

JOURNAL  
OF  
EDUCATION

BEING THE SEMI-ANNUAL SUPPLEMENT TO THE REPORT OF  
THE SUPERINTENDENT OF EDUCATION FOR

NOVA SCOTIA

---

APRIL, 1912.



Published by Order of the Legislature of Nova Scotia.

---

HALIFAX, N. S.:  
COMMISSIONER PUBLIC WORKS AND MINES  
KING'S PRINTER.  
1912.

PRINTED BY WM. MACNAB AND SON, 7-9-11 BEDFORD ROW, HALIFAX, N. S.

# JOURNAL OF EDUCATION.

---



---

THIRD SERIES, Vol. VII.....No. 3—(Total No. 141.)

---

SECOND SERIES: **October, 1878, to August, 1892; XII Vols.,  
29 Nos.**

FIRST SERIES: **September, 1866, to August, 1877; 73 Nos.**

---

HALIFAX, NOVA SCOTIA, APRIL, 1912.

---

## OFFICIAL.

---

*I.—The JOURNAL OF EDUCATION shall be published semi-annually, in the months of April and October respectively, and shall continue to be the medium of Official Notices in connection with the Department of Education.*

*II.—The JOURNAL which is the Semi-annual Supplement of the Education Report, will be furnished gratuitously, according to law, to each Inspector, Chairman of Commissioners and Board of Trustees; and will be supplied to other parties wishing it at the rate of ten cents a copy.*

*III.—Each Secretary of Trustees is instructed and required to file and preserve the successive numbers of the JOURNAL for the benefit of his fellow Trustees and the Teacher or Teachers of his section, and their successors, and to inform his associates in office, and the Teacher or Teachers, of its receipt, so soon thereafter as may be convenient.*

# COUNCIL OF PUBLIC INSTRUCTION.

---

- Hon. G. H. Murray, K. C., LL. D., *Premier and Provincial Secretary.*  
Hon. E. H. Armstrong, K. C., M. P. P., *Commissioner of Public Works and Mines.*  
Hon. O. T. Daniels, K. C., M. P. P., *Attorney-General.*  
Hon. Jason M. Mack, K. C., M. L. C.  
Hon. James Macdonald, M. P. P.  
Hon. G. E. Faulkner, M. P. P.  
Hon. R. M. MacGregor, M. P. P.  
Hon. J. W. Comeau, M. P. P.
- 

## EDUCATION OFFICE.

---

- A. H. MacKay, B. A., B. Sc., LL. D., F. R. S. C., *Superintendent of Education and Secretary of Council of Public Instruction.*  
Geo. W. T. Irving, *Chief Clerk.*  
Miss E. E. Anderson, *Stenographer.*
- 

### INSPECTORIAL DIVISIONS, WITH NAMES AND ADDRESSES OF INSPECTORS.

---

- Division No. 1, the City and County of Halifax—Graham Creighton, B. A., Halifax.  
Division No. 2, the Counties of Lunenburg and Queens—H. H. MacIntosh, Lunenburg.  
Division No. 3, the Counties of Shelburne and Yarmouth—C. Stanley Bruce, Shelburne.  
Division No. 4, the Counties of Digby and Annapolis—Leander S. Morse, A. M. Digby.  
Division No. 5, the Counties of Kings and Hants—Ernest W. Robinson, B. A., Aylesford.  
Division No. 6, the Counties of Antigonish and Guysboro—A. G. Macdonald, A. M., Antigonish.  
Division No. 7, the County of Richmond and the District of South Inverness—M. J. T. Macneil, B. A., River Bourgeois.  
Division No. 8, the County of Victoria and the District of North Inverness—James MacKinnon, Whycomagh.  
Division No. 9, the County of Pictou—E. L. Armstrong, Pictou.  
Division No. 10, the County of Cumberland—Inglis C. Craig, A. M., Amherst.  
Division No. 11, the County of Cape Breton—T. M. Phelan, A. M., LL. B., North Sydney.  
Division No. 12, the County of Colchester—W. R. Campbell, A. M., Truro.

## ADVISORY BOARD OF EDUCATION.

William Cameron, B. A., Pictou, *Chairman*.  
Howard Murray, LL. D., Halifax.  
A. G. Macdonald, M. A., Antigonish.  
W. F. Kempton, B. A., Yarmouth.  
E. J. Lay, Esq., Amherst.  
Burgess McKittrick, B. A., Lunenburg, *Secretary*.

---

## PROVINCIAL EXAMINERS.

David Allison, LL. D., *Greek and Latin*.  
Archibald MacMechan, Ph. D., *Anglo-Saxon*.  
Rev. C. E. Willets, D. C. L., *Higher English*.  
J. B. Curry, *English of Grade I X*.  
James Liechti, LL. D., *French and German*.  
Rev. Wm. Foley, D. D., *History*.  
J. B. Calkin, LL. D., *Geography*.  
John Waddell, D. Sc., *The Sciences*.  
A. G. Macdonald, M. A., *The Practical Mathematics*.  
F. R. Haley, M. A., *Algebra*.  
I. B. Oakes, M. A., *Geometry*.  
Alexander McKay, M. A., *Drawing and M. P. Q.*  
J. B. Hall, Ph. D., *M. P. Q. subjects*.

---

## NOVA SCOTIA NORMAL COLLEGE, TRURO.

### Regular Staff.

David Soloan, B. A., LL. D., *Principal, Principles of Pedagogy, Language, History*.  
John B. Calkin, A. M., LL. D., *Emeritus Professor of Psychology and Pedagogy*.  
Miss Ottie A. Smith, *Drawing and Calisthenics*.  
J. Alphonse Benoit, B. A., *Method in Mathematics and Physics, French*.  
Edward W. Connolly, B. A., *Hygiene, Physiology, Commercial Branches*.  
Leslie C. Harlow, B. Sc., B. S. A., *Method in Nature Study, Biology, Chemistry, Mineralogy*.  
Mrs. Edna C. Harper, M. A., *Elocution, English Literature, Music*.  
Loran A. DeWolfe, B. Sc., M. Sc., *Physiography, Plant Study, Mathematical Drawing*.

---

### Affiliated Staff of Normal College.

F. G. Matthews, *Principal, Truro Mechanic Science School*.  
A. H. Trevo, *Truro Mechanic Science School*.  
Miss Myrtle McCallum, *Principal, Truro School of Domestic Science*.  
Miss Bessie M. Smith, *Truro School of Domestic Science*.  
Miss Agnes Mackenzie, *Principal, Truro Kindergarten*.  
Miss Morgan, *Truro, Kindergarten*.  
D. G. Davis, M. A., *Director of Teaching-practice in Truro Schools*.  
M. Cumming, B. A., B. S. A., *Principal, College of Agriculture, and staff*.

## NOVA SCOTIA COLLEGE OF AGRICULTURE, TRURO.

### Regular Staff.

- M. Cumming, B. A., B. S. A., *Principal and Lecturer in Animal Husbandry, Agriculture and Bacteriology.*  
H. W. Smith, B. Sc., *Professor of Biology.*  
P. J. Shaw, B. A., *Professor of Horticulture and Nature Study.*  
P. J. Shaw, B. A., *Professor of Horticulture and Nature Study.*  
E. S. Archibald, B. A., B. S. A., *Professor of Agriculture and Animal Husbandry.*  
J. Standish, V. S., *Professor of Veterinary Science.*  
J. P. Landry, *Manager and Lecturer in Poultry Department.*  
B. H. Landells B. S. A., *Experimentalist and Drainage Expert.*

### Affiliated.

- L. C. Harlow, B. S. A., B. Sc., (*Member of Normal College Staff*),  
*Lecturer in Chemistry.*  
E. W. Connoly, B. A., (*Member of Normal College Staff*), *Lecturer in Mathematics.*  
W. R. Campbell, M. A., (*Inspector of Schools*), *Lecturer in English.*  
F. G. Matthews, (*Principal Truro Mechanic Science School*), *Lecturer in Mechanical Drawing and Carpentering.*  
C. W. McDougall, (*Dairying Superintendent, Province of New Brunswick*), *Lecturer in Dairying.*  
J. E. Barteaux, M. A., (*Member Technical Education Staff*), *Lecturer in Physics.*

Miss M. P. Blair, *Secretary and Stenographer.*

## RURAL SCIENCE SCHOOL, TRURO.

- M. Cumming, B. A., B. S. A., *Local Director.*  
Loran A. DeWolfe, B. Sc., M. Sc., *Vice-Director.*

## TECHNICAL EDUCATION.

- Frederic H. Sexton, S. B., *Director.*  
J. E. Barteaux, M. A., *Inspector of Evening Technical Schools.*

## NOVA SCOTIA TECHNICAL COLLEGE, HALIFAX.

- F. H. Sexton, S. B., *Principal and Prof. of Mining and Metallurgy.*  
W. S. Ayars, E. E., *Prof. of Electrical and Mechanical Engineering.*  
J. W. Roland, S. B., *Prof. of Civil Engineering.*  
E. A. Holbrook, S. B., *Asst. Prof. of Mining and Metallurgy.*  
C. A. Hodge, S. B., *Instructor in Mining and Metallurgy.*  
C. F. Murphy, B. E., *Instructor in Mining and Metallurgy.*  
F. M. Dawson, S. B., *Instructor in Civil Engineering.*

- H. Piers, *Librarian and Curator of Museum.*  
Miss L. B. Taylor, *Secretary.*  
W. J. Butler, Jr., *Engineer.*

## PROVINCIAL AID

To Teachers employed in the Public Schools  
for the half year ended, Feb. 2nd, 1912.

The Asterisk (\*) marks those employed  
in Poor Sections.

|                       | Number of Teaching<br>Days employed. | Am't paid to Teach-<br>ers from Provincial<br>Treasury. |                       |     |       |
|-----------------------|--------------------------------------|---|-----------------------|-----|-------|
| ANNAPOLIS.            |                                      |   |                       |     |       |
| Martin O. McNutt      | 98                                   | 99 87   | Wheclock Mildred E.   | 98  | 57 07 |
| Ruggles Lenfest       | 102                                  | 103 97  | Withers Lulu B.       | 103 | 60 00 |
| Whitman Elbert J.     | 102                                  | 59 41   | Woodward Lola M.      | 103 | 60 00 |
| Balcom Irene C.       | 19                                   | 11 05   | Woodworth B. May      | 103 | 60 00 |
| Banks Beriah S.       | 103                                  | 60 00   | Baker Ermina M.       | 25  | 10 91 |
| Banks Wilford E.      | 102½                                 | 59 70   | Baker Kathleen A.     | 103 | 45 00 |
| Berry Ruperta L.      | 63                                   | 36 69   | Banks Ida B.          | 103 | 45 00 |
| Bowlby Jessie I.      | 103                                  | 60 00   | Brinton Birdie P.     | 103 | 45 00 |
| Bowser M. Frances     | 103                                  | 60 00   | Chute Zephina B.      | 103 | 45 00 |
| Brooks Estella M.     | 103                                  | 60 00   | Crowe Bessie H.       | 98  | 42 80 |
| Bustin Harry L.       | 98                                   | 57 07   | Ellis Florence M.     | 20  | 8 72  |
| Charlton Mabel E.     | 103                                  | 60 00   | Hall Eunice M.        | 103 | 45 00 |
| Chesley Carrie E.     | 102                                  | 59 41   | Hebb Maud G.          | 103 | 45 00 |
| Chivers Gladys P.     | 103                                  | 60 00   | Hoyt Bessie G.        | 103 | 45 00 |
| Chute Flossie H.      | 103                                  | 60 00   | Hutchinson Nina B.    | 102 | 44 56 |
| Davis May T.          | 103                                  | 60 00   | Jackson Annie L.      | 103 | 45 00 |
| Dexter, Mattie A. G.  | 103                                  | 60 00   | Laird Elizabeth E.    | 98  | 42 80 |
| Durling, Ina          | 103                                  | 60 00   | Locke F. Alberta      | 103 | 45 00 |
| Elliott, Sr. Primrose | 79                                   | 46 01   | Longley Annie G.      | 51  | 22 27 |
| Gesner, Agnes P.      | 103                                  | 60 00   | Margeson Hanna L.     | 98  | 42 80 |
| Gilliatt, Ruth E.     | 103                                  | 60 00   | McBride Bessie V.     | 103 | 45 00 |
| Gormley, Katherine I. | 103                                  | 60 00   | McCormick Albert E.   | 103 | 45 00 |
| Graves, Ena E.        | 103                                  | 60 00   | Mills Hattie G.       | 103 | 45 00 |
| Graves Laura H.       | 98                                   | 57 07   | Morse Nellie C.       | 51½ | 22 49 |
| Hardwicke Helen M.    | 103                                  | 60 00   | Nauglar Lilla M.      | 103 | 45 00 |
| Harris C. Louise      | 98                                   | 57 07   | Patterson Lulu M.     | 103 | 45 00 |
| Lee Minnie M.         | 103                                  | 60 00   | Phinney Jennie D.     | 103 | 45 00 |
| Longley Ella F.       | 102                                  | 59 41   | Phinney Mary S.       | 103 | 45 00 |
| Longley Hilda M.      | 103                                  | 60 00   | Roy Maud E.           | 103 | 45 00 |
| McGill Flora M.       | 103                                  | 60 00   | Ruggles Annie B.      | 103 | 45 00 |
| McGinnis Gladys R.    | 103                                  | 60 00   | Shortliffe Nina M.    | 101 | 44 12 |
| McMurtery Haidee P.   | 103                                  | 60 00   | Simpson Lizzie M.     | 53  | 23 15 |
| McWhinnie Elizabeth   | 103                                  | 60 00   | Trimper Catherine R.  | 88  | 38 43 |
| Neily Edith M.        | 94                                   | 54 74   | Troop Beatrice E.     | 102 | 44 56 |
| Palfrey Mary M.       | 98                                   | 57 07   | Troop Bessie L.       | 103 | 45 00 |
| Phillips Carrie E. B. | 103                                  | 60 00   | Wambolt Gertrude V.   | 103 | 45 00 |
| Phinney M. Gwendolyn  | 103                                  | 60 00   | Whitman Minnie C.     | 102 | 44 56 |
| Robbins Myrtle J.     | 98                                   | 57 07   | Withrow Elsie M.      | 101 | 44 12 |
| Ruggles Florence L.   | 102                                  | 59 41   | Young Flossie C.      | 103 | 45 00 |
| Snow Delma            | 74                                   | 43 09   | *Acker Fleulah B.     | 54  | 20 97 |
| Spinney Hattie S.     | 103                                  | 60 00   | Andrews Nina B.       | 98½ | 28 68 |
| Spinney Theo. H.      | 100                                  | 58 25   | Armstrong Mary M.     | 102 | 29 70 |
| Thorne Alice E.       | 103                                  | 60 00   | Beardsley Jos. D.     | 103 | 30 00 |
| Tibert Walton K.      | 103                                  | 60 00   | Bent Rhoda M.         | 103 | 30 00 |
| VanBuskirk John L.    | 103                                  | 60 00   | *Buckler Alma L.      | 103 | 40 00 |
| Wade Edna M.          | 103                                  | 60 00   | Calnek Anna A.        | 103 | 30 00 |
|                       |                                      |   | *Campbell Irma B.     | 42  | 16 31 |
|                       |                                      |   | *Campbell Mary L.     | 89  | 34 56 |
|                       |                                      |   | Chute Sadie J.        | 78  | 22 71 |
|                       |                                      |   | Crawford Lillian E.   | 89  | 25 91 |
|                       |                                      |   | Dargie Charlotte E.   | 88  | 25 62 |
|                       |                                      |   | Downie Helena G.      | 103 | 30 00 |
|                       |                                      |   | Elliott Mabel I.      | 103 | 30 00 |
|                       |                                      |   | Fairn Bessie C.       | 103 | 30 00 |
|                       |                                      |   | Fairn Henrietta M.    | 102 | 29 70 |
|                       |                                      |   | Gilliatt Robie C.     | 89  | 25 91 |
|                       |                                      |   | Goodspeed Claire V.   | 103 | 30 00 |
|                       |                                      |   | Harris Mildred L.     | 103 | 30 00 |
|                       |                                      |   | Hassett Helena        | 86  | 25 04 |
|                       |                                      |   | Hayes W. Evangeline   | 98  | 28 53 |
|                       |                                      |   | Hiltz Cora E.         | 93  | 27 08 |
|                       |                                      |   | Hinds Elsie L.        | 103 | 30 00 |
|                       |                                      |   | Holmes Iola M.        | 103 | 30 00 |
|                       |                                      |   | *Jackson Lena M.      | 102 | 39 61 |
|                       |                                      |   | *Lambertson Minnie G. | 86  | 33 39 |
|                       |                                      |   | Lambertson Myrtle F.  | 103 | 30 00 |
|                       |                                      |   | Longley Cora M.       | 103 | 30 00 |

