUIT GROWING IN NOVA SCOTIA.

The *Country Gentleman*, referring to the last report of this Association, and alluding to the Western Counties of Nova Scotia, says: The northern latitude and proximity to open water appear to give these counties the same advantages in raising long keepers as those possessed by the Owen Sound region in Canada and the Grand Traverse in Michigan, all three being alike in latitude.

---

From all the information which reaches us, a vast increase in the fruit production of this country may be expected in a few years. Nova Scotia bids fair to become celebrated for its growth of superior fruit.—*Halifax Herald.*

---

The following is from the Report of the Directors of the King's County Agricultural Society at their last Annual Meeting:—The orchards are rapidly growing in extent and importance, and fruit is becoming a large source of income to the farmers of this valley. Cherries are not counted here. Plums were a light crop and the price high. Apples, *the* fruit of the Annapolis valley, and *the* crop above all others in the near future, were far below the average yield; but they were large, well colored, and very uniform in size, and there was a quiet market for them at figures which fully compensated for the short crop. Our early soft varieties, including Gravensteins, found a ready market in Boston at from three to four dollars a barrel, delivered at the cars. The long keeping varieties have been largely held for the London market and have already been shipped, or will be, by first steamer offering, so as to reach the Christmas market. Your directors find that orcharding is becoming more and more popular, not only with farmers but also with professional men, and men of wealth in our cities who have an eye to a good investment and who also appreciate the pure, cool health-restoring atmosphere of our garden valley in the summer months, filled as it is with the beauty and perfume of the pink and white blossoms in the flowery months of June, and later all aglow with the red cheeked and golden fruit among the green leaves. There is not a spot of earth in the world better adapted by the soil and climate to the cultivation of the various kind of apples than this

valley, and every acre of it from the Annapolis Basin on the west to the Avon River on the east might be profitably planted with trees. There is no doubt that money invested in this way would pay as large profits as orange groves in Florida and be subject to none of the risks of stock in Mexican silver mines. There is now a permanent market across the water for all the surplus apples we can raise, as our apples cannot be surpassed in size, color, or quality, the world over. This was proved by the reception with which C. R. H. Starr's collection was met at the Horticultural Exhibition lately held in England and the notice it received by the press. * * * * Very little change is noted in the variety of the apples planted. The Gravenstein deservedly holds its place in the front rank; but there is a tendency to plant more of the long keeping varieties, and not so many varieties in one orchard. The Ben Davis has become quite popular within the last year on account of its long keeping quality. It will keep sound with ordinary care the year round, and is sound and bright, and of good flavor a year from the time of gathering. The pear, which is a most delicious table fruit, would repay a much larger cultivation than it has at present. The crop for the past year was good and found a ready sale. The Bartlett is hardy and prolific and usually brings five dollars a barrel in our markets.

---

"I am confident there is a great future before your colony, as regards the raising of fruit for the London market. Only let it be *honestly* packed, and sent by an expeditious route, taking due care as regards frost, &c."—*Extract Mr. Lowe's letter.*

---

The Augusta, (Me.) *Journal* says that good Canadian fruit sells to far better advantage in England than any other, because of its keeping qualities; and that shippers of Maine apples are imitating the Canadian barrel, that they may obtain the advantage of the reputation of Canadian fruit.

---

A correspondent, who has been visiting Nova Scotia, writes to the *Farmers' Advocate*, from which we clip the following:

* * * * Whilst we know from personal experience, that there are a few favoured spots in Canada better adapted to apple culture than Ontario, such as the Annapolis Valley, N. S., still we claim

that our Province is, on the whole, well fitted for producing a large variety of apples.

Are the trees planted of inferior quality? Certainly not. Our local nurseries and others, supply good trees, in fact we have the same class of trees that are sold in Annapolis and Kings Counties, N. S.

Where then is our fault, and what our remedy? The information we want must come from practical men. A few months residence in the best apple districts of N. S. enables me to contrast our mode of apple culture, and its results, with theirs.

One or two common errors, prevalent in our Province, and their remedies, may be noticed.

First.—Too little attention has been given to apple culture, and other branches of agriculture have been more closely followed. The uncertainty of local markets, easily glutted at any time, afforded little stimulus to fruit raising; besides, while Ontario was the great wheat producing province, special attention was given to grain growing. But the condition of things is fast changing. We have a sure foreign market for good keeping apples. On the other hand the broad prairies of the North-West, rapidly filling up with a soil tilling population, may render wheat raising in Ontario much less profitable than at present, while this same influx of settlers opens up to us what may be called a home market for apples, as it is not likely that fruit will be largely grown in the North-West for years to come.

Second—Too many varieties of trees are found in our orchards, and a very large proportion of these apples are unfit for a foreign or any market. I cannot too strongly emphasize this point, which has been the bane of apple culture in Ontario. It is not uncommon to find in an orchard of one hundred trees from twenty to thirty varieties. If an orchard contain say twenty varieties, each of which has to be assorted into two or three classes, at the close of the sorting some thirty or forty barrels partly filled will be left. These will have to be disposed of at a disadvantage by mixing or some other way.