|                         |     |    |    |
|-------------------------|-----|----|----|
| Mappelbeck Elizabeth D. | 89  | 25 | 91 |
| McMurtery Mildred E.    | 103 | 30 | 00 |
| Miller Bessie B.        | 102 | 29 | 70 |
| Millett Kathleen S.     | 81  | 23 | 59 |
| *Morton Tessie          | 88  | 34 | 17 |
| *Neily Pauline A.       | 89  | 34 | 56 |
| *Newcombe Florence B.   | 103 | 40 | 00 |
| Phinney Annie M.        | 98  | 28 | 53 |
| Potter Mary E.          | 103 | 30 | 00 |
| Reagh Mildred L.        | 88  | 25 | 62 |
| Sanders E. Grace        | 103 | 30 | 00 |
| *Saunders Ruth H.       | 58  | 22 | 52 |
| *Sawler Pearl M.        | 64  | 24 | 85 |
| *Simpson Gladys J.      | 74  | 28 | 73 |
| Slocomb Louis W.        | 84  | 24 | 46 |
| Stoddard Elena H.       | 103 | 30 | 00 |
| *Todd Mabel G.          | 87  | 33 | 78 |
| Tompkins Grace          | 54  | 15 | 72 |
| Tupper Fannie C.        | 103 | 45 | 00 |
| *Wagner Sadie E.        | 103 | 40 | 00 |
| Wood Bernard G.         | 103 | 30 | 00 |
| *Wright Elta M.         | 83  | 32 | 23 |
| *Wright Lena B.         | 89  | 34 | 56 |

**Annuitants.**

|                       |    |    |
|-----------------------|----|----|
| Shaffner Sam C.       | 75 | 00 |
| Brown Alfred D.       | 60 | 00 |
| Munroe Henry          | 60 | 00 |
| Richardson Rebecca A. | 60 | 00 |
| Vidito Helen A.       | 60 | 00 |
| Jones Watson C.       | 45 | 00 |
| Sanders Arthur W.     | 45 | 00 |

**ANTIGONISH.**

|                          |     |    |    |
|--------------------------|-----|----|----|
| Coady, Moses M.          | 84  | 73 | 36 |
| Sr. St. Thomas des Auges | 103 | 75 | 00 |
| Tompkins, J. J.          | 84  | 85 | 61 |
| McLeod, John W.          | 84  | 73 | 36 |
| Porter, Sadie E.         | 103 | 90 | 00 |
| Sister St. Leonard       | 103 | 90 | 00 |
| Chisholm, William J.     | 103 | 60 | 00 |
| Hulbert, Hazel D.        | 103 | 60 | 00 |
| McAmis, Katie            | 103 | 60 | 00 |
| Macdonald, Mary C.       | 102 | 59 | 41 |
| Macdonald, Sadie         | 97  | 56 | 49 |
| McKenzie, Dan J.         | 92  | 53 | 58 |
| Sister M. Leonora        | 103 | 60 | 00 |
| Somers, Alexander M.     | 103 | 60 | 00 |
| Chisholm, Dan M.         | 79  | 34 | 50 |
| Chisholm, Christina      | 87  | 37 | 99 |
| Cameron, Mary C.         | 98  | 42 | 80 |
| Cameron, Sarah           | 98  | 42 | 80 |
| Cameron, Dannie          | 102 | 44 | 56 |
| Faugere, Remi            | 103 | 45 | 00 |
| Gillis, Margaret         | 100 | 43 | 68 |
| Hattie, John D.          | 92  | 40 | 18 |
| Leydon, Anastasia        | 103 | 45 | 00 |
| Morgan, Edith            | 98  | 42 | 80 |
| Mullins, Annie J.        | 99  | 43 | 24 |
| Macdonald, Anna B.       | 103 | 45 | 00 |
| Macdonald, Sadie E.      | 78  | 34 | 06 |
| Macdonald, Margaret J.   | 103 | 45 | 00 |

|                            |     |    |    |
|----------------------------|-----|----|----|
| Macdonald, A. T.           | 19  | 8  | 28 |
| McEachern, Elizabeth       | 103 | 45 | 00 |
| McGillivray, Rose          | 101 | 44 | 12 |
| McKenzie, Gertrude         | 103 | 45 | 00 |
| McKeough, Anna             | 99  | 43 | 24 |
| Purcell, Mary Hilda        | 103 | 45 | 00 |
| Rogers, William J.         | 103 | 45 | 00 |
| Stewart, Catherine E.      | 103 | 45 | 00 |
| Sister St. Hugh            | 103 | 45 | 00 |
| Sister St. Walburga        | 103 | 45 | 00 |
| Sr. St. Mary Matilda       | 103 | 45 | 00 |
| Sister M. Irene            | 103 | 45 | 00 |
| Sister Rose Berchmans      | 103 | 45 | 00 |
| Beaton, Janet              | 89  | 25 | 91 |
| Boyle Catherine            | 93  | 27 | 08 |
| Boyle Mary                 | 90  | 26 | 21 |
| Chisholm, Margaret M.      | 103 | 30 | 00 |
| Chisholm, Mary C.          | 101 | 29 | 41 |
| Crispo, Sadie Ellen        | 66  | 19 | 21 |
| Fitzgerald, Annie          | 103 | 30 | 00 |
| Forrestall, Evelyn E.      | 102 | 29 | 70 |
| Gillis, Sadie              | 103 | 30 | 00 |
| Homer, Catherine C.        | 86  | 25 | 04 |
| Leydon, Jean F.            | 103 | 30 | 00 |
| Mariin, Ellen              | 96  | 27 | 95 |
| McArthur, Janet            | 102 | 29 | 70 |
| Macdonald, Annie           | 102 | 29 | 70 |
| Macdonald, Mary            | 87  | 25 | 33 |
| Macdonald, Mary C.         | 97  | 28 | 24 |
| Macdonald, Henrietta       | 98  | 28 | 53 |
| Macdonald, Catherine       | 94  | 27 | 37 |
| Macdonald, Laura B.        | 103 | 30 | 00 |
| Macdonald, Catherine M.    | 86  | 25 | 04 |
| Macdougall, Hyacintha      | 97  | 28 | 24 |
| McEachern, Penelope        | 89  | 25 | 91 |
| McInnis, Annie             | 86  | 25 | 04 |
| McInnis Annie              | 88  | 25 | 62 |
| McPherson, Sarah           | 78  | 22 | 77 |
| Purcell, Jennie A.         | 103 | 30 | 00 |
| Sister St. Thomas de S. C. | 103 | 30 | 00 |
| Sister St. Helen           | 103 | 30 | 00 |

**In Poor Sections.**

|                         |     |    |    |
|-------------------------|-----|----|----|
| Boyd, Effie Ann         | 100 | 38 | 83 |
| Bray, James J.          | 62  | 24 | 07 |
| Chisholm, Florence      | 89  | 34 | 56 |
| Chisholm, Margaret A.   | 74  | 28 | 73 |
| Cameron, Annie          | 86  | 33 | 39 |
| Campbell, Mary          | 93  | 36 | 11 |
| Decoste, Florence R.    | 88  | 34 | 17 |
| Macdonald, Harriett F.  | 89  | 34 | 56 |
| Macdonald, Annie M.     | 99  | 38 | 45 |
| Macdonald, Carrie A.    | 84  | 32 | 62 |
| McGillivray Margaret A. | 103 | 40 | 00 |
| Ross, Christina M.      | 94  | 36 | 50 |
| Stewart, Sadie D.       | 103 | 40 | 00 |
| Watkins, Isabel         | 77  | 29 | 90 |

**Special Poor Sections.**

|               |    |    |
|---------------|----|----|
| College Grant | 30 | 00 |
|---------------|----|----|

**Consolidated Schools.**

|                  |    |    |    |
|------------------|----|----|----|
| West River, 2 D. | 98 | 57 | 06 |
|------------------|----|----|----|

## Annuitants.

|                     |    |    |
|---------------------|----|----|
| Chisholm, Alexander | 75 | 00 |
| Gillis, Angus       | 60 | 00 |
| Gillis, D. McK.     | 60 | 00 |
| Boyd, Angus A.      | 45 | 00 |
| Bonin, John B.      | 45 | 00 |
| Cameron, Wm. D.     | 45 | 00 |
| Fraser, William     | 45 | 00 |
| Macdonald, Donald   | 30 | 00 |

## Assistants.

|                 |    |       |
|-----------------|----|-------|
| McPherson, Hugh | 84 | 40 76 |
| Connolly, C. J. | 84 | 32 62 |
| Cormier, A. H.  | 84 | 24 46 |

## CAPE BRETON.

|                       |     |        |
|-----------------------|-----|--------|
| Archibald, John T.    | 98  | 85 60  |
| Bingay, James         | 98  | 99 87  |
| Crcelman, William A.  | 98  | 99 87  |
| Davidson, Milton D.   | 103 | 105 00 |
| Dodds, Agnes A.       | 98  | 71 32  |
| Ellis, Russel         | 98  | 85 60  |
| Haverstock, W. Ernest | 103 | 105 00 |
| Keating, Florence M.  | 93  | 81 24  |
| MacRae, Mary I.       | 98  | 71 32  |
| Matheson, Duncan M.   | 94  | 82 12  |
| Smith, Gertrude O.    | 98  | 85 60  |
| Trask, J. Logan       | 98  | 85 60  |
| Douglas, Havelock G.  | 103 | 75 00  |
| Smith, Lenore         | 103 | 75 00  |
| Whyte, Earle F.       | 101 | 73 53  |
| Aikins, Charles E.    | 103 | 60 00  |
| Anderson, M. Blanche  | 103 | 60 00  |
| Arsenault, M. Teresa  | 103 | 60 00  |
| Baizley, Abby B.      | 5   | 2 91   |
| Barss, Muriel J.      | 103 | 60 00  |
| Bishop, Emma E.       | 10  | 5 82   |
| Bown, Eleanor F.      | 103 | 60 00  |
| Burke, Domatella M.   | 101 | 58 83  |
| Burrill, Harold O.    | 102 | 59 41  |
| Cameron, Charlotte A. | 95  | 55 33  |
| Campbell, Lizzie M.   | 98  | 57 07  |
| Cann, Lillian         | 103 | 60 00  |
| Carson, Teresa B.     | 103 | 60 00  |
| Chisholm, Jennie      | 98  | 57 07  |
| Crowell, Annie E.     | 103 | 60 00  |
| Curry, Delila Pearz   | 8   | 4 65   |
| Dawson, J. Arthur     | 103 | 60 00  |
| Dawson, J. Arthur     | 9   | 5 23   |
| Doyle, Cecilia J. M.  | 97  | 56 49  |
| Edgecombe, Ethel L.   | 98  | 57 07  |
| Egan, Carlotta        | 103 | 60 00  |
| Foley, Mary E.        | 98  | 57 07  |
| Fownes, Grace M.      | 98  | 57 07  |
| Fulton, Edith Irene   | 98  | 57 07  |
| Fulton, Elora A.      | 98  | 57 07  |
| Fulton, Lillian M.    | 103 | 60 00  |
| Fulton, M. Eurrella   | 98  | 57 07  |
| Gannon, Mary          | 98  | 57 07  |
| Gates, Lena M.        | 103 | 60 00  |
| Gillis, Katherine     | 103 | 60 00  |
| Gillis, Simon P.      | 98  | 57 07  |

|                        |     |       |
|------------------------|-----|-------|
| Goode, Myrtle M.       | 98  | 57 07 |
| Graham, Bessie F.      | 98  | 57 07 |
| Grant, Jessie M.       | 98  | 57 07 |
| Greenwell, Bertha L.   | 103 | 60 00 |
| Gunn, Annie            | 103 | 60 00 |
| Gunn, Jessie A.        | 103 | 60 00 |
| Harrison, Edna M.      | 103 | 60 00 |
| Hennessey, Martha J.   | 102 | 59 41 |
| Hoar, Daniel W.        | 103 | 60 00 |
| Irwin, Margaret J.     | 98  | 57 07 |
| Kay, Mary E.           | 103 | 60 00 |
| Kilpatrick, Hattie     | 103 | 60 00 |
| Kinley, Florence E.    | 95  | 55 33 |
| Lawley, James H.       | 88  | 51 24 |
| Lumsden, Mary E.       | 84  | 48 92 |
| MacDougall, Jean       | 98  | 57 07 |
| MacIntosh, Anna B.     | 98  | 57 07 |
| MacIntosh, Grace A.    | 64  | 37 27 |
| McKenzie, Daniel A.    | 98  | 57 07 |
| MacLean Christena      | 103 | 60 00 |
| McLean, S. Agnes       | 98  | 57 07 |
| McLean, William        | 84  | 48 92 |
| MacLennan, Florence    | 98  | 57 07 |
| MacLennan, Josephine   | 98  | 57 07 |
| MacMillan, Katherine   | 103 | 60 00 |
| McMillan, Victoria K.  | 94  | 54 74 |
| MacNiel, Jennie E.     | 98  | 57 07 |
| MacNeil, Katie         | 103 | 60 00 |
| McPhee, Annie          | 103 | 60 00 |
| Milburn, Verna V.      | 103 | 60 00 |
| Miller, Katherine F.   | 103 | 60 00 |
| Mingo, Irene Eva       | 103 | 60 00 |
| Munroe, Mary C.        | 101 | 58 83 |
| Oulton, Charles A.     | 98  | 57 07 |
| Parker, Lillian        | 95  | 55 33 |
| Robertson, Edith       | 103 | 60 00 |
| Robinson, Stewart I    | 98  | 57 07 |
| Schurman, Sadie        | 98  | 57 07 |
| Simpson, A. Olive P    | 103 | 60 00 |
| Sister Agnes Maria     | 98  | 57 07 |
| Sister M. Alonzo       | 48  | 27 95 |
| Sister M. Ambrosia     | 103 | 60 00 |
| Sister M. Angela       | 93  | 57 07 |
| Sister M. Annette      | 38  | 57 07 |
| Sister M. Chrysostom   | 88  | 51 24 |
| Sister M. Clarissa     | 103 | 60 00 |
| Sister M. Cleophas     | 98  | 37 07 |
| Sister M. Gerard       | 97  | 56 49 |
| Sister M. Josita       | 98  | 57 07 |
| Sister M. Lawrence     | 103 | 60 00 |
| Sister Rose Maria      | 103 | 60 00 |
| Sister St. Bernard     | 98  | 57 07 |
| Sister St. M. Aloysins | 98  | 57 07 |
| Sister St. Mary Asc.   | 103 | 60 00 |
| Smith, Jessie P.       | 98  | 57 07 |
| Stalker, Elizabeth J.  | 103 | 60 00 |
| Sullivan, Marie        | 103 | 60 00 |
| Sutherland, Mary       | 98  | 57 07 |
| Thurber, Ronald E.     | 98  | 57 07 |
| Townsend, Tillie F.    | 103 | 60 00 |
| Walker, Jean R.        | 103 | 60 00 |
| Wilton, Richard T.     | 98  | 57 07 |
| Withrow, Helena H.     | 103 | 60 00 |
| Woodbury, Harold C.    | 103 | 60 00 |
| Woodill, Arthur W.     | 98  | 57 07 |
| Anderson, Isabella     | 98  | 42 80 |
| Boutilier, Alice R.    | 103 | 45 00 |



|                       |      |    |    |                       |     |    |    |
|-----------------------|------|----|----|-----------------------|-----|----|----|
| Boyle, Harriett M.    | 100½ | 43 | 90 | Moore, Elizabeth      | 98  | 42 | 80 |
| Broderick, Annie      | 103  | 45 | 00 | Morrison, Lottie M.   | 103 | 45 | 00 |
| Browner, Florence V.  | 103  | 45 | 00 | Morrison, Margaret    | 103 | 45 | 00 |
| Burke, Helena B.      | 92   | 40 | 18 | Nicholson, Mary V.    | 102 | 44 | 56 |
| Burrell, Narcisse A.  | 88   | 38 | 43 | Phillips, Katie E.    | 50  | 21 | 84 |
| Cameron, Annie        | 98   | 42 | 80 | Phoran, Alice         | 103 | 45 | 00 |
| Campbell, Elizabeth   | 97   | 42 | 37 | Purcill, Alice        | 84  | 36 | 68 |
| Currie, Charlotte S.  | 99   | 43 | 24 | Sampson, Mary E.      | 103 | 45 | 00 |
| Currie, Donald J.     | 103  | 45 | 00 | Simpson, Margaret J.  | 103 | 45 | 00 |
| Currie, Michael D.    | 96   | 41 | 93 | Sister M. Ambrose     | 103 | 45 | 00 |
| Currie, Teresa        | 98   | 42 | 80 | Sister M. Annina      | 103 | 45 | 00 |
| Curry, Alice B.       | 98   | 42 | 80 | Sister M. Cammillus   | 98  | 42 | 80 |
| Donovan, Catherine    | 98   | 42 | 80 | Sister M. Eulalia     | 98  | 42 | 80 |
| Downing, Florence C.  | 98   | 42 | 80 | Sister M. Isadore     | 98  | 42 | 80 |
| Fox, Edith I.         | 102  | 44 | 56 | Sister M. Leonard     | 98  | 42 | 80 |
| Francis, Hildred O.   | 103  | 45 | 00 | Sister M. Lucina      | 103 | 45 | 00 |
| Fraser, Lulu F.       | 98   | 42 | 80 | Sister M. Oswald      | 103 | 45 | 00 |
| Fyfe, Magdalen M.     | 103  | 45 | 00 | Sister M. Pelagia     | 103 | 45 | 00 |
| Gillis, Margaret      | 98   | 42 | 80 | Sister M. Stephen     | 98  | 42 | 80 |
| Gillis, Mary D.       | 103  | 45 | 00 | Sister M. Thomas      | 98  | 42 | 80 |
| Gillis, Minnie        | 102  | 44 | 56 | Sister M. Veronica    | 98  | 42 | 80 |
| Goodwin, Leda M.      | 103  | 45 | 00 | Sister M. Wilfrid     | 103 | 45 | 00 |
| Greig, Ida H.         | 103  | 45 | 00 | Sister St. Aldric     | 98  | 42 | 80 |
| Hamilton, Agnes E.    | 98   | 42 | 80 | Sister St. Alexander  | 103 | 45 | 00 |
| Harris, Gladys E.     | 98   | 42 | 80 | Sister St. Augustine  | 98  | 42 | 80 |
| Hartigan, Helen       | 98   | 42 | 80 | Sister St. Berthold   | 14  | 6  | 10 |
| Hartigan, Katherine   | 50   | 21 | 84 | Sister St. Casilda    | 83  | 36 | 25 |
| Johnston, Agatha      | 101  | 44 | 12 | Sister St. Frances    | 98  | 42 | 80 |
| Johnston, Mary C.     | 98   | 42 | 80 | Sister St. Genevieve  | 98  | 42 | 80 |
| Kavanagh, Eva C.      | 101  | 44 | 12 | Sister St. Henedine   | 103 | 45 | 00 |
| Kelley, Amy R.        | 103  | 45 | 00 | Sister St. John C.    | 103 | 45 | 00 |
| Kerr, Annie F.        | 103  | 45 | 00 | Sister St. Reginald   | 98  | 42 | 80 |
| Knowlton, Edith       | 96   | 41 | 93 | Slaven, Elizabeth M.  | 103 | 45 | 00 |
| Lamb, Leah M.         | 103  | 45 | 00 | White, Minnie M.      | 98  | 42 | 80 |
| Macaulay, Ida M.      | 10   | 4  | 36 | Adamson, Mary         | 103 | 30 | 00 |
| McCarthy, Helen       | 103  | 45 | 00 | Battersby, Ethel E.   | 102 | 29 | 70 |
| McCormick, Katherine  | 103  | 45 | 00 | Baxendale, Annie      | 79  | 23 | 00 |
| McDonald, Annie C.    | 82   | 35 | 81 | Cameron, Hazel B.     | 100 | 29 | 12 |
| McDonald, Daisy F.    | 98   | 42 | 80 | Campbell, Florence M. | 98  | 28 | 53 |
| McDonald, Edith       | 98   | 42 | 80 | Campbell, Margaret    | 96  | 27 | 95 |
| McDonald, Jean F.     | 98   | 42 | 80 | Campbell, Maud L.     | 3   | 87 |    |
| McDonald, Joanna      | 98   | 42 | 80 | Carmichael, Jessie    | 103 | 30 | 00 |
| McDonald, Mary L.     | 98   | 42 | 80 | Chisholm, Cassie      | 96  | 27 | 95 |
| McDonald, Nellie      | 98   | 42 | 80 | Coady, Margaret A.    | 103 | 30 | 00 |
| McDonald, Norman      | 18   | 7  | 84 | Connors, Michael C.   | 98  | 28 | 53 |
| McDonald, Sarah A.    | 90   | 39 | 31 | Cozzolino, Gertrude   | 15  | 4  | 36 |
| McDonald, Theresa     | 87   | 37 | 99 | Crews, Myra A.        | 103 | 30 | 00 |
| McDougall, Mabel      | 98   | 42 | 80 | Currie, Jessie        | 83  | 24 | 17 |
| MacInnis, Dorothea    | 103  | 45 | 00 | Daley, Annie S.       | 98  | 28 | 53 |
| McIntyre, Matilda     | 98   | 42 | 80 | Dillon, Agnes W.      | 98  | 28 | 53 |
| MacIsaac, Elizabeth   | 98   | 42 | 80 | Doyle, Daniel H.      | 103 | 30 | 00 |
| MacIsaac, J. Agnes    | 15   | 6  | 54 | Forbes, Florence      | 98  | 28 | 53 |
| MacIsaac, Margaret    | 98   | 42 | 80 | Fraser, Josephine     | 98  | 28 | 53 |
| MacIsaac, Mary C.     | 98   | 42 | 80 | Gillis, Margaret      | 103 | 30 | 00 |
| MacKenzie, John K.    | 103  | 45 | 00 | Gillis, Margaret E.   | 103 | 30 | 00 |
| MacKenzie, Josephine  | 103  | 45 | 00 | Gillis, Mary E.       | 98  | 28 | 53 |
| MacKinnon, Jessie M.  | 98   | 42 | 80 | Gillis, Rose A.       | 51  | 14 | 85 |
| MacKinnon, Katie      | 98   | 42 | 80 | Gouthro, Lillian E.,  | 100 | 29 | 12 |
| MacKinnon, Sayde      | 103  | 45 | 00 | Ingraham, Grettie I.  | 103 | 30 | 00 |
| MacLean, Christine V. | 96   | 41 | 93 | Jameson, Roberta      | 98  | 28 | 53 |
| MacLean, Rachel I.    | 102  | 44 | 56 | Johnston, Catherine   | 101 | 29 | 41 |
| MacLean, Cecilia I.   | 103  | 45 | 00 | King, Alice B.        | 99  | 28 | 82 |
| McLeod, Elizabeth     | 98   | 42 | 80 | Leonard, Dollie       | 100 | 29 | 12 |
| McLeod, Kathleen R.   | 3    | 1  | 30 | Macaulay, Katherine   | 100 | 29 | 12 |
| McNeil, Annie L.      | 98   | 42 | 80 | McCormick, Mary       | 103 | 30 | 00 |
| McNeil, Minnie A.     | 103  | 45 | 00 | McDonald, Anna F.     | 88  | 25 | 62 |
| MacRae, Alice M.      | 95   | 41 | 49 | McDonald, John        | 88  | 25 | 62 |

|                          |     |       |                              |     |        |
|--------------------------|-----|-------|------------------------------|-----|--------|
| McDonald, Margaret M.    | 77  | 22 42 | MacMillan, Florence V.       | 57  | 22 13  |
| MacDonald, Mary          | 89  | 25 91 | Townshend, Laura H.          | 89  | 34 56  |
| Macdonald, Mary S.       | 98  | 28 53 |                              |     |        |
| MacDonald, Peter         | 103 | 30 00 | <b>Consolidated Schools.</b> |     |        |
| MacDonald, Roland J.     | 60  | 17 47 | The Meadows, 1 D.            | 98  | 28 53  |
| Macdonald, Teresa B.     | 103 | 30 00 | Ocean View, 1 D.             | 96  | 27 95  |
| MacGillivray, Mary A.    | 100 | 29 12 | East Bay, 3 D.               | 97  | 84 72  |
| MacGillivray, Mildred F. | 10  | 2 91  |                              |     |        |
| MacGrigor, Minnie        | 102 | 29 70 | <b>Annuitants.</b>           |     |        |
| MacInnes, Margaret M.    | 99  | 28 82 | McDonald, Joseph             |     | 60 00  |
| MacIsaac, K. Agatha      | 81  | 23 59 | Garrett, Charles V.          |     | 45 00  |
| MacIsaac, Margaret       | 98  | 28 53 | McDougall, Philip            |     | 45 00  |
| MacKay, Georgina M.      | 97  | 28 24 | McMillan, Fanny              |     | 30 00  |
| McKenzie, Theresa        | 103 | 30 00 |                              |     |        |
| McKinnon, Martin W.      | 89  | 25 91 | <b>Assistant.</b>            |     |        |
| McKinnon, Sadie M.       | 102 | 29 70 | Fyfe, Honora                 |     | 23 29  |
| MacLean, Myrtle L.       | 51  | 14 85 |                              |     |        |
| McLellan, Mary           | 8   | 2 33  | <b>COLCHESTER.</b>           |     |        |
| McNeil, Katie J.         | 103 | 30 00 | <b>South.</b>                |     |        |
| MacNeill, Loretto        | 48  | 13 97 | Davis, D. G.                 | 103 | 105 00 |
| Macneil, Vincent         | 92  | 26 79 | Archibald, G. G.,            | 103 | 90 00  |
| Madomer, Henrietta J.    | 98  | 28 53 | England, H. E.               | 103 | 90 00  |
| Matheson, Sarah          | 103 | 30 00 | Hibbert, T. M.               | 103 | 90 00  |
| Mattatall, Florence      | 103 | 30 00 | Osborne, N. A.               | 103 | 90 00  |
| Miller, Mary E.          | 68  | 19 79 | Richardson, Euphemia         | 103 | 75 00  |
| Munn, Ella               | 99  | 28 82 | Mosher, Amy                  | 103 | 60 00  |
| Nicholson, Katie         | 90  | 26 21 | Linton, Alice                | 103 | 59 41  |
| Nickerson, Margaret      | 98  | 28 53 | Baltzer, Nettie L.           | 102 | 60 00  |
| Power, Elizabeth M.      | 101 | 29 41 | Bradley, Anne E.             | 103 | 60 00  |
| Rose, Janet F.           | 20  | 5 82  | Brown, Bertha                | 103 | 60 00  |
| Ross, Margaret M.        | 103 | 30 00 | Cossett, Ethel J.            | 103 | 60 00  |
| Sampson, Clara M.        | 39  | 11 35 | Creelman, Deane              | 103 | 60 00  |
| Sampson, Clara M.        | 17  | 4 94  | Dickson, Elsie               | 103 | 60 00  |
| Sister Francis Paula     | 103 | 30 00 | Dickson, Hattie              | 103 | 58 25  |
| Sister M. Imelda         | 6   | 1 74  | Doyle, Mable                 | 100 | 59 41  |
| Sister St. Alexander C.  | 103 | 30 00 | Elliott, Vera E.             | 102 | 60 00  |
| Sister St. Ann           | 98  | 28 53 | Faulkner, Ellen              | 103 | 60 00  |
| Sister St. Gregory       | 98  | 28 53 | Fulton, Beauce O.            | 103 | 60 00  |
| Sister St. Mary          | 98  | 28 53 | Fulton, Elsie L.             | 103 | 60 00  |
| Slattery, Janet          | 81  | 23 59 | Lavers, Josephine            | 103 | 60 00  |
| Smith, Christena         | 103 | 30 00 | Lawrence, Gladys             | 103 | 60 00  |
| Smith, Harvey R.         | 97  | 28 24 | Lockhart, Bessie             | 103 | 45 42  |
| Smith, Mary A.           | 98  | 28 53 | Logan, Margaret              | 78  | 60 00  |
| Spencer, Mildred M.      | 103 | 30 00 | Loughead, Mary E.            | 103 | 60 00  |
| Spencer, Mildred M.      | 10  | 2 91  | McDonald, Jean               | 103 | 60 00  |
| Sullivan, Kathryn        | 102 | 29 70 | McIntosh, Agnes              | 103 | 60 00  |
| Walker, Sarah B.         | 102 | 27 90 | McKenzie, Agnes              | 103 | 60 00  |
| Watt, Bridgie, G.        | 5   | 1 45  | McLennan, Jennie             | 103 | 60 00  |
| Wallace, Jean            | 98  | 28 53 | McNeill, Bessie              | 103 | 60 00  |
|                          |     |       | McNutt, Bessie               | 103 | 60 00  |
| <b>In Poor Sections.</b> |     |       | Parker, Gwendolyn            | 103 | 60 00  |
| Brown, Sarah J.          | 38  | 14 77 | Scothorne, Priscilla         | 103 | 60 00  |
| Crittenden, Edith A.     | 63  | 24 46 | Turner, Ida                  | 103 | 60 00  |
| Crowdis, Marjorie A.     | 58  | 22 52 | Waddell, Dorothy             | 103 | 60 00  |
| Farrell, Hugh            | 103 | 40 00 | Wright, Jessie               | 103 | 45 00  |
| Gillis, Mary L.          | 74  | 28 73 | Archibald, Janet             | 103 | 10 91  |
| MacDonald, Mary          | 99  | 38 45 | Archibald, Minnie            | 25  | 45 00  |
| McDougall, Catherine B.  | 99  | 38 45 | Archibald, Elsie             | 103 | 44 56  |
| MacGillivray, Jessie     | 54  | 20 97 | Bates, Edwina                | 102 | 45 00  |
| MacGillivray, Jessie     | 20  | 7 77  | Brenton, Mable               | 103 | 45 00  |
| McInnis, Christena       | 68  | 26 40 | Caddell, Oattie C.           | 103 | 45 00  |
| MacKenzie, Ethel C.      | 92  | 35 72 | Carter, Medora               | 103 |        |
| McLean, Christena, A.    | 86  | 33 39 |                              |     |        |
| MacLellan, Mary A.       | 84  | 32 62 |                              |     |        |
| McLeod, Catherine M.     | 73  | 28 34 |                              |     |        |
| McLeod, Catherine M.     | 9   | 3 49  |                              |     |        |