One of the most successful farmers in Annapolis County last year had nearly five hundred barrels of Nonpareils, and only two hundred barrels of other sorts. Instead of having a few trees of each variety, he would at once graft, or else set out three, four or five hundred Nonpareil, or whatever apple stood the highest in the English market. Such is the true policy. * * * *

## NOVA SCOTIA APPLES AT THE GREAT NATIONAL APPLE CONGRESS.

The following extracts are from London papers:

NOVA SCOTIA APPLES.—An interesting contribution has been added during the past week to the great Apple exhibition at Chiswick. It consists of a grand collection of Apples, numbering some fifty sorts, from Nova Scotia. Every fruit shown is a first-rate example of its sort, and some are exceptionally fine as regards size and colour. The collection consists mainly of sorts well known in English gardens, but there are a great many American kinds, some of which are extremely handsome, whatever their edible qualities may be. The collection is well and legibly named, and an asterisk affixed to the name indicates that the sort is grown for exportation to the English market. Among these are the Ribston Pippin, King of the Pippins, Old Golden Pippin, Mammoth Pippin, Sweet Russet, Baldwin, Rhode Island Greening or Green Newtown Pippin, Cooper's Russet, Hubbardtson's Nonsuch, Talman Sweet, Flushing Spitzenberg, Willoughby, King of Tomkin's County, Pomme Grise, and Blue Pearmain. It will be seen from this list what a small percentage there is of sorts cultivated in English gardens. Among the sorts not marked by an asterisk are Gravenstein, Golden Ball, Fall Harvey, Ben Davis, Drap d'Or, Old Nonpareil, Cox's Orange Pippin, Holly, Gloria Mundi, Yellow Belle Fleur, De Rocas, Emperor Alexander, Dutch Codlin, Cat's-head, Concord, Pearmain, Blenheim Orange, Lyscom, Rambo, and Chebucto Beauty. The last named sort is the finest in the whole collection, the fruits being of extraordinary size, highly coloured, and distinct from any other. The collection is in excellent condition, and excites general admiration.—"*The Garden.*"

"*The Gardeners Magazine*," Oct. 20th, 1883, says:

Since the opening of this exhibition great changes have been made in the arrangements, and the sum total has considerably increased. Collections have come in from Dalkeith and other places in the north that were wanting in the first instance, and to these have been added collections from Sweden and other parts of Scandinavia, and from Nova Scotia, Canada. The American apples are conspicuous for size, evenness of growth, and brilliant colour.

They are mostly light in texture, tender fleshed, and of mild balsamic flavor, showing quick and kindly growth under purer and stronger sunshine than apples are favoured with in these cloudy isles. Students of apples who have explored the show as it stood in the first few days, may with advantage have another look round to enjoy the splendour of the American apples, and make notes on their names and characters.

Foreign Apples.—During the present week the exhibition has been enriched by a remarkably fine and interesting collection of Apples sent by Mr. C. R. H. Starr, of Port Williams, Nova Scotia, whose London agents, Messrs. Nothard & Lowe, have admirably set up, and further increased the value of the collection by indicating those sorts which are generally sent from Nova Scotia to the English market. These are the Baldwin, Rhode Island Greening, Cooper's Russet, Blue Pearmain, Talman's Sweet, Gravenstein, Nonpareil, Flushing Spitzenberg, King of the Pippins, Willoughby, Golden Russet, King of Tomkins County, Sweet Russet, Pomme Gris, Golden Pippin, Ribston Pippin, and Mammoth Russet. Most of these are of medium size, and several of them highly coloured, but all, by comparison with home-grown samples, are of low specific gravity. As regards handsome appearance, these Nova Scotian Apples compare most favourably with the best of our own, but contain much less water and sugar. Such varieties as the Emperor Alexander, Fall Pippin, Chebucto Beauty, Dutch Codlin and Cat's Head are finely represented.—"*Gardeners Chronicle*," Oct. 30.

National Apple Congress.—The great exhibition of apples in the conservatories of the Royal Horticultural Society at Chiswick, where over 10,000 plates filled with varieties from the orchards or gardens of 182 fruit growers in different parts of Great Britain are displayed, not having been closed on the day originally fixed, remains open until the 25th inst. Of the interest taken in the subject proof afforded by the large attendance—on an average from 700 to 800 visitors a day, a majority of whom have come from the chief apple growing districts of the country. So successful, indeed, has been this well-arranged scheme for showing what intelligent culture of the apple has actually effected in the Kingdom, and for collecting information which may lead to the more profitable selection of varieties suited to particular soils and local climates, that there is

already talk of holding a similar exhibition in Manchester next month. Since our first notice of the show some additional contributions have come in from Norfolk and Worcester, and a highly satisfactory collection from the Orkney Islands.