|                       |     |    |    |
|-----------------------|-----|----|----|
| Cox, Janet, R.        | 99  | 43 | 24 |
| Cooke, Agnes B.       | 103 | 45 | 00 |
| Cooke, Mary L.        | 103 | 45 | 00 |
| Crowe, M. Della       | 103 | 45 | 00 |
| Davis, Mabel L.       | 103 | 45 | 00 |
| Fulmore, Della M.     | 91  | 39 | 75 |
| Fulton, Mildred       | 87  | 37 | 99 |
| Higgins, Stella       | 103 | 45 | 00 |
| Meadows, May Pearle   | 102 | 44 | 56 |
| McCleave, H. A.       | 99  | 43 | 24 |
| McCully, Laurel G.    | 98  | 42 | 80 |
| McLearn, Gertrude E.  | 103 | 45 | 00 |
| Nelson, Annie M.      | 103 | 45 | 00 |
| Robertson, Jennie A.  | 102 | 44 | 56 |
| Ross, Bessie L.       | 103 | 45 | 00 |
| Sutherland, Jessie C. | 103 | 45 | 00 |
| Thrush, Daisy         | 102 | 44 | 56 |
| Turner, Josephine     | 103 | 45 | 00 |
| Whidden, Carlotta     | 103 | 45 | 00 |
| Archibald, Bertha I.  | 103 | 30 | 00 |
| Brown, Rosie O.       | 103 | 30 | 00 |
| Bradley, Nina F.      | 68  | 19 | 79 |
| Chisholm, Agnes       | 73  | 21 | 26 |
| Erskine, Alexandra    | 103 | 30 | 00 |
| Ellis, Marguarita     | 98  | 28 | 53 |
| Fraser, Roxie M.      | 103 | 30 | 00 |
| Johnson, Hattie R.    | 68  | 19 | 79 |
| Lewis, Hattie B.      | 98  | 28 | 53 |
| Lynds, Myrtle B.      | 97  | 28 | 24 |
| Morgan, Lizzie        | 103 | 30 | 00 |
| McLean, Nellie V.     | 99  | 28 | 82 |
| McLeod, Susie         | 99  | 28 | 82 |
| Parker, Laura D. B.   | 100 | 29 | 12 |
| Semple, Cecelia J.    | 87  | 25 | 33 |
| Shott, Mary H.        | 103 | 30 | 00 |
| Spencer, Kathryn      | 102 | 29 | 70 |
| Wright, Bertha A.     | 103 | 30 | 00 |

**In Poor Sections.**

|                     |      |    |    |
|---------------------|------|----|----|
| Matheson, Minnie    | 88   | 34 | 17 |
| Mason, Sarah J.     | 103  | 40 | 00 |
| Simpson, Mildred H. | 58   | 22 | 52 |
| Stevens, Minerva    | 18   | 6  | 99 |
| Leck, Alix Heloise  | 32½  | 12 | 62 |
| Phillips, Grace     | 92   | 35 | 72 |
| Crockett, Minnie    | 84   | 32 | 62 |
| Harvey, Florence M. | 100½ | 39 | 02 |
| McLeod, Susie       | 102  | 39 | 61 |

**Annuitant.**

|               |     |    |  |
|---------------|-----|----|--|
| Caikin, J. B. | 125 | 00 |  |
|---------------|-----|----|--|

**Stirling.**

|                    |     |    |    |
|--------------------|-----|----|----|
| Reid, Alice C.     | 37  | 21 | 54 |
| Stevens, Georgie   | 57  | 33 | 19 |
| Smith, Grace D.    | 38  | 22 | 12 |
| Byers, Maggie J.   | 100 | 43 | 58 |
| Byers, Janie C.    | 103 | 45 | 00 |
| Clarke, Agnes      | 103 | 45 | 00 |
| Ferguson, Jennie   | 92  | 40 | 18 |
| Gray, Mary Ethel   | 103 | 45 | 00 |
| Gunn, Mamie        | 103 | 45 | 00 |
| Langille, A. Mabel | 85  | 37 | 12 |
| McKay, Marion A.   | 103 | 45 | 00 |
| McLeod, Jessie A.  | 103 | 45 | 00 |

|                      |     |    |    |
|----------------------|-----|----|----|
| Sutherland Jennie,   | 102 | 44 | 56 |
| Campbell, Christina  | 103 | 30 | 00 |
| Clarke, Ella M.      | 36  | 10 | 47 |
| Cunningham, Laura    | 92  | 26 | 79 |
| Currie Marjorie,     | 103 | 30 | 00 |
| Forbes, Olive T.     | 103 | 30 | 00 |
| Jollimore, Agnes     | 84  | 24 | 46 |
| Mattatall, Violet E. | 85  | 24 | 75 |
| Murray, Bessie M.    | 103 | 30 | 00 |
| MacKay, Janetta A.   | 96  | 27 | 95 |
| McKay, Mary E.       | 98  | 28 | 53 |
| McKenzie, Nina J.    | 79  | 23 | 00 |
| McLanders, Minnie    | 103 | 30 | 00 |
| McLeod, Christina    | 103 | 30 | 00 |
| Nelson, Etta V.      | 95  | 27 | 66 |

**In Poor Sections.**

|                  |     |    |    |
|------------------|-----|----|----|
| Chisholm, Stella | 93  | 36 | 11 |
| Langille, J. A.  | 89  | 34 | 56 |
| McIntosh, Lizzie | 94  | 36 | 50 |
| McKay, Jean E.   | 102 | 39 | 61 |
| Putnam, Mabel    | 87½ | 33 | 97 |

**West.**

|                       |     |    |    |
|-----------------------|-----|----|----|
| Davidson, Edna        | 103 | 60 | 00 |
| Lewis, Myrtle E.      | 103 | 60 | 00 |
| Morse, Sylvia H.      | 103 | 60 | 00 |
| Morse, E. P.          | 103 | 60 | 00 |
| Peppard, Ruth R.      | 103 | 60 | 00 |
| Smith, Margaret J.    | 57  | 33 | 19 |
| Archibald, Maynard    | 103 | 45 | 00 |
| Crowe, Elizabeth B.   | 103 | 45 | 00 |
| Drysdale, Carrie M.   | 103 | 45 | 00 |
| Drysdale, Janet R.    | 103 | 45 | 00 |
| Fulton, Sarah M.      | 103 | 45 | 00 |
| Kent, M. L.           | 103 | 45 | 00 |
| Morash, Isabel        | 102 | 44 | 56 |
| Morrison, Ida M.      | 103 | 45 | 00 |
| O'Brien, M. E.        | 103 | 45 | 00 |
| O'Connell, E. Grace   | 103 | 45 | 00 |
| Robbins, Violet       | 102 | 44 | 56 |
| Simpson, Elsie        | 92  | 40 | 18 |
| Treen, Lulu B.        | 103 | 45 | 00 |
| Archibald, Annie F.   | 103 | 30 | 00 |
| Carter, Hattie M.     | 103 | 30 | 00 |
| Chisholm, Florence    | 163 | 30 | 00 |
| Flemming, Jenfa       | 99  | 28 | 82 |
| Finlay, Ida May       | 103 | 30 | 00 |
| Fulton, Sylvia W.     | 103 | 30 | 00 |
| Harrington, Lottie W. | 73  | 21 | 26 |
| Huntley, Ida M.       | 103 | 30 | 00 |
| Lockhart, Florence    | 94  | 27 | 37 |
| Melvyn, Wilhelmina    | 103 | 30 | 00 |
| McLaughlin, Erna R.   | 86  | 25 | 04 |
| McLellan, Ada Jean    | 103 | 30 | 00 |
| Patriquin, Edith M.   | 99  | 28 | 82 |
| Smith, Alberta J.     | 103 | 30 | 00 |
| Urquhart, Nellie L.   | 103 | 30 | 00 |
| Vance, Flora B.       | 103 | 30 | 00 |
| Vance, Emma Maud      | 102 | 29 | 70 |

**In Poor Sections.**

|                    |     |    |    |
|--------------------|-----|----|----|
| Berry, Sadie       | 84  | 32 | 62 |
| Mills, Nellie      | 89  | 34 | 56 |
| McCully, Iola Emma | 103 | 40 | 00 |

| CUMBERLAND.           |     |       |                        |      |       |
|-----------------------|-----|-------|------------------------|------|-------|
| Lay, E. J.            | 97  | 98 86 | MacCurdy, Irene        | 103  | 45 00 |
| Morehouse, F. G.      | 98  | 99 87 | MacIntosh, Laura       | 103  | 45 00 |
| Smith, Lizzie         | 97  | 84 73 | MacIvor, Ethel         | 97   | 42 37 |
| Caldwell, Lewis H.    | 103 | 75 00 | MacLeod, Georgina      | 94   | 41 06 |
| Evans, Laura          | 91  | 84 73 | MacPhee, Teressa       | 98   | 42 80 |
| MacPhee, Annie R.     | 98  | 85 60 | MacPherson, Leona      | 98   | 42 80 |
| Atkinson, Florence    | 96½ | 56 10 | Miller, Agnes M.       | 103  | 45 00 |
| Bent, Evelyn          | 98  | 57 07 | Morcash, Georgina      | 103  | 45 00 |
| Blanche, Julia        | 97  | 56 49 | Nowlan, Bessie A.      | 103  | 44 12 |
| Brannen, W. E.        | 103 | 60 00 | O'Brien, Agnes         | 101  | 42 80 |
| Brown, Delia          | 103 | 60 00 | O'Brien, Fannie        | 98   | 45 00 |
| Brown, Ellen C.       | 103 | 60 00 | Ripley, Ada            | 103  | 37 55 |
| Campbell, Helen       | 97  | 56 49 | Ripley, Jennie         | 86   | 45 00 |
| Carter, Lillian       | 97  | 56 49 | Roach, Bessie          | 103  | 6 54  |
| Chandler, Isabella    | 98  | 57 07 | Roach, Lena            | 15   | 45 00 |
| Chapman, Myra         | 97  | 56 49 | Shiple, Ethel          | 103  | 45 00 |
| Charman, Mary E.      | 77  | 44 84 | Slade, Almira F.       | 103  | 42 80 |
| Corkum, Inez B.       | 103 | 60 00 | Snowdon, Gladys        | 98   | 45 00 |
| Crawford, R. D.       | 95  | 55 33 | Sproule, Kathleen      | 103  | 44 56 |
| Glennie, Emma         | 97  | 56 49 | Staples, Elsie         | 102  | 42 80 |
| Gunn, Helen C.        | 103 | 60 00 | Tabor, Clara           | 98   | 45 00 |
| Harrison, Kate        | 97  | 56 49 | Taylor, Arabella       | 103  | 36 25 |
| Hennigar, Mabel       | 88  | 51 24 | Tuttle, Ada G.         | 83   | 42 37 |
| Johnson, Laura        | 102 | 59 41 | Travis, Agnes          | 97   | 42 80 |
| Landells, Ermina      | 20  | 11 64 | Watt, Daisey           | 98   | 45 00 |
| Lightbody, Edna J.    | 83  | 48 34 | Weathered, Emma B.     | 103  | 2 91  |
| Marston, Hazel        | 97  | 56 49 | Anderson, H. Percy     | 10   | 29 70 |
| MacDonald, Hilda      | 103 | 60 00 | Austin, Florence       | 102  | 30 00 |
| MacDonald, Viola      | 98  | 57 07 | Bailey, Maud           | 103  | 30 41 |
| MacDonald, Ethel      | 98  | 57 07 | Baillie, Mary J.       | 101  | 30 00 |
| MacLean, Viola B.     | 102 | 59 41 | Beaton, Margaret       | 103  | 30 00 |
| MacLean, Pearle       | 97  | 56 49 | Beattie, Jane          | 103  | 30 00 |
| Mitchell, Jennie M.   | 84  | 48 92 | Bird, Retta L.         | 103  | 19 03 |
| O'Brien, Bertha       | 98  | 57 07 | Bird, Elsie            | 49   | 25 91 |
| O'Brien, Della        | 98  | 57 07 | Bleakhorn, Florence R. | 89   | 23 00 |
| Pugsley, Chester      | 20  | 11 64 | Brander, Edith, R.     | 79   | 30 00 |
| Reade, Elizabeth      | 97  | 56 49 | Brenton, Florence R.   | 103  | 30 00 |
| Russel, Jean          | 98  | 57 07 | Brownell, Louise V.    | 103  | 18 25 |
| Sinclair, Willena     | 97  | 56 49 | Brownell, Viola E.     | 47   | 30 00 |
| Sproule, Lottie       | 97  | 56 49 | Brownell, Myrtle       | 103  | 30 00 |
| Trelice, Mary         | 95  | 55 33 | Brownell, Gertrude     | 103  | 29 41 |
| Watt, Beatrice        | 98  | 57 07 | Cameron, Jennie        | 101  | 22 13 |
| Webb, Hattie          | 97  | 56 49 | Cameron, Ella M.       | 76   | 30 00 |
| Wyde, Sara W.         | 97  | 56 49 | Campbell, Lulu         | 103  | 18 05 |
| Archibald, Minnie     | 83  | 36 25 | Campbell, Anna         | 60   | 25 91 |
| Baird, Jean F.        | 103 | 45 00 | Carter, Elverina L.    | 89   | 30 00 |
| Benjamin, May L.      | 103 | 45 00 | Christie, Stella       | 103  | 25 62 |
| Blaikie, Heloise M.   | 102 | 44 56 | Coulter, Annie M.      | 88   | 30 00 |
| Butler, Mary E.       | 97  | 42 37 | Crossman, Irene        | 103  | 21 55 |
| Cameron, Annie        | 103 | 45 00 | Crawley, Teresa        | 74   | 29 70 |
| Cameron, Emily W.     | 103 | 45 00 | Deuch, Susie           | 102  | 25 62 |
| Campbell, Margaret A. | 102 | 44 56 | Dewar, Florence        | 88   | 30 00 |
| Clarke, Elizabeth     | 103 | 45 00 | Dickinson, Carrie E.   | 103  | 30 00 |
| Craig, Muriel E.      | 97  | 42 37 | Edgett, Minnie         | 103  | 29 70 |
| Creelman, Jean        | 97  | 42 37 | Fage, Lottie           | 102  | 28 10 |
| Davis, Retta I.       | 78  | 34 06 | Farrell, Annie         | 96½  | 2 91  |
| Fillmore, Bessie M.   | 98  | 42 80 | Fullerton, Janie       | 10   | 23 59 |
| Fraser, Ida J.        | 103 | 45 00 | Gilray, Ethel          | 81   | 30 00 |
| Gallager, Adelaide I. | 101 | 44 12 | Gordon, B. Gaynelle    | 103  | 30 00 |
| Hennesey Elva         | 103 | 45 00 | Gordon, Hattie M.      | 103  | 30 00 |
| Hennigar, Mina        | 89  | 38 87 | Graham, Agnes          | 103  | 29 41 |
| Jeffers, Myrtle       | 102 | 44 56 | Gray, Edna A.          | 101  | 28 82 |
| Jennison, Mary        | 98  | 42 80 | Harpell, Annie B.      | 99   | 30 00 |
| Matheson, Mary        | 98  | 42 80 | Hayward, Inez          | 103  | 30 00 |
| MacCullum, Alberta M. | 103 | 45 00 | Hickey, Lizzie E.      | 103  | 2 91  |
|                       |     |       | Hills, Mary S.         | 10   | 29 27 |
|                       |     |       | Hunter, Winnifred P.   | 100½ |       |