The most noteworthy addition, however, is a tableful of apples from Nova Scotia, sent by Mr. C. R. H. Starr, of Port Williams. The stand on which these glowing, healthy beauties of the orchard are set out presents a wonderful display of natural colour. Here are smooth-skinned nectarine-like apples, suggestively named Maiden's-blush; singularly fine specimens of a German variety, the Gravenstein; a clean, evenly tinted, well-grown lot of the Gloria Mundi; and some appetizing, sound-looking dessert apples, apparently of American origin, for they are called by that poetical slang term for autumn, which has established itself in the every-day language of the Old Dominion, as well as of the United States, "Fall" pippins.

In order that those who propose a visit to the exhibition may not be disappointed, they should understand that they must not expect to see any of the monsters, which, like gigantic gooseberries and abnormal melons, are the wonders, if not the chief attractions, of ordinary fruit shows. This collection has been brought together with far more practical aims. Committees have, in the first place, endeavoured to ascertain and correct errors in the nomenclature of the great number of varieties now shown, and, next, to collect information as to the soil and position in which each exhibit was grown, and the habits and qualities of the trees which bore the specimens sent. The first conclusions of the committees after examinations and comparisons by the well-known pomologist, Dr. Hogg, and Mr. A. F. Barron, the manager of the Society's gardens, will be reported upon by Mr. Barron, and his report, with full notes on each of the varieties exhibited, will be published in a convenient form. An acknowledgement of the services of Mr. Barron, to pomology was made last week, when at a gathering of fruit growers he was presented with a gold watch by Dr. Hogg, on behalf of a large body of subscribers to the testimonial.—"*Times.*"

---

National Apple Exhibition.—The monster exhibition of apples in the Royal Horticultural Society's gardens, at Chiswick, has proved to be a much greater attraction than was anticipated, and the committee have determined to prolong its existence over an additional

week. Several additions have been made to it since the opening day, and it now includes about 1,000 different sorts or varieties, nearly 10,000 dishes being staged by 170 exhibitors. The fruit is shown in the great vinery, which just now is an exhibition in itself, and three large green-houses. The arrangement of the exhibits according to counties is very instructive, enabling the visitor to note the variation in the character of any particular variety produced by locality. Many will be surprised to find so comparatively small a share in the exhibition contributed by those counties where apples are produced in the greatest abundance, such as the cider districts in the West of England; but the reason is not far to seek. The exhibition was originated not for competition but for scientific investigation; there is no prize list, and the exhibitors responded to the invitation of the committee without hope of fee or reward.

Among the more recent additions to the show is a small but handsome collection from Nova Scotia, as fine a lot of fruit as was ever staged at an exhibition.

The list of exhibitors includes the names of Her Majesty the Queen, the Prince of Wales, the Duke of Buccleuch, the Duke of Northumberland, the Duke of Sutherland, the Marquis of Exeter, the Marquis of Abergavenny, the Earl of Rosebery, Earl Home, Lord Carrington, Lord Monson, Baron Rothschild, Sir T. D. Acland, M.P., Admiral Greville, General Benson, Mr. Beresford-Hope, M.P., Mr. J. Wingfield Digby, and Mr. Barron on behalf of the Society.—*The Morning Post*, Oct. 22.

---

Extract from a letter written by the Revd. A. Shadwell, of Little Ilford, Essex, England, to his son, B. Shadwell, Esq., Cornwallis, who has kindly supplied the copy:—

"I do not think you heard from any of us the history of the Apple Congress lately held at the Royal Horticultural Society's grounds, at Chiswick. The Committee invited dealers and owners from every district of England and Wales to contribute specimens, both for the purpose of identifying the sorts and establishing a correct nomenclature, and also for testing the applicability of sorts to climate.

The Queen sent 153 sorts from Frogmore, the Royal Horticultural Society 250, Mess. Veitch of Chelsea 150. This was the finest British collection. In every collection Cox's Orange Pippin was

conspicuous. Douglass, of Loxford Hall (a most experienced gardener), assured me that this is without doubt the finest British Apple. Mine here are now ripe, and I will consent to say that it is half a point better than Ribston Pippin. But I consider no apple in this country at all equal to the finest of the Italians, the difference arises I think from the attenuation of the skin under the prolonged heat of autumn, so that there is left, not a rind, but a thin transparent layer. The three largest are Warner's King, Lord Grosvenor, and Haycock, monstrous hillocks of green and yellow. The miniature kinds which are all best pippins, are well represented, with quantities of the old golden pippin, and many others similar. It will interest you to know that the collection of 44 sorts from Nova Scotia, all of the varieties usually sold to England, completely eclipsed every other. There were no monsters, but every apple was perfect in form, smoothness and colour, the last very beautiful in some cases. The most inviting were Gravensteins, Hubbardtson's, Nonsuch, Emperor Alexander, and Chebucto Beauty. All the 44 came from C. R. H. Starr, Port Williams, N. S."

---

## TO PREPARE GROUND FOR AN ORCHARD.

John Manwaring writes to the *Williamette Farmer* he has had twenty-five years experience in orchard planting, and has best succeeded when this method of preparing the ground has been adopted: Set stakes whatever distance apart trees are to be planted, (say thirty-three to forty feet, Comp.) and plow in ridges, harrow thoroughly and let lay a few days. Then throw it up in ridges cross-ways, the same distance apart as at first, and harrow as before. Now plow again, throwing ridge right on top of the first, till the dead furrow at one rod from the ridge is about eighteen inches deep. Harrow again thoroughly till mellow and fine. Now apply manure, which has previously been prepared, spread evenly over all the ground, and plow again, throwing furrows back into last dead furrow, this is the place where the trees are to be set. Harrow as before, and repeat plowing crossways. You will now have a soil to set your trees in. Some may say this is too much trouble, but I will ensure them a good orchard, if they will follow this plan. No man ever succeeded unless he had depth of soil to set his trees in,

and he ought not to attempt an orchard without having the ground plowed at least two years before setting out the trees.

---

Buying Trees.—Orders should have been sent to the nurseries before this. Better to defer planting until another year than to purchase from the glib-tongued tree pedlers, who will furnish only the refuse of nurseries, impartially named. Order direct from the nurseries (*or from their authorized agents, but not tree pedlers—Comp.*)

Nursery trees, when long on the road, often dry and the bark becomes shrivelled. Bury such trees in sandy soil, root and branch, in a few days they will become plump.—*American Agriculturist for March.*

---

Size of Trees.—The *American Agriculturist* says:—In selecting trees for planting the largest is not always the best. Medium sized trees are lifted with better roots, are easily handled, are less liable to injury from transportation, start quicker and grow faster than large old trees, which have wider spread roots, which are certain to be severely abridged in lifting. The top must then be pruned severely to correspond with the destruction of the roots. So there is nothing gained in the way of size. Two-year-old trees of the apple, pear, plum and cherry, and one-year-old of the peach, are the best sizes, and of these, stocky, low-branched specimens will be found to give the most satisfaction.

---

Transplanting Trees.—A correspondent of the *Williamette Farmer*, who claims to have had twenty-five years experience in orchard planting, says:—Having the ground thoroughly prepared, measure off the distance with a pole, and set small stakes right where the tree is to be set, (stake out the whole field intended for planting —when done properly they should be in line, looking from any direction. Drive these stakes down so they will not be disturbed in digging the holes.—Comp.) This done dig holes large enough to set the trees without the roots being cramped, *remove the stake and place the tree exactly where it stood, spread out the roots in their natural position*, throw in a small quantity of fine earth, move the tree up and down a little to sift the earth among the fibres, then put in more earth, tread gently till the hole is full, but in no case set the trees more than one inch deeper than they were in the nursery.

We clip the following from "*The Examiner*," and consider it worthy of careful perusal, as it is much to the point:

### HINTS ON TRANSPLANTING TREES.

*By H. Reynolds, M. D.*

The old saying that "whatever is worth doing at all is worth doing well," applies with peculiar force to the transplanting of trees. A great deal of loss and disappointment has resulted from careless and hasty transplanting. Necessarily some risk attends the removal and resetting of a tree. Some of the roots must be broken, and the tree may fail to thrive in its new location. Some trees are more difficult to transplant successfully than others. It is harder to transplant trees from the forest to open country and make them live than the same kind of trees which have been grown in a nursery. Some of the forest trees, such as the walnut, have a long tap-root, which extends deeply. Such trees, when grown in a nursery, have been transplanted when young, and the tap-root cut off, so that numerous smaller roots have been formed. They can thus be more easily and more successfully transplanted.

Losses by Carelessness.—A great many trees are lost by carelessness in transplanting. Some persons seem to think that if the roots of the tree are only put into the ground and covered, that is about all that is necessary. An instance is related where "three men dug the holes and planted 1,200 trees in two days; in some places they used a nine-inch post auger to make the holes; and though, through the aid of a very wet summer, most of these trees lived, they have never made a satisfactory orchard." Setting trees in that way does not pay. When the work is well done it is slow business; but it is better to have one tree well set than half a dozen put into the ground in any way that the work can be done the quickest. The setting of trees should never be let out by the job. It is safer to hire men by the day, and have the work well done, regardless of the length of time required to do it.

How to Set the Trees.—The land must be well prepared. If the soil is poor it must be enriched by cultivation and manuring. If the soil is shallow it must be deepened; if wet, it should be well underdrained. Holes should be dug for the trees larger than are needed barely to receive the roots. They should be made large

enough, so that when the trees begin to extend their delicate rootlets in search of food they will not at once meet the hard wall of the excavation. The hole should be dug deep and broad and filled with good loam. The poor subsoil which is thrown out should not be put back, but its place supplied with loam from the soil around, or brought from a distance. The tree should be carefully set in the place prepared, the roots arranged in their natural position, and the best of the soil worked carefully in among the roots with the hand and firmly compressed. After the roots are well covered, manure as a fertilizer may be strewn about. One orchardist in Maine, in setting apple-trees last spring, scattered about the covered roots two quarts of superphosphate to each tree, and the result was that the trees made a thrifty growth of about a foot or more each. Well-rotted barn-yard manure as compost may be scattered over the covered roots and mingled freely with the soil. In filling the hole, the earth should be pressed in firmly about the roots, so that there will be no settling of the soil afterwards. There is no danger of making the earth too firm, provided it is all equally compressed.