|                      |                                |       |
|----------------------|--------------------------------|-------|
| Johnson, Pearle      | 103                            | 30 00 |
| Kelley, Vera         | 103                            | 30 00 |
| Lawson, Edith M.     | 103                            | 30 00 |
| Leslie, Everett C.   | 97                             | 28 24 |
| Lindsay, Susie       | 97                             | 28 24 |
| Lorrimer, Minnie     | 41 <sup>1</sup> / <sub>2</sub> | 12 09 |
| Lynch, Gwendolene    | 102                            | 29 70 |
| Melanson, Lelia G.   | 103                            | 30 00 |
| MacDonald, Annie     | 98                             | 28 53 |
| MacDonald, Elizabeth | 98                             | 28 53 |
| MacDougall, Iva      | 103                            | 30 00 |
| MacEachern, Lydia    | 103                            | 30 00 |
| MacIntosh, Lulu M.   | 101                            | 29 41 |
| MacIvor, Frances     | 102                            | 29 70 |
| MacKeil, Linda B.    | 103                            | 30 00 |
| MacLean, Annie J.    | 94                             | 27 37 |
| MacNab, Kate E.      | 103                            | 30 00 |
| MacSavaney, Annie    | 98                             | 28 53 |
| Marsh, Edith         | 98 <sup>1</sup> / <sub>2</sub> | 27 23 |
| Marsh, Isabel        | 103                            | 30 00 |
| Miller, Lillian G.   | 97 <sup>1</sup> / <sub>2</sub> | 28 39 |
| Milner, Mildred      | 45                             | 13 10 |
| Mort, Effie T.       | 103                            | 30 00 |
| Murray, Lexie        | 98                             | 28 53 |
| Noiles, Frances A.   | 79                             | 23 00 |
| O'Brien, Lena J.     | 103                            | 30 00 |
| Oulton, Christena    | 103                            | 30 00 |
| Parker, Hettie E.    | 102                            | 29 70 |
| Parsons, Anna H.     | 98                             | 28 53 |
| Paul, Susie          | 87                             | 25 33 |
| Pettygrew, Ellen     | 103                            | 30 00 |
| Purdy, Amy C.        | 103                            | 30 00 |
| Reid, Ida M.         | 102                            | 29 70 |
| Ripley, Mildred      | 103                            | 30 00 |
| Roberts, Minnie      | 103                            | 30 00 |
| Ryan, Beulah         | 101                            | 29 41 |
| Shiple, Jessie       | 103                            | 30 00 |
| Simpson, Myrtle      | 74                             | 21 55 |
| Smith, Bessie M.     | 85 <sup>1</sup> / <sub>2</sub> | 24 90 |
| Sproule, Florence A. | 102                            | 29 70 |
| Stevenson, Dora      | 98                             | 28 53 |
| Taggart, Liby M.     | 103                            | 30 00 |
| Tait, Sadie O.       | 96                             | 27 95 |
| Teed, Ruby E.        | 87                             | 25 33 |
| Thompson, Mable      | 87                             | 25 33 |
| Tupper, Juanita      | 79                             | 23 00 |
| VanBuskirk, Marjorie | 103                            | 30 00 |
| Wood, Willo          | 89                             | 25 91 |
| Wood, Walter         | 77                             | 22 42 |

**In Poor Sections.**

|                     |                                 |       |
|---------------------|---------------------------------|-------|
| Beebe, May S.       | 102                             | 39 61 |
| Brundage, Teressa   | 84                              | 32 62 |
| Canning, Minnie     | 103                             | 40 00 |
| Jeffers, Gussie, M. | 102 <sup>1</sup> / <sub>2</sub> | 39 80 |
| Johnson, Lizzie     | 60                              | 23 30 |
| MacPherson, Edna    | 67                              | 26 01 |
| Salter, Laura A.    | 43                              | 16 70 |
| Smith, Mainie       | 87                              | 33 78 |
| Ward, Nema C.       | 79                              | 30 58 |

**Parrsboro.**

|                |     |        |
|----------------|-----|--------|
| Foster, Mayhew | 103 | 105 00 |
| Morgan, S. C.  | 102 | 74 26  |
| Roy, Lida J.   | 79  | 57 50  |

|                         |                                 |       |
|-------------------------|---------------------------------|-------|
| Atkinson, Ruby          | 103                             | 60 00 |
| Barnes, Grace A.        | 103                             | 60 00 |
| Fraser, Stanley A.      | 79                              | 46 01 |
| Galager, Violet L.      | 103                             | 60 00 |
| Hiltz, Adelaide         | 101 <sup>1</sup> / <sub>2</sub> | 59 12 |
| Lavers, Winnifred G. M. | 103                             | 60 00 |
| Leitch, Holly A.        | 103                             | 60 00 |
| MacCleave, R. D.        | 102                             | 59 41 |
| MacQuarrie, Sadie       | 103                             | 60 00 |
| O'Mullon, Mary F.       | 103                             | 60 00 |
| O'Regan, Nellie         | 103                             | 60 00 |
| Smith, Gladys M.        | 103                             | 60 00 |
| Smith, Ada H.           | 103                             | 60 00 |
| Watton, Lillian G.      | 103                             | 60 00 |
| Challen, Minnie         | 102                             | 44 56 |
| Ellis, Nina M.          | 103                             | 45 00 |
| Kerr, Minnie G.         | 79                              | 34 50 |
| MacIntosh, Jessie B.    | 99                              | 43 24 |
| O'Connell, Irene        | 100                             | 43 68 |
| Patterson, Florence     | 101                             | 44 12 |
| Treice, Ruth            | 98                              | 42 80 |
| Ward, Cora B.           | 103                             | 45 00 |
| Bartheaux, Florence J.  | 89                              | 25 91 |
| Callow, Margaret G.     | 84                              | 24 46 |
| Fullerton, Sydney B.    | 103                             | 30 00 |
| Gibson, Ada B.          | 102                             | 29 70 |
| Hillgrove, Sadie G.     | 83                              | 24 17 |
| Kewer, Jessie           | 82                              | 23 88 |
| Knowlton, Rose          | 103                             | 30 00 |
| Larrimer, Minnie        | 19                              | 5 52  |
| Quinn, Dora M.          | 94                              | 27 37 |
| Robinson, Alice A.      | 102                             | 29 70 |
| Salter, Josephine       | 103                             | 30 00 |
| Salter, Vivien          | 79                              | 23 00 |
| Thompson, Flora         | 102                             | 29 70 |

**In Poor Sections.**

|                   |     |       |
|-------------------|-----|-------|
| Graham, Iva M.    | 103 | 40 00 |
| Morris, Ruby      | 103 | 40 00 |
| Weatherby, Hattie | 92  | 35 72 |

**In Special Poor Section.**

|               |    |       |
|---------------|----|-------|
| Lunn, Cora B. | 87 | 33 78 |
|---------------|----|-------|

**Consolidation Grant.**

|                  |     |       |
|------------------|-----|-------|
| Spencer's Island | 103 | 30 00 |
| Advocate         | 103 | 30 00 |

**Annuitant.**

|                   |  |       |
|-------------------|--|-------|
| Charman, Eliza G. |  | 45 00 |
|-------------------|--|-------|

**DIGBY.**

|                      |     |       |
|----------------------|-----|-------|
| Patterson, Mabel G.  | 101 | 90 00 |
| Baker, Grace V.      | 103 | 60 00 |
| Belliveau, Catherine | 103 | 60 00 |
| Belliveau, Marie Ann | 103 | 60 00 |
| Churchill, Gordon H. | 103 | 60 00 |
| Chute, Hettie M.     | 103 | 60 00 |
| Crocker, Nina B.     | 103 | 60 00 |
| Gower, Ina L.        | 103 | 60 00 |



|                        |     |       |
|------------------------|-----|-------|
| Ferguson, Ruth R.      | 103 | 45 00 |
| Ferguson, Ida A.       | 103 | 45 00 |
| Hennessey, Eva         | 103 | 45 00 |
| Howard, Ruth W.        | 103 | 45 00 |
| Kennedy, Annie M.      | 103 | 45 00 |
| Mason, Erma F.         | 103 | 45 00 |
| Mattatall, Daisy       | 103 | 45 00 |
| McIntosh, Margaret     | 56  | 24 45 |
| Nicolle, Everett J.    | 103 | 45 00 |
| Paget, Gertrude W.     | 103 | 45 00 |
| Ross, May E.           | 103 | 45 00 |
| Sampson, Annie E.      | 103 | 45 00 |
| Boudreau Evangeline E. | 30  | 30 00 |
| Hartt, Carrie M.       | 83  | 24 17 |
| Holloran, Mary E.      | 103 | 30 00 |
| Halfpenny, Viva E.     | 57  | 16 59 |
| Josey, Izetta B.       | 83  | 24 17 |
| Jones, Clara M.        | 103 | 30 00 |
| Kennedy, Lena C.       | 103 | 30 00 |
| Kennedy, Theresa M.    | 103 | 30 00 |
| Kelly, Mary            | 103 | 30 00 |
| Luddington, Phebe      | 89  | 25 91 |
| Morgan, Katie L.       | 96  | 27 95 |
| Murphy, Annie O.       | 103 | 30 00 |
| Meagher, Stella M.     | 102 | 29 70 |
| Martin, Mabel B.       | 103 | 30 00 |
| Macdonald, Mary C.     | 103 | 30 00 |
| Macdonald, Mary M.     | 80  | 23 30 |
| McDougall, Mary A.     | 98  | 28 53 |
| McLean, Catherine A.   | 100 | 29 12 |
| Nichols, Eva M.        | 87  | 25 33 |
| Reynolds, Cynthia      | 103 | 30 00 |
| Spinks, Katie G.       | 79  | 23 00 |
| Strahan, Mary H.       | 103 | 30 00 |
| Somers, Edith F.       | 44  | 12 81 |
| Scott, Edna M.         | 85  | 24 75 |
| Tate, Catherine A.     | 103 | 30 00 |
| Worth, Iosie L.        | 103 | 30 00 |
| Worth, Marion S.       | 103 | 30 00 |
| Worth, Anna B.         | 103 | 30 00 |
| Wells, Clara P.        | 102 | 29 70 |

**In Poor Sections.**

|                      |     |       |
|----------------------|-----|-------|
| Brown, Sadie M.      | 70  | 27 18 |
| Hartling, Eva C.     | 101 | 39 22 |
| Hurst, Clara C.      | 98  | 38 06 |
| Jenkins, Cecelia F.  | 89  | 34 56 |
| Little, Bertha M.    | 103 | 40 00 |
| Leary, Florence M.   | 81  | 31 45 |
| McGuire, Gertrude J. | 103 | 40 00 |
| McKenzie, Settie V.  | 98  | 38 06 |
| O'Connor Lawrence M. | 89  | 34 56 |
| Rogers, Mary E.      | 20  | 7 77  |
| Spinks, Elora J.     | 103 | 40 00 |

**Special Poor Sections.**

|          |       |
|----------|-------|
| Lakedale | 30 00 |
|----------|-------|

**Annuitant.**

|                  |       |
|------------------|-------|
| Hannifen, Maggie | 30 00 |
|------------------|-------|

**St. Mary's.**

|                  |     |       |
|------------------|-----|-------|
| Bruce, Bessie W. | 101 | 58 83 |
| McLeod, Greta L. | 61  | 35 53 |

|                      |     |       |
|----------------------|-----|-------|
| Corneally, Lottie G. | 94  | 41 06 |
| Chisholm, Ethel M    | 102 | 44 56 |
| Dickson, Margaret    | 97  | 42 37 |
| Fisher, Sarah E.     | 103 | 45 00 |
| Hartling, Nettie J.  | 96  | 41 93 |
| Jordan, Catherine J. | 103 | 45 00 |
| Kirk, Gertrude B.    | 102 | 44 56 |
| Macdonald, M. Lilian | 103 | 45 00 |
| McNaughton, Dan P.   | 15  | 6 54  |
| Pye, Hannah          | 5   | 2 18  |
| Stevens, Maud        | 103 | 45 00 |
| Ashton, Maud E.      | 98  | 28 53 |
| Boyd, Elfreda        | 98  | 28 53 |
| Crowley, Estella     | 99  | 28 82 |
| Fenton, Annie M.     | 103 | 30 00 |
| Hartling, Minnie     | 102 | 29 70 |
| Manson, Agnes K.     | 103 | 30 00 |
| McInnis, John D.     | 82  | 23 88 |
| McLean, Katherine    | 13  | 3 78  |
| McLean, Katherine    | 60  | 17 47 |
| Wilson, Hannah F.    | 14  | 4 07  |