Precautions to be Observed.—In transplanting trees, the roots should not be exposed to the sun or wind, and allowed to become dry. They should be kept as moist as when removed from the earth. If the roots become dry, they should be dipped in water and sprinkled with fine soil before setting, so as to cover all parts of them, and ensure the close application of the soil to the rootlets. [Better still, dip them in a puddle of thin mud, prepared for the purpose.] When a tree is transplanted some of the roots are necessarily sacrificed, and the feeding capacity of those retained will be more or less impaired by the shock of removal. Consequently it is desirable to remove a portion of the top, so as to restore the balance between the top and the roots. The strong shoots which are needed to form the top of the tree should be retained, shortening them if needful to secure the proper shape, and the weak branches which can be spared should be removed entire. In selecting trees for transplanting, those growing in rich soil should be preferred. A tree or shrub growing in such soil bears the shock of transplanting better than one growing upon poor soil. The roots of a tree in poor soil extend more widely and are more likely to be broken than those growing in rich soil, where plenty of food is found near at hand.

*Livermore Falls, Me., October, 1883.*

## PRUNING TREES.

If pruning is attended to annually, there will be no necessity for large wounds, which are as injurious to a tree as to an animal. A correspondent writes, that in his neighborhood all the orchards and trees pruned by an itinerant are declining and dying, while those not pruned then are still sound. The fault is in doing such severe pruning at one time, aggravated by leaving the wounds open to the cold drying winds. When a branch is already dead from any cause, and decaying, it is necessary to cut back to sound wood, and a coat of varnish, paint or tar, should be applied to prevent loss to the tree by evaporation of the sap from inside, and further decomposition by access of air from outside. Pruning should not be done when the sap is so abundant—as in late spring—that the wound cannot dry. It's continued oozing causes rapid decay, and injures the bark below the wound.—*Farmers' Advocate.*

---

A fruit tree to be grown in perfection *requires some pruning every year till it gets in bearing condition.* After that it may possibly take care of itself, though such cases are rare.

The fruit grower should have an ideal in his mind of what he wants as to size and shape. If he has this and will attend to the pruning at the proper time, there need be little cutting of large branches, to leave bad wounds or bring disease and decay. A tree should be so shaped that it will be strong enough to hold up its load of fruit, compact enough to withstand severe winds, and open enough to give a healthy growth to all leaves and fruit. A great many trees are neglected till their tops are so thick, and the growth so fine, that large healthy fruit is an impossibility. A certain amount of room for air and sunlight is required for the healthy development of every thing that grows. Large fruit can only be produced upon trees that have large healthy leaves, and where there are three or four twigs, or leaves, where there should be but one, the fruit must be small.—*New England Farmer.*

---

DEAD BRANCHES are usually looked upon as simply unsightly, doing no injury to the tree upon which they remain! but the *Gardeners' Monthly* urges their removal because of the draft upon the tree for moisture. It says: Our readers must remember that only

recently has it been clearly demonstrated that a dead branch on a tree makes almost as much strain upon the main plant for moisture as does a living one. It is one of the most important discoveries of modern botanical science to the practical horticulturist, as by this knowledge he can save many a valuable tree. Any dead branch or any weak one should be at once cut away.—*Secty. Michigan State Horticultural Society.*

---

Apple Trees Splitting.—Various devices or remedies are given in the papers from time to time to prevent forked apple trees from splitting. Iron bolts are inserted; iron bands are employed; ropes are used to draw parts together; branches are drawn together and interlaced, &c. Prevention is best; well formed heads will not split down. Two main branches, diverging from each other at an acute angle should not be permitted. An even and spreading head will not split, nor will any tree be liable to injury if not allowed to overbear. The practice of propping up the limbs of fruit trees indicates that the trees are not well trained, or they are allowed to overbear, or both.—*Country Gentleman.*

---

## GRAFTING WAX.

I have used this wax for the past eight years. Take one lb. rosin, one ounce beef tallow, one ounce beeswax. Melt and stew together thoroughly. Remove from the fire and add seven ounces of alcohol and one tablespoonful turpentine, stir until entirely cold. Bottle air-tight in large-mouth bottles. Apply with a brush.—*W. S. B. in Fruit Recorder.*

---

After considerable trouble this receipt was obtained for grafting wax, and has proved satisfactory:

Take 1 lb. of rosin, ½ lb. beeswax, and a little less than ½ lb. of tallow. Melt together in a small iron kettle and stir thoroughly. Pour into a dish of cold water, and when cool pull like molasses candy until white and fine grained. Roll in oiled paper.—*O. A. O. in Country Gentleman.*

## THE CULTIVATION OF FRUIT AND OTHER TREES.

Without considering the value of the fruit itself, the trees, if properly and tastefully arranged, are very ornamental, and they do much towards rendering home attractive. A homestead cannot be made pleasant and cheerful without the trailing vine, the rich green foliage of trees and shrubbery to fill the vacant nooks and hide unseemly objects. Even though they be forest trees, it will repay the cost of transplanting to beautify one's surroundings. A cottage that is environed with shade trees and things to render it attractive, is pretty sure to have contentment within.—*R. H. Bass, in Boston Cultivator.*

---

THE CULTURE OF APPLES.—When advised to set more apple trees, the average farmer answers: "Orchards do not pay. If apples are selling at a good price, it is the year my trees do not bear, and when I do have a good crop apples are so cheap that they scarcely pay for picking."

Something of truth in that, but it is not quite the truth. When apples are at the lowest price, a man can make pretty good wages in picking, assorting and barreling them, even though he has but a small share of the products of the orchard for his labour.

The day's labour spent in an apple orchard usually yields better pay to the farmer than any other farm work that he does. Compare the time necessary to get a barrel of apples ready for market, and that required to grow and harvest a barrel of potatoes.

The increased demand for apples for exportation is likely to make better markets and better prices for this fruit in the future than we have had in years of plenty in the past. The evaporators or fruit dryers, and the conversion of cider into apple jelly, enables those whose temperance principles would not allow them to make cider to be used as a beverage, to feel that they can now convert their cider apples into wholesome food.

Better cultivation and better variety of fruit will make better crops and better prices. In the matter of fruit, also, increased supply seems to create an increased demand. Witness the quantities of strawberries, cranberries and other small fruits now sold in our markets, and then think of the time thirty years ago, when scarcely one-tenth was sold, and yet prices have not declined very much.

Of all our fruits, none other is as valuable as the apple. It can be had in perfection at almost all seasons of the year; it can be eaten raw, or cooked in a variety of ways; it is healthful and nourishing, and it can be found in the greatest variety of flavours, enough to suit all tastes. Therefore, we repeat, plant out more apple trees; get good, healthy trees, grafted with good varieties of fruits; put them in good soil; prepare the land carefully, and give the trees good care, and you will find that they will prove profitable.—*American Cultivator.*

---

Cultivation of Orchards.—Cultivators are becoming more and more satisfied of the value of common manure for bearing orchards. Those which have been regularly top-dressed have borne much better the past scarce season than neglected orchards. The owner of an orchard of six acres, in a region where not one-tenth of a crop was raised the past season, sold over three hundred dollars worth of fruit from it. He has regularly top-dressed it for several years, and two sheep to each tree have picked up the fallen fruit infested with the Codlin moth.—*American Agriculturist,*

---

Dr. George B. Wood of Philadelphia, says unleached wood ashes applied around peach and apple trees, give them renewed life and activity, and greatly promote vigorous bearing. Decaying trees have been wonderfully stimulated into healthy growth, by digging four or five inches deep around the base of the stem, scraping away the worms, and filling the hollow thus made with fresh wood ashes. This was done in the fall, and the following spring they put forth bright green leaves, and bore a crop of fruit far exceeding anything they had previously done. All of his orchards, so treated, gave promise of great crops of fruit, also, this present season.

---

Young trees, for some years after setting out, must be as well cultivated as corn, and after coming into bearing manure may take the place. Not much grass can grow in a bearing apple orchard, and manure seems to be just the thing to give good fruit. But to expect an orchard to pay well, when neglected in grass, is folly.—*Country Gentleman.*

## FRUIT FARMING.

The Philadelphia Press gives an interesting account of C. Shearer's fruit farming in Pennsylvania. In the course of the description it says :

The apple crop is the most valuable harvest, and some novel methods add to the profit from it.

The best are stored in his fruit retarding house, which will hold 3,000 bushels, and sold in April and all along until July, bringing never less than a dollar per bushel, and sometimes nearly double. But few are lost by rot. They are stored in pine boxes, holding about three bushels each. The bottom and sides are tight, and they stand on each other in tiers, so that no apples are directly exposed to the air, except those in the upper boxes, and these are sometimes covered, which Mr. S. regards as best. The boxes are made of inch stuff, and when full it takes two men, of course, to handle them. Large boxes are regarded as more economical than small ones. The poor apples are made into cider, the greater part of which is made into vinegar. The pomace receives a tremendous pressure, so that most of the juice is pressed out at once, but after that it is put into large brick and cement vats in the earth, a little water added, and then it is pressed again, and the juice made into vinegar. By some after manipulation the pomace is preserved after this second pressure, so as to keep like sauer-kraut, and makes good food for his stock, answering about as well as bran or hay. It must be fed at first with care, or the animals will eat too much, but after a gradual introduction they are allowed to eat all they wish, and do well upon it. A bushel of apples will make ten pounds of pomace. He has now on hand about 10,000 gallons of vinegar, worth about ten cents a gallon.