**In Poor Sections.**

|                       |    |       |
|-----------------------|----|-------|
| Barkhouse, Mary J. A. | 23 | 8 94  |
| Crooks, Hilda G.      | 88 | 34 17 |
| Cameron, Flora E. M.  | 89 | 34 56 |
| Chisholm, Jessie M.   | 77 | 29 90 |
| Crittenden, Ida M.    | 84 | 32 62 |

**HALIFAX CITY.**

|                    |     |        |
|--------------------|-----|--------|
| McKay, A.          | 103 | 105 00 |
| Morton, S. A.      | 97  | 84 73  |
| Logan, J. W.       | 97  | 84 73  |
| Mackintosh, K.     | 98  | 85 60  |
| Trefry, J. H.      | 98  | 85 60  |
| Bancroft, G. R.    | 98  | 57 07  |
| Peters, F. A.      | 98  | 57 07  |
| Bigney, E. M.      | 97  | 56 49  |
| MacDonald, E. M.   | 98  | 42 80  |
| Agnes, Sr. R.      | 103 | 60 00  |
| Bayer, H. M.       | 103 | 75 00  |
| Blois, H. H.       | 103 | 90 00  |
| Boyd, D. D.        | 103 | 75 00  |
| Brunt, H. D.       | 103 | 90 00  |
| Butler, G. K.      | 103 | 90 00  |
| Cummings, E.       | 103 | 75 00  |
| Evaristus, Sr.     | 98  | 85 60  |
| Fitzgerald, Mme.   | 103 | 60 00  |
| Huggins G. M.      | 103 | 75 00  |
| Marshall G. R.     | 103 | 90 00  |
| Matheson D. J.     | 98  | 71 32  |
| Murray E.          | 103 | 75 00  |
| O'Hearn P.         | 98  | 85 60  |
| Rosaire, Sr.       | 103 | 60 00  |
| Agnes, Sr. M.      | 103 | 60 00  |
| Agnita, Sr.        | 103 | 60 00  |
| Allen, M. E.       | 79  | 46 02  |
| Archibald, S. M.   | 103 | 60 00  |
| Berchmans, Sr.     | 103 | 60 00  |
| Blakeney, B. H. V. | 103 | 60 00  |
| Bowden, I. M.      | 103 | 60 00  |
| Bowden, L. J.      | 103 | 60 00  |
| Brimms, M. C.      | 103 | 60 00  |

|                     |     |       |                      |     |       |
|---------------------|-----|-------|----------------------|-----|-------|
| Brunt, B. G.        | 103 | 60 00 | Wickwire, A. L.      | 103 | 60 00 |
| Brodie, I.          | 103 | 60 00 | Wiswell, I. M.       | 103 | 60 00 |
| Brown, E. R.        | 103 | 60 00 | Woolrich, M. E.      | 103 | 60 00 |
| Brown, M. L.        | 103 | 60 00 | Ackhurst, M. L.      | 79  | 34 52 |
| Burgoyne, A. V.     | 103 | 60 00 | Angelorum, Sr.       | 103 | 45 00 |
| Cecelia, Sr.        | 103 | 60 00 | Baker, G. H.         | 93  | 40 63 |
| Chisholm, E.        | 24  | 13 98 | Baker, G. J.         | 103 | 45 00 |
| Concepta, Sr.       | 103 | 60 00 | Bayer, A. L.         | 103 | 45 00 |
| Cunningham, A. M.   | 103 | 60 00 | Billman, G. I.       | 15  | 6 54  |
| DeChantal, Sr. F.   | 103 | 60 00 | Blakeney, E. M.      | 20  | 8 73  |
| DeChantal, Sr. M.   | 98  | 57 07 | Blois, E. H.         | 102 | 44 56 |
| Delahanty, K.       | 103 | 60 00 | Catherine, Sr.       | 103 | 45 00 |
| Dempsey, I. B.      | 103 | 60 00 | Christina, Sr.       | 35  | 15 29 |
| Dolorita, Sr.       | 103 | 60 00 | Clark, E. M.         | 83  | 36 27 |
| Edwina, Sr.         | 103 | 60 00 | Conrod, E. M.        | 103 | 45 00 |
| Ernestine, Sr.      | 103 | 60 00 | Cunningham, E. S.    | 103 | 45 00 |
| Ethelbert, Sr.      | 103 | 60 00 | Curren, E. M.        | 103 | 45 00 |
| Florence, Sr.       | 103 | 60 00 | DePazzi, Sr.         | 103 | 45 00 |
| Flowers, E. M.      | 103 | 60 00 | Delphine, Sr.        | 103 | 45 00 |
| Flowers, H. L.      | 103 | 60 00 | Devine, M. E.        | 103 | 45 00 |
| Francis, Sr.        | 103 | 60 00 | Evangelista, Sr.     | 103 | 45 00 |
| Fraser, W. M.       | 103 | 60 00 | Felix, Sr.           | 103 | 45 00 |
| Frye, B. E.         | 103 | 60 00 | Finn, Mme.           | 103 | 45 00 |
| Gervase, Sr.        | 103 | 60 00 | Gowen, M.            | 24  | 10 48 |
| Greig, G. S.,       | 103 | 60 00 | Gualbert, Sr.        | 103 | 45 00 |
| Greig, L. C.        | 103 | 60 00 | Grierson, F.         | 100 | 43 68 |
| Harlow, A. O.       | 103 | 60 00 | Grierson, M. H.      | 103 | 45 00 |
| Haverstock, A. M.   | 103 | 60 00 | Hamilton, H. H.      | 103 | 45 00 |
| Hazle, E. M.        | 103 | 60 00 | Hartigan, Sr.        | 89  | 38 87 |
| Ignatia, Sr.        | 98  | 57 07 | Healy, K. E.         | 103 | 45 00 |
| Joseph, Sr.         | 103 | 60 00 | Helena, Sr.          | 68  | 29 71 |
| Kelly, Mme.         | 103 | 60 00 | Henrion, C. E.       | 103 | 45 00 |
| Kenny, M. B. D.     | 103 | 60 00 | James, C. A.         | 103 | 45 00 |
| Kierstead, M. F.    | 103 | 60 00 | Jamieson, H. J.      | 103 | 45 00 |
| Laracy, A. X.       | 103 | 60 00 | J. Baptist, Sr.      | 103 | 45 00 |
| Leontine, Sr.       | 103 | 60 00 | Johnson, I. J.       | 103 | 45 00 |
| Longueil, E.        | 103 | 60 00 | Joseph, Sr.          | 103 | 45 00 |
| Maria, Sr. S.       | 113 | 60 00 | Kennedy, M. C.       | 103 | 45 00 |
| Macdonald, V. A.    | 103 | 60 00 | Leo, Sr.             | 103 | 45 00 |
| Marshall, L. E.     | 79  | 46 01 | Leocadia, Sr.        | 103 | 45 00 |
| Mason, B. E.        | 103 | 60 00 | Logan, A.            | 103 | 45 00 |
| Morrison, E. J.     | 103 | 60 00 | Lyall, B. H.         | 103 | 45 00 |
| O'Brien, M. A.      | 103 | 60 00 | Lyons, M.            | 103 | 45 00 |
| Phelan, M. F.       | 103 | 60 00 | McArthur, J. R.      | 103 | 45 00 |
| Pius, Sr.           | 103 | 60 00 | McDermott, Mme.      | 103 | 45 00 |
| Publicover, L. D.   | 103 | 60 00 | McDonell, Mme.       | 103 | 45 00 |
| Pye, E. C.          | 103 | 60 00 | McGill, F.           | 10  | 4 37  |
| Rankine, A. B.      | 103 | 60 00 | McGillivray, F. G.   | 103 | 45 00 |
| Ross, E. J.         | 103 | 60 00 | McGregor, A.         | 103 | 45 00 |
| Sanders, K. O.      | 103 | 60 00 | Macleary, A.         | 103 | 45 00 |
| Saunders, A. C.     | 103 | 60 00 | Martin, M. I.        | 103 | 45 00 |
| Shields, E. G.      | 103 | 60 00 | Mary, Sr.            | 103 | 45 00 |
| Shields, S. W.      | 103 | 60 00 | Mitchell, L. E. J.   | 100 | 43 68 |
| Sims, S. A.         | 103 | 60 00 | Mooney, E. M.        | 103 | 45 00 |
| Smith, S. B.        | 61  | 35 53 | O'Donaghue, M. T. T. | 103 | 45 00 |
| Spencer, E. M.      | 103 | 60 00 | Perpetua, Sr.        | 103 | 45 00 |
| Sullivan, Mme.      | 103 | 60 00 | Phelan, F. J.        | 103 | 45 00 |
| Theakston, H. S. F. | 103 | 60 00 | Publicover, J. E.    | 102 | 44 56 |
| Thompson, F. M.     | 103 | 60 00 | Putnam, A. F.        | 103 | 45 00 |
| Tulloch, M. E.      | 103 | 60 00 | Remigius, Bro.       | 103 | 45 00 |
| Trefry, E. C.       | 103 | 60 00 | Rita, Sr.            | 103 | 45 00 |
| Tynan, J. C.        | 103 | 60 00 | Rockett, M. M.       | 103 | 45 00 |
| Vincent, Sr. M.     | 103 | 60 00 | Ross, Carrie E.      | 103 | 45 00 |
| Vincent, Sr. F.     | 103 | 60 00 | Smith, G. V.         | 83  | 36 27 |
| Wakeley, A. C.      | 103 | 60 00 | Stratton, E.         | 103 | 45 00 |
| Wallace, E. M.      | 103 | 60 00 | Sullivan, M.         | 103 | 45 00 |
| Whalen, A. T.       | 42  | 24 47 | Sullivan, M. T.      | 103 | 45 00 |



|                    |     |       |                        |      |       |
|--------------------|-----|-------|------------------------|------|-------|
| Sullivan, M. T. R. | 103 | 45 00 | Balcombe, Florence C.  | 103  | 45 00 |
| Theakston, S. E.   | 103 | 45 00 | Barron, Margaret       | 103  | 45 00 |
| Travis, A. A.      | 103 | 45 00 | Bruhm, Flora M.        | 103  | 45 00 |
| Trivett, M. E.     | 103 | 45 00 | Coleman, Hannah E.     | 103  | 45 00 |
| Umlah, L. A. B.    | 103 | 45 00 | Custance, Sarah B.     | 103  | 45 00 |
| Vincent, Sr. R.    | 103 | 45 00 | DeVan, Eileen M.       | 103  | 45 00 |
| Walsh, A. M.       | 103 | 45 00 | DeVan, Nano            | 102  | 44 56 |
| Warner, M. F.      | 103 | 45 00 | Dickie, Gertrude       | 20   | 8 72  |
| Wells, C.          | 103 | 45 00 | Dickie, Mabel B.       | 103  | 45 00 |
| Wells, M. H.       | 103 | 45 00 | Ernst, Florence C.     | 103  | 45 00 |
| Willis, E. J.      | 103 | 45 00 | Faulkner, Melissa      | 103  | 45 00 |
| Christie, A. E.    | 24  | 6 98  | Ferguson, Cora M.      | 103  | 45 00 |
| Jemmott, M. F.     | 103 | 30 00 | Findlay, Sadie         | 103  | 45 00 |
| Patrick, Bro.      | 103 | 30 00 | Fraser, Ellen J.       | 102  | 44 56 |
| Macaloney, K.      | 87  | 25 33 | Fulton, Susie D.       | 101½ | 44 34 |
| Sweeney, M.        | 103 | 30 00 | Gallagher, Mildred     | 100  | 43 68 |
|                    |     |       | Glawson, Ethel M.      | 102  | 44 56 |
|                    |     |       | Graham, Myrtle E.      | 103  | 45 00 |
|                    |     |       | Guild, Jean            | 103  | 45 00 |
|                    |     |       | Hamilton, Janet        | 69   | 30 13 |
|                    |     |       | Harrison, Helen        | 103  | 45 00 |
|                    |     |       | Hume, Bessie           | 103  | 45 00 |
|                    |     |       | Hume, Mary E.          | 103  | 45 00 |
|                    |     |       | LaidLaw, Elizabeth     | 98   | 42 80 |
|                    |     |       | Marryatt, Ida          | 102  | 44 56 |
|                    |     |       | Maskell, Eva A.        | 103  | 45 00 |
|                    |     |       | Murray, B. F. J.       | 103  | 45 00 |
|                    |     |       | Myers, Jeanetta A.     | 103  | 45 00 |
|                    |     |       | Myers, Tillie A.       | 103  | 45 00 |
|                    |     |       | McGill, Frances        | 108  | 47 18 |
|                    |     |       | McGinty, Agatha        | 103  | 45 00 |
|                    |     |       | MacKay, Isabel         | 103  | 45 00 |
|                    |     |       | MacKenzie, Margaret A. | 103  | 45 00 |
|                    |     |       | McLeod, Beatrice       | 103  | 45 00 |
|                    |     |       | Nicholson, Mary V.     | 103  | 45 00 |
|                    |     |       | Partridge, Ethel       | 102  | 44 56 |
|                    |     |       | Parke, Nellie L.       | 98   | 42 80 |
|                    |     |       | Parke, Marion          | 102  | 44 56 |
|                    |     |       | Roche, Mary            | 103  | 45 00 |
|                    |     |       | Rutherford, Julia J.   | 98   | 42 80 |
|                    |     |       | Shaw, Sarah E.         | 97   | 42 37 |
|                    |     |       | Smith, Alice M.        | 102  | 44 56 |
|                    |     |       | Smith, Isabella        | 72   | 31 44 |
|                    |     |       | Thomas, Bessie         | 103  | 45 00 |
|                    |     |       | Thompson, Ray M.       | 103  | 45 00 |
|                    |     |       | Tolson, Elizabeth A.   | 101  | 44 12 |
|                    |     |       | Vaughan, Ethel         | 98   | 42 80 |
|                    |     |       | Wier, Amelia           | 87   | 37 99 |
|                    |     |       | White, Mabel J.        | 97   | 42 37 |
|                    |     |       | Wolfe, Jessie A.       | 100  | 43 68 |
|                    |     |       | Archibald, Nellie      | 103  | 30 00 |
|                    |     |       | Bambrick, Lena         | 103  | 30 00 |
|                    |     |       | Barkbouse, Mary J.     | 103  | 30 00 |
|                    |     |       | Brokenshire, Amelia    | 103  | 30 00 |
|                    |     |       | *Brown, Jessie M.      | 83   | 32 23 |
|                    |     |       | Brown, Martha H.       | 100  | 29 12 |
|                    |     |       | Burris, Annie          | 102  | 29 70 |
|                    |     |       | Crawford, Jennie       | 90   | 26 21 |
|                    |     |       | Christie, Margaret     | 98   | 28 53 |
|                    |     |       | Christie, Ruth M.      | 102  | 29 70 |
|                    |     |       | Conrad, Hazel B.       | 103  | 30 00 |
|                    |     |       | Corner, Bessie B.      | 103  | 30 00 |
|                    |     |       | *Crook, Edna           | 74   | 28 73 |
|                    |     |       | Cruiskbank, Melville   | 94   | 27 37 |
|                    |     |       | DeWolfe, George A.     | 103  | 30 00 |
|                    |     |       | Dickie, Ada B.         | 94   | 27 37 |
|                    |     |       | Dickie, Ida M.         | 102  | 29 70 |