---

## THE PRESERVATION OF FRUIT IN ITS NATURAL STATE.

On Thursday last, under the auspices of the Montreal Horticultural Society, the Canadian Fruit Export Company, (lim.) made an exhibit of fruit that had been preserved in its natural state by Mr. Geo. A. Cochrane's patent case and method, for six months. There

were twenty-five cases of various kinds of fall and winter apples, all of which were in a most remarkable state of preservation, looking as fresh and plump as if just taken from the tree. There were four cases of Canada's famous Fameuse apples. These attracted great attention from the goodly number of fruit growers present. A case of Alexanders was the greatest attraction, as the apple is an early Fall variety, and its condition at this time of year was surprising to all. There were cases of Kings, N. Spys, Greenings, Baldwins, Blue Pearmains, Ben Davis, &c., all of which were fine specimens. The exhibition, so far as showing the benefit of employing Cochrane's case and method of preservation, was a complete success. An enterprising grocer bought the entire exhibit at three dollars a case, which is equal to seven and a half dollars per bbl. The Cochrane case is particularly adapted for soft fruits, such as peaches, plums and pears, which will carry any distance without bruising or injury in this case.—*Journal of Commerce*, April 13, 1883.

---

A correspondent of *The Cultivator* states that he kept 1,200 bushels of apples, mostly Baldwins, through the past winter and spring in his cellar. He claims that by his mode apples may be kept the year round, without losing their juiciness or crispness. His theory is that the early rotting and decay of apples is due, to a great extent, to a vegetable miasma in the air, which is communicated to it by vegetable evaporation under certain conditions. The effect of this miasma is first seen in a minute speck; sometimes as many as a dozen may be counted on the same apple. His remedy is a daily airing of the cellar or place where the apples are stored, arranging so as to have a brisk circulation, until all the stagnant air is expelled, and its place occupied by pure, healthy air. [His success proves that his views are at least worthy of consideration.—Ed.]

---

Fruit in the Cellar of the Dwelling.—Open the windows whenever there is no danger of freezing. The ventilation is important to the inmates, and low temperature prolongs the keeping of the fruit.—*American Agriculturist.*

## PRESERVATION OF FRUIT BY EVAPORATION.

Fruit production is only limited by the extent of the market, and this question of market is at once determined by that of fruit preservation. If our luscious summer fruits can only be brought over the hurry and glut of their season of ripening, by means cheap and practical, the question of marketing them can be profitably settled at our leisure. In this way all the fruits we can produce can be readily and profitably disposed of, either in our home or foreign markets. Fruit production thus stimulated would at once spring into renewed activity, and where there is now only a bushel produced tons would be gathered, and all sure of finding a ready and profitable disposal.

There are at present but two popular methods of fruit preservation. 1st, by canning, 2nd, by drying or evaporating. We much prefer the latter of these methods, for the following reasons: 1st, the fruit is prepared for operation with less expense. In the case of small fruits, they are at once placed in the dryer and in a few minutes the fruit is taken out, and is ready for packing. In the case of large fruits they are simply pared and quartered, and rapidly evaporated to a dry state, ready for shipment. No expense of cans or labels is needed, and the consumer gets the goods in their simplest form, ready, by the addition of a little water, for preparation for the table or any domestic purposes. 2nd, It is easier to pack and ship. For this purpose it is simply placed in boxes or barrels and sent direct to the dealer, be he ever so far away, without fear of breakage or loss. 3rd, It can be more readily handled, exposed and sold by the dealer, with less risk of suspicion or delay. No suspicion can attach to evaporated fruits, as the purchaser can see what he gets, consequently it gives better satisfaction. This fruit can be sold in any quantity desired by the purchaser, and there is no useless expense for cans, labels, etc. The purchaser gets exactly what he paid for, and no more or less.

Well-evaporated fruit bears no resemblance to that which is merely dried by the old process.—B. Gott, *in Canadian Horticulturist.*

---

Fruit marketing in future.—The appetite for good fruit has evidently existed as long as the human race, and will continue while

there are any grown people and children. The question is as to the relative quantity of early and perishable, and long keepers. Perishable fruit must not be thrown on the market faster than the people within its reach can use it, no matter how excellent it may be. Long keepers may be retained for months until wanted. There are three agencies which will greatly aid in the extension of fruit growing, namely, the preserving of surplus perishing supplies by canning; keeping the fresh fruit in well constructed air-cooled fruit houses; and by far the most important of all, the conversion of all fruits into the permanently keeping article by means of evaporators. When well dried, it will not decay; it may be handled without bruising, and the weight renders it of easy and cheap conveyance on long journeys.—*Country Gentleman.*

---

The demand for fruits in all forms is steadily increasing; and there is little danger of over production if the products are put into a non-perishable condition by canning or drying.—*Grocers' Bulletin of Chicago.*

---

The *Williamette* (Oregon) *Farmer* says:—W. H. Jessup, a successful fruit grower in California, is of opinion that the market for fresh fruit is limited and uncertain, but that in canning or drying fruit for the markets of the world, there is scarcely any limit or uncertainty. Of the two Mr. J. gives the preference to the dried fruit business, as being the most certain in the long run, because the fruit can be put up cheaper and transported at less cost than the canned fruit, while if properly evaporated it possesses all the good qualities of canned fruit of the same grade.

The evaporating process is working a revolution in the dried fruit industry, especially with the product of the apple. It renders the dried article so far superior in appearance and quality to that produced by the old methods, that the latter have been nearly driven out of the market. Evaporated apples become a staple wherever they are known, and the scope of their market is constantly growing wider.