Evening Schools.

|                 |    |      |
|-----------------|----|------|
| Faulkner, A. W. | 17 | 9 89 |
| Huggins, G. M.  | 17 | 9 89 |
| Parker, C. W.   | 16 | 9 31 |
| Mackasey, W. F. | 17 | 7 41 |
| Jemmott, M. F.  | 23 | 6 69 |

Annuitants.

|                  |       |
|------------------|-------|
| Hall, H. McG.    | 60 00 |
| Torrey, C. E.    | 45 00 |
| Gossip, C. M.    | 30 00 |
| Creighton, I. M. | 60 00 |
| Johns, M. A.     | 45 00 |
| Weir, Lewis.     | 45 00 |

HALIFAX COUNTY.

|                       |     |        |
|-----------------------|-----|--------|
| Stapleton, W. C.      | 103 | 105 00 |
| (nightschool)         | 14½ | 8 43   |
| Walker, Mabel R.      | 100 | 72 81  |
| Allen, Christina      | 103 | 60 00  |
| Balcom, Hilda B.      | 100 | 58 25  |
| Bell, Mary, F.        | 103 | 60 00  |
| Courteen, Violet      | 92  | 53 58  |
| Creighton, Frances G. | 103 | 60 00  |
| Dickie, Lillie A.     | 103 | 60 00  |
| Hiltz, Ethel M.       | 103 | 60 00  |
| Hiltz, Mary C.        | 103 | 60 00  |
| Hamilton, Mary A.     | 103 | 60 00  |
| Layton, Annie H. M.   | 102 | 59 41  |
| Leblanc, Andrew, A.   | 103 | 60 00  |
| Miller, Florence M.   | 103 | 60 00  |
| Moseley, Mabel, C.    | 103 | 60 00  |
| Mosher, Mary L.       | 103 | 60 00  |
| Munro, Lizzie B.      | 98  | 57 07  |
| Murphy, Alice         | 103 | 60 00  |
| McCurdy, Mary J.      | 103 | 60 00  |
| Ogilvie, Bertha C.    | 103 | 60 00  |
| Ogilvie, Bessie R.    | 103 | 60 00  |
| Ogilvie, Phebe, A.    | 102 | 59 41  |
| Palmer, Gladys        | 103 | 60 00  |
| Prescott, Alice       | 103 | 60 00  |
| Shaffelburg, Ada L.   | 103 | 60 00  |
| Strachan, Katherine   | 103 | 60 00  |
| Ahern, Mary E.        | 71  | 31 00  |
| Atwood, Maud L.       | 103 | 45 00  |
| Auld, Margaret E.     | 94  | 41 06  |

|                       |      |       |
|-----------------------|------|-------|
| *Drillio, Bessie C.   | 55   | 21 36 |
| Drysdale, Annie J.    | 103  | 30 00 |
| *Ernst, Grace L.      | 83   | 32 23 |
| Foley, Irene          | 93   | 27 08 |
| Gactz, Mima A.        | 102  | 29 70 |
| Garrison, Vera G.     | 101  | 29 41 |
| Gourley, Margaret J.  | 103  | 30 00 |
| Goff, Flora M.        | 98   | 28 53 |
| Glawson, Annie E.     | 113  | 32 91 |
| *Godwin, Edith L.     | 87½  | 33 97 |
| Graham, Alice M.      | 89   | 25 91 |
| Guild, Agnes L.       | 102½ | 29 85 |
| Grant, Janet M.       | 103  | 30 00 |
| Gray, Cecilia J.      | 103  | 30 00 |
| Guild, Effie J.       | 89   | 25 91 |
| Guild, Ethel G.       | 103  | 30 00 |
| *Hawkins, Florence A. | 60   | 23 30 |
| *Havill, Mary         | 94   | 36 50 |
| Hawes, Susan          | 79   | 23 00 |
| Heisler, Nellie M.    | 94   | 27 37 |
| Henry, Ida M.         | 99   | 28 82 |
| Hilchie, Nellie M.    | 88   | 25 62 |
| Hilchie, Stella B.    | 102  | 29 70 |
| Hopkins, Effie R.     | 103  | 30 00 |
| *Innis, Charles S.    | 78   | 30 29 |
| *Isenor, Cora B.      | 69   | 26 79 |
| James, Annie M.       | 98   | 28 53 |
| Jewers, Annie M.      | 98   | 28 53 |
| *Josey, Ansel L.      | 86   | 33 39 |
| Julien, Emma B.       | 103  | 30 00 |
| Keeler, Celia         | 101  | 29 41 |
| Logan, Heber          | 64   | 18 63 |
| Lowe, Elizabeth A.    | 82   | 23 88 |
| Lowe, Katherine M.    | 102  | 29 70 |
| *Lowndes, Vera E.     | 67   | 26 01 |
| *Martin, Katie L.     | 78   | 30 29 |
| Mason, Guy            | 101  | 29 41 |
| Myers, Bertha F.      | 88   | 25 62 |
| Murray, Isabell       | 103  | 30 00 |
| MacCarthy, Cornelia   | 90   | 26 21 |
| *MacCarthy, Kat. M.   | 103  | 40 00 |
| MacCarthy, Tena J.    | 102  | 29 70 |
| MacDonald, Helen      | 72   | 20 97 |
| MacKay, Annie         | 102  | 29 70 |
| MacKay, Ina E.        | 83   | 24 17 |
| MacKenzie, Elsie C.   | 103  | 30 00 |
| *Parlee, Alwilda M.   | 102½ | 39 81 |
| Prest, Mary M.        | 97½  | 28 39 |
| Reid, Mabel L.        | 103  | 30 00 |
| Ritcy, Augusta O.     | 103  | 30 00 |
| Ritcy, Jean L.        | 103  | 30 00 |
| Schultz, Jessie E.    | 78½  | 22 86 |
| *Skerry, Emma         | 102  | 39 61 |
| Stoddard, Hildred B.  | 103  | 30 00 |
| Stoddard, Lena S.     | 103  | 30 00 |
| Shaw, Selena          | 68   | 19 79 |
| Smith, Emmie G.       | 93½  | 27 23 |
| Stoddard, Sabina B.   | 102  | 29 70 |
| Townsend, Dorothy     | 97   | 28 24 |
| Tupper, Aleda         | 101  | 29 41 |
| *Upshaw, Ethel I.     | 103  | 40 00 |
| Warner, Mary          | 102  | 29 70 |
| Webber, Joyce         | 103  | 30 00 |
| Wilson, Florence      | 88   | 25 62 |
| Williams, Sarah E.    | 98   | 28 53 |
| Yeadon, Ida M.        | 103  | 30 00 |
| *Young, Mary E.       | 84   | 32 62 |

## Annuitants.

|                   |       |
|-------------------|-------|
| Miller, George J. | 75 00 |
| Herdman, W. C.    | 60 00 |
| Mary Ann, Sister  | 60 00 |
| Bacon, Amelia     | 30 00 |
| Gibbons, John     | 30 00 |

## HANTS.

## West.

|                     |      |        |
|---------------------|------|--------|
| Dill, George W.     | 103  | 105 00 |
| Smith, John A.      | 103  | 105 00 |
| Scott, Agnes B.     | 97   | 70 61  |
| Black, Pearl McK.   | 103  | 60 00  |
| Davies, Kathleen    | 103  | 60 00  |
| Demmons, Mona       | 103  | 60 00  |
| Dodge, Leila J.     | 103  | 60 00  |
| Lantz, Helena M.    | 103  | 60 00  |
| Lawrence, Lily M.   | 95   | 55 33  |
| Lewis, Lena L.      | 103  | 60 00  |
| Lockhart, Bessie B. | 98   | 57 07  |
| Lockhart, Lena M.   | 103  | 60 00  |
| MacRae, Luella      | 102½ | 59 70  |
| Muise, Elizabeth    | 102  | 59 41  |
| McLellan, Mary      | 103  | 60 00  |
| Nunn, May           | 103  | 60 00  |
| O'Brien, Annie B.   | 102½ | 59 70  |
| Trenholm, Olga      | 103  | 60 00  |
| Webster, Abbie R.   | 103  | 60 00  |
| Baxter, Mabel C.    | 103  | 45 00  |
| Bennett, Hannah     | 103  | 45 00  |
| Burgoyne, N. A.     | 103  | 45 00  |
| Dimock, Annie       | 103  | 45 00  |
| Foley, Ethel        | 103  | 45 00  |
| Fraser, Daisy R.    | 98   | 42 80  |
| Goudey, Emily       | 103  | 45 00  |
| Harvey, Arabella    | 98   | 45 00  |
| Jenkins, Giralda    | 102  | 42 80  |
| Jacques, G. V.      | 20   | 8 72   |
| Kelley, Minnie      | 103  | 45 00  |
| Kent, Bessie W.     | 93   | 45 00  |
| Lawrence, Harriet   | 87   | 37 99  |
| Lynch, Jessie A.    | 103  | 45 00  |
| Mariette, Emma      | 52   | 22 71  |
| Marsters, Gladys    | 82½  | 36 03  |
| Millett, Georgetta  | 103  | 45 00  |
| Moore, Jennie       | 103  | 45 00  |
| McDonald, Katherine | 100½ | 48 90  |
| McCurdy, Helen      | 103  | 45 00  |
| O'Brien, Maggie     | 102½ | 44 78  |
| O'Brien, Jennie     | 103  | 45 00  |
| Parsons, Harriet    | 100  | 43 68  |
| Sanford, Alida      | 103  | 45 00  |
| Shaw, Mildred       | 103  | 45 00  |
| Shiple, Mary H.     | 103  | 45 00  |
| Spidell, Jennie     | 103  | 45 00  |
| Sweet, Annie E.     | 103  | 45 00  |
| Brown, Edith S.     | 103  | 30 00  |
| Card, Edna R.       | 103  | 30 00  |
| Davidson, Rebecca   | 98   | 28 53  |
| Greenough, Jennie   | 102  | 29 70  |
| Hamilton, Olevia    | 103  | 30 00  |
| Laws, Lillian F.    | 103  | 30 00  |

|                      |     |       |
|----------------------|-----|-------|
| McCallum, Mabel      | 103 | 30 00 |
| Pratt, Lena H.       | 98  | 28 53 |
| Sanford, Janet M.    | 103 | 30 00 |
| Underwood, Elizabeth | 103 | 30 00 |
| Vaughan, Cora A.     | 103 | 30 00 |
| Warr, Evangeline     | 103 | 30 00 |

**In Poor Sections.**

|                     |     |       |
|---------------------|-----|-------|
| Benedict, Lottie M. | 97  | 37 67 |
| Harvey, Meta A.     | 76  | 29 51 |
| Muller, Lena        | 103 | 40 00 |
| Rose, Bessie M.     | 69  | 26 79 |
| Underwood, Ruth     | 86  | 33 39 |
| Warr, Marjorie      | 103 | 40 00 |

**East.**

|                      |      |       |
|----------------------|------|-------|
| Doane, Margaret A.   | 103  | 75 00 |
| Chase, Gertrude M.   | 103  | 60 00 |
| Dowell, Vera B.      | 37   | 21 54 |
| Holesworth, Mabel C. | 103  | 60 00 |
| Logan, Jessie B.     | 103  | 60 00 |
| Mitchener, Leona     | 76   | 44 26 |
| MacDougall, Myrna    | 103  | 60 00 |
| McKinnon, John J.    | 20   | 11 64 |
| O'Brien, Ellen J.    | 20   | 11 64 |
| Scott, Catherine M.  | 103  | 60 00 |
| Simm, Ada            | 103  | 60 00 |
| Simm, Ethalyn        | 102  | 59 41 |
| Starratt, Hattie B.  | 103  | 60 00 |
| Weldon, Augusta      | 101  | 58 83 |
| Wright, Johanna      | 103  | 60 00 |
| Boutilier, May       | 103  | 45 00 |
| Burgess, Bertha      | 101  | 44 12 |
| Campbell, Margaret   | 103  | 45 00 |
| Croft, Margaret      | 46   | 20 08 |
| Crowe, Bella         | 103  | 45 00 |
| Dawson, Katherine    | 103  | 45 00 |
| Eastham, Gertrude    | 102½ | 44 78 |
| Fiske, Lalia         | 103  | 45 00 |
| Gates, Gertrude      | 100  | 43 68 |
| King, Ada A.         | 103  | 45 00 |
| Loughead, Agnes      | 103  | 45 00 |
| Mosher, Leona        | 102½ | 44 78 |
| McLellan, Annie      | 103  | 45 00 |
| McLellan, Ruth G.    | 103  | 45 00 |
| McLeod, Margaret     | 80   | 34 94 |
| O'Brien, Miles, A.   | 103  | 45 00 |
| Smith, Eva M.        | 93   | 40 62 |
| Smith, Mary L.       | 103  | 45 00 |
| Spares, Sadie J.     | 103  | 45 00 |
| Stephens, Gladys     | 103  | 45 00 |
| Stevens, Verna B.    | 97   | 42 37 |
| Taylor, Sadie O.     | 103  | 45 00 |
| Underwood, Annie     | 103  | 45 00 |
| Wallace, Ellen       | 103  | 45 00 |
| Weathered, Jessie    | 103  | 45 00 |
| Wickwire, Margaret   | 98   | 42 80 |
| Withrow, Mary L.     | 102  | 44 56 |
| Wright, Florence     | 102  | 44 56 |
| Aldred, Laura        | 76   | 22 13 |
| Bradshaw, Janet      | 103  | 30 00 |
| Etter, Florence      | 58   | 16 88 |
| Horne, May E.        | 103  | 30 00 |
| Macdonald, Ada       | 89   | 25 91 |
| MacKenzie, Gertrude  | 89   | 25 91 |

|                    |     |       |
|--------------------|-----|-------|
| MacPhee, Rose      | 103 | 30 00 |
| McKenzie, Estelle  | 87  | 25 33 |
| Platt, Gwladys     | 103 | 30 00 |
| Robinson, Sadie    | 46½ | 13 54 |
| Sinclair, Margaret | 103 | 30 00 |
| Sim, Jennie P.     | 103 | 30 00 |
| Wallace, Della E.  | 98  | 28 53 |
| Withrow, Ethel B.  | 98  | 28 53 |

**In Poor Sections.**

|                   |     |       |
|-------------------|-----|-------|
| Burton, Matilda   | 81. | 31 45 |
| Brown, Helen      | 89  | 34 56 |
| Brownell, Pleasah | 88  | 34 17 |
| Etter, Gorden A.  | 45  | 17 47 |
| MacDougall, Merle | 101 | 39 22 |

**Annuitants.**

|                   |       |
|-------------------|-------|
| Goudey, Theodosia | 60 00 |
| Scott, Lily A.    | 60 00 |
| Smith, Letson M.  | 60 00 |
| Scott, Annie E.   | 45 00 |