An increased demand for dried fruit tends to create an increased demand for green fruit, and operates favourably to the business of fruit production. By utilizing the surplus apples, in seasons of over-production, the evaporating process helps to equalize and ensure the

apple market. Large evaporators located in extensive apple-producing regions, by appropriating a vast amount of fruit that would otherwise be forced upon the market, make room for the product of thousands of orchards.

The tendency of this revolution in apple drying is to make the production of this fruit a reliable business. We think that farmers who have come to the conclusion that apple growing is unprofitable need no longer fear to set out apple trees. In average seasons the fruit will always be in demand, and in years of over-production, which have heretofore been a dread, it will command a price that will repay harvesting.—*The Husbandman.*

---

For years we have been shipping enormous quantities of apples to Europe, and this exportation is steadily increasing, and will continue to increase until the trade shall become of national importance.

In dried fruits, such as peaches and apples, the exportation has already acquired large proportions, and in ten years more it will go on multiplying in extent until fruit-raising will become a far greater and more profitable branch of industry than at present. With such a market open to us we can never grow an over-abundance of apples and peaches; while these, in addition to cranberries, in their natural condition, ought to be, and no doubt will be, produced in sufficient quantities to meet any demand. The very cheapness that we can send them abroad for will open for us an unlimited market for all with which we can supply it.—*Germantown Telegraph.*

NOTE.—Every word of this extract (barring the peaches) is applicable to Nova Scotia.—Comp.

---

Apples turn off 5 to 5½ lbs. of dried fruit to the bushel of 50 lbs. Pears turn off about 7 lbs. per bushel, and plums yield about 12½ lbs. to the bushel.

---

## APPLES AND HEALTH.

From the earliest ages apples have been in use for the table as a dessert. The historian Pliny tells us that the Romans cultivated twenty-two varieties of the apple. In these later days we probably possess over two thousand. As an article of food they rank with the potato, and on account of the variety of ways in which they

may be served, they are far preferable to the taste of many persons; and if families would only substitute ripe, luscious apples for pies, cakes, candies and preserved fruits, there would be much less sickness among the children, and the saving in this one item alone would purchase many barrels of apples. They have an excellent effect upon the whole physical system, feeding the brain as well as adding to the flesh and keeping the blood pure; also preventing constipation and correcting a tendency to acidity, which produces rheumatism and neuralgia. They will cool off the feverish condition of the system, in fact they are far better for these than the many nostrums which are so highly praised in the advertisements and so constantly purchased by sufferers. A ripe, raw apple is entirely digested in an hour and a half, while a boiled potato takes twice the time.—*Rural World.*

---

## FRUIT GARDEN.

Every Farmer, whether he markets fruit or not, should have an abundant supply of small fruits, all that the family, no matter how large, can eat, from the earliest strawberry to the last grape. Not only will they conduce to health, but will greatly help to make farm life acceptable to young people. The cost for a start need not be large, and if one has a few plants, they may be readily increased.—*American Agriculturist.*

---

Chas. A. Green, of Rochester, says, his family enjoy fruit no better than others, but for three weeks they live on strawberries, four weeks more on raspberries and blackberries, three months on peaches, and six months on pears. He had 200 vines of early grapes, from which all the family and labourers were free to eat. He thinks that grapes planted in long rows, so as to be cultivated with a horse, are the cheapest food that can be supplied, and are exceedingly wholesome, as well as all other fruit when fully ripe.

---

Transplanting Strawberries.—As regards transplanting the strawberry, possibly some readers may be ignorant of one portion of the process, which to everyone making a plantation in a dry time, is well worth knowing. In preparing the plant do not pull off the

runners, but leave, say six inches of them attached to each side of the plant. Bend these ends of runners down, and bury them with the roots. Plants thus provided with these "umbilical cords" on which to draw for nourishment, will survive and flourish in adverse conditions under which plants denuded of their runners will almost inevitably perish. The practice of this precaution in transplanting is equivalent to almost complete insurance of success, in spite of the weather. —*Country Gentleman.*

---

## QUINCE GROWING.

"A successful grower of quinces says he attributes all his success in the business to the accident that most of his trees were set in low, mucky ground, and with such shelter, that their own fallen leaves and those of an adjoining apple orchard made a good annual mulch. He says it is not the trunk and branches of the quince that are tender, but the root, trees being almost invariably killed in exposed situations, wherever frost penetrated deeply. He mulches well with autumn leaves and well rotted stable manure, saying the better the manure (within reasonable limits) the fairer and larger the fruit. He also believes a vigorous growth prevents to some extent the twig blight and red rust."—*The Michigan Farmer.*

---

## HOW IS THIS?

There is an apple tree in Rabun County, Georgia, that is probably the largest on the continent. It shades the greater part of a farm yard, and in one year the owner gathered 204 bushels of apples from it, besides what his stock destroyed. He received 25 cents per bushel for them from wagoners.—*Fruit Recorder.*

ide of
a with
ls" on
dverse
almost
ting is
of the

uccess
n low,
leaves
nulch.
at are
xposed
l with
er the
. He
blight

obably
yard,
om it,
nel for