**INVERNESS.**

**South.**

|                         |     |       |
|-------------------------|-----|-------|
| Tompkins, Ida           | 98  | 99 90 |
| Hennesey, Margaret      | 98  | 57 07 |
| Hirtle, Roy J. E.       | 102 | 59 41 |
| McDougall, Jessie A.    | 98  | 57 07 |
| MacLellan, Mary F.      | 103 | 60 00 |
| Sr. St. Marie Dolores   | 103 | 60 00 |
| Sr. St. Zephyrin        | 103 | 60 00 |
| Bird, Vera              | 102 | 44 56 |
| Davis, Catherine M.     | 103 | 45 00 |
| Fox, Bertha             | 103 | 45 00 |
| Grant, Bertha A.        | 103 | 45 00 |
| Henderson, Mamie B.     | 102 | 44 56 |
| McDonald, Jessie        | 103 | 45 00 |
| McDonnell, Christina E. | 103 | 45 00 |
| MacDougall, Agnes       | 103 | 45 00 |
| McMaster, Duncan B.     | 103 | 45 00 |
| Martin, Marion          | 103 | 45 00 |
| Mosher, Clarence M.     | 98  | 42 80 |
| Sister St. Olga         | 103 | 45 00 |
| Sister St. Philip       | 103 | 45 00 |
| Strople, Janie I.       | 102 | 44 56 |
| Tompkins, Mary E.       | 103 | 45 00 |
| Bayne, Lily I.          | 82  | 23 88 |
| Beaton, Sarah A.        | 97  | 28 24 |
| Beaver, Lina M.         | 87  | 25 33 |
| Boyle, Cecilia M. ...   | 103 | 30 00 |
| Bren, Frances E.        | 97  | 28 24 |
| Chisholm, Katie         | 102 | 29 70 |
| DeCoste, Florence K.    | 62  | 18 05 |
| Forbes, Jessie A.       | 103 | 30 00 |
| Forbes, John C.         | 88  | 25 62 |
| Forrestall, Mary        | 103 | 30 00 |
| Gillis, Dougald A.      | 55  | 16 01 |
| Gillis, Mary C.         | 103 | 30 00 |
| Graham, Katie M.        | 45  | 13 10 |
| Grant, Cassie J.        | 79  | 23 00 |
| Hawley, Maude           | 64  | 18 63 |

|                         |     |       |
|-------------------------|-----|-------|
| Jamieson, Alexandra M.  | 84  | 24 46 |
| Kennedy, Mary M. A.     | 86  | 25 04 |
| Leonard, Catherine C.   | 71  | 20 68 |
| McCalder, Norman A.     | 74  | 21 55 |
| McDonald, Agatha        | 84  | 24 46 |
| McDonald, Christina     | 90  | 26 21 |
| McDonald, Christina     | 66  | 19 21 |
| McDonald, Katherine     | 103 | 30 00 |
| McDonald, Mary Belle    | 102 | 29 70 |
| McDonald, Tena Eliza    | 70  | 20 39 |
| McDonnell, Mary F.      | 94  | 27 37 |
| McDougall, Jessie A.    | 103 | 30 00 |
| MacFadyen, Barbara R.   | 84  | 24 46 |
| McFadyen, Florence M.   | 82  | 23 88 |
| McInnis, Catherine C.   | 89  | 25 91 |
| McIntosh, Jessie A.     | 74  | 21 55 |
| McKenzie, William D.    | 64  | 18 63 |
| McKinnon, Christina     | 89  | 25 91 |
| McLellan, Margaret B.   | 73  | 21 26 |
| MacLeod, Mary Ann       | 98  | 28 53 |
| MacNeill, Mary A.       | 98  | 28 53 |
| MacQueen, Alice         | 103 | 30 00 |
| McQueen, Christina      | 85  | 24 75 |
| MacRae, Barbara         | 67  | 19 50 |
| Miller, Christina J.    | 103 | 30 00 |
| Rose, Janet F.          | 83  | 24 17 |
| Watt, Bridgie G.        | 99  | 28 82 |
| Watts, Ada M.           | 103 | 30 00 |
| *Cameron, Isabell       | 72  | 27 95 |
| *Forbes, Katie B.       | 103 | 40 00 |
| *Langley, Grace E.      | 59  | 22 91 |
| *McDonald, Florence     | 82  | 31 84 |
| *McDonald, Catherine    | 81  | 31 45 |
| *MacLellan, Archibald D | 69  | 26 79 |
| *MacLellan, Marcella B. | 18  | 6 99  |
| *MacPhail, Eilan S.     | 89  | 34 56 |
| *Proctor, Nellie F.     | 109 | 42 33 |

**Annuitants.**

|                  |       |
|------------------|-------|
| Chisholm, Duncan | 60 00 |
| McQuarrie, Angus | 30 00 |

**North.**

|                         |     |       |
|-------------------------|-----|-------|
| Arseneau, Florence      | 103 | 60 00 |
| Collins, Daniel         | 98  | 57 07 |
| Cormier, Wm. E.         | 103 | 60 00 |
| Gillis, Malcolm H.      | 88  | 51 24 |
| LeBlanc, John J.        | 103 | 60 00 |
| McDonald, Duncan H.     | 103 | 60 00 |
| McLellan, Annie M.      | 103 | 60 00 |
| MacLeod, Francis C.     | 103 | 60 00 |
| Morrison, Alex. B.      | 103 | 60 00 |
| Sister St. Andrew       | 103 | 60 00 |
| Sister Mary St. Stephen | 103 | 60 00 |
| Archibald, A. D.        | 36  | 15 71 |
| Aucoin, James H.        | 103 | 45 00 |
| Blanchard, Annie J.     | 91  | 39 75 |
| Chiasson, Ephraim       | 102 | 44 56 |
| Coady, Sara J.          | 98  | 42 80 |
| DeCoste, Joseph A.      | 14  | 6 10  |
| Doucet, Cecilia         | 103 | 45 00 |
| Gillis, Katherine       | 103 | 45 00 |
| Gillis, Michael         | 103 | 45 00 |

|                        |     |       |
|------------------------|-----|-------|
| McDaniel, Annie E.     | 103 | 45 00 |
| McDougall, Katherine   | 100 | 43 68 |
| MacIsaac, Mary A.      | 71  | 31 00 |
| MacKean, Rilda M.      | 102 | 44 56 |
| MacKinnon, Mary A.     | 103 | 45 00 |
| McLean, L. E.          | 103 | 45 00 |
| McLellan, Florence C.  | 103 | 45 00 |
| McLellan, A. N.        | 103 | 45 00 |
| McLeod, Teresa         | 103 | 45 00 |
| Sister St. Berthold    | 84  | 36 68 |
| Sister St. Mary Jane   | 103 | 45 00 |
| Austen, Katherine      | 66  | 19 21 |
| Beaton, Bella          | 74  | 21 55 |
| Cameron, Ellen C.      | 85  | 24 75 |
| Cameron, Marion        | 103 | 30 00 |
| Campbell, Lucy J.      | 77  | 22 42 |
| Collins, Sadie K.      | 103 | 30 00 |
| DesVaux, Adele D.      | 103 | 30 00 |
| Doucet, Delina         | 103 | 30 00 |
| Doucet, Adele S.       | 103 | 30 00 |
| Doucet, Philip G.      | 100 | 29 12 |
| Ferguson, Helen J.     | 84  | 24 46 |
| Ferguson, Rachel       | 70  | 20 39 |
| Gillis, Ronald A.      | 64  | 18 63 |
| Jamieson, Beatrice M.  | 70  | 20 39 |
| Kennedy, Murdoch D.    | 10  | 2 91  |
| LeBlanc, Paul F. D.    | 103 | 30 00 |
| LeBlanc, Mary          | 103 | 30 00 |
| LeBlanc, Thomas        | 103 | 30 00 |
| McDonald, Mary J.      | 90  | 26 21 |
| McGregor, Dan E.       | 102 | 29 70 |
| McGregor, Mary A.      | 103 | 30 00 |
| MacLean, Malcolm H.    | 89  | 25 91 |
| McLellan, Mary C.      | 19  | 5 52  |
| McLellan, Marjorie B.  | 88  | 25 62 |
| McLellan, Mamie        | 89  | 25 91 |
| McLellan, Alexander D. | 78  | 22 71 |
| McLellan, Margaret     | 93  | 27 08 |
| McMillan, Daniel       | 103 | 30 00 |
| McNair, Margaret E.    | 98  | 28 53 |
| Macquarrie, Annie      | 82  | 23 88 |
| Murray, Claude         | 103 | 30 00 |
| Philips, Maggie C.     | 93  | 27 08 |
| Sister Margaret Mary   | 103 | 30 00 |
| Walker, Mary C.        | 102 | 29 70 |

**In Poor Sections.**

|                      |     |       |
|----------------------|-----|-------|
| Austen, Bella M.     | 89  | 34 56 |
| Beaton, Margaret C.  | 83  | 32 23 |
| Cameron, Mary B.     | 47  | 18 25 |
| Cameron, Christina   | 89  | 34 56 |
| Delaney, Matilda     | 103 | 40 00 |
| McDonald, Katie Anne | 80  | 31 06 |
| MacDonald, Angus A.  | 93  | 36 11 |
| McLellan, Hugh       | 73  | 28 34 |
| McMillan, Dan A.     | 40  | 15 53 |
| Robertson, Mamie     | 81  | 31 45 |
| Smith, S. Lorena     | 54  | 20 97 |
| Tompkins, Mary A.    | 82  | 31 84 |

**Consolidations.**

|                         |     |       |
|-------------------------|-----|-------|
| Eastern, Harbor D, 1911 | 200 | 58 24 |
| Aberdeen, D             | 103 | 30 00 |

**Annuitants.**

|                     |    |    |
|---------------------|----|----|
| McLean, Donald E.   | 60 | 00 |
| Gillis, John A.     | 45 | 00 |
| McDougall, Arch. S. | 45 | 00 |
| McDonald, Teresa    | 45 | 00 |
| McKinnon, Malcolm   | 45 | 00 |
| Nicholson, A. G.    | 45 | 00 |

**KING'S.**

|                      |     |    |    |
|----------------------|-----|----|----|
| Campbell, Jessie B.  | 22  | 22 | 40 |
| Ford, Robie W.       | 95  | 96 | 82 |
| Oxner, Bertha        | 98  | 85 | 60 |
| Swanson, Peter I.    | 98  | 99 | 87 |
| Webster, Winnifred   | 98  | 85 | 60 |
| Armstrong, Flora     | 94  | 54 | 74 |
| Armstrong, Georgie   | 103 | 60 | 00 |
| Best, Flora A.       | 103 | 60 | 00 |
| Coggins, Adelaide    | 98  | 57 | 07 |
| Chambers, Flora      | 98  | 57 | 07 |
| Chipman, Emma        | 103 | 60 | 00 |
| Dennison, Gertrude   | 103 | 60 | 00 |
| Elliott, Ora B.      | 103 | 60 | 00 |
| Franey, Mary J.      | 103 | 60 | 00 |
| Hamilton, Helena     | 95  | 55 | 33 |
| Hall, Bradford       | 103 | 60 | 00 |
| Healey, Lidy, A.     | 103 | 60 | 00 |
| Hird, Cassie B.      | 103 | 60 | 00 |
| Illsley, Lucy A.     | 99  | 57 | 66 |
| Jacques, Violet, D.  | 103 | 60 | 00 |
| Kent, Mary A.        | 103 | 60 | 00 |
| Lewis, Dora F.       | 103 | 60 | 00 |
| Loomer, Estelle J.   | 103 | 60 | 00 |
| Lutz, Carrie M.      | 103 | 60 | 00 |
| Macdonald, Ruby      | 103 | 60 | 00 |
| Marchant, Laura      | 69  | 40 | 18 |
| Marshall, Gertrude   | 103 | 60 | 00 |
| Morse, Elizabeth     | 103 | 60 | 00 |
| Munro, Mary E.       | 103 | 60 | 00 |
| Nowlin, Elsie M.     | 103 | 60 | 00 |
| Parker, Millie V.    | 103 | 60 | 00 |
| Purdy, Agnes L.      | 98  | 57 | 07 |
| Reddy, Gertrude      | 103 | 60 | 00 |
| Rines, Rossie        | 98  | 57 | 07 |
| Robinson, Win. E.    | 103 | 60 | 00 |
| Seaboyer, Mabel      | 103 | 60 | 00 |
| Shields, Dorinda     | 103 | 60 | 00 |
| Smith, Jennie J.     | 98  | 57 | 07 |
| Strong, Mae S.       | 103 | 60 | 00 |
| Turner, Beatrice     | 98  | 57 | 07 |
| Webster, Elsie       | 102 | 59 | 41 |
| Welton, Jennie       | 97  | 56 | 49 |
| West, Gladys         | 98  | 57 | 07 |
| Whitman, Viola B.    | 103 | 60 | 00 |
| Woodward, Grace      | 98  | 57 | 07 |
| Yould, Evangeline    | 98  | 57 | 07 |
| Brown, Mertie B.     | 98  | 42 | 80 |
| Calder, Marie        | 98  | 42 | 80 |
| Challen, Bessie      | 103 | 45 | 00 |
| Chesley, Ella M.     | 103 | 45 | 00 |
| Chute, Edith         | 103 | 45 | 00 |
| Corkum, D. A.        | 103 | 45 | 00 |
| Dow, Margaret        | 98  | 42 | 80 |
| Eaton, Bertha. M. L. | 103 | 45 | 00 |

|                      |      |    |    |
|----------------------|------|----|----|
| Erskine, Jennie B.   | 103  | 45 | 00 |
| Fairweather, Winnie  | 98   | 42 | 80 |
| Franey, Bertha       | 98   | 42 | 80 |
| Freeman, Blanch      | 59   | 25 | 77 |
| Harris, Mary H.      | 103  | 45 | 00 |
| Jewers, Beatrice     | 98   | 42 | 80 |
| Jones, Bessie M.     | 98   | 42 | 80 |
| King, Mildred E.     | 103  | 45 | 00 |
| Lamont, Nancy        | 103  | 45 | 00 |
| Lawrence, Lillie     | 27   | 11 | 78 |
| Levy, Evelyn         | 88   | 38 | 43 |
| Loomer, Elizabeth    | 103  | 45 | 00 |
| Mapplebeck, Idella   | 103  | 45 | 00 |
| Mahan, Effie E.      | 103  | 45 | 00 |
| MacLeod, Ethel       | 102  | 44 | 56 |
| Manthorne, Muriel    | 101  | 44 | 12 |
| Marshall, Ida M.     | 103  | 45 | 00 |
| Marshall, Lettie     | 103  | 45 | 00 |
| Morse, Kate O.       | 103  | 45 | 00 |
| Mosher, Margaret     | 102  | 44 | 56 |
| Neary, Stella B.     | 103  | 45 | 00 |
| Newcombe, Bertha     | 100  | 48 | 68 |
| Nichols, Lola        | 102  | 44 | 56 |
| Palmeter, Nora       | 103  | 45 | 00 |
| Parker, Essie        | 97   | 42 | 37 |
| Parker, Prudence     | 54   | 23 | 58 |
| Plant, Thomas W.     | 103  | 45 | 00 |
| Quigley, Mary E.     | 84   | 36 | 68 |
| Rand, Harriett       | 103  | 45 | 00 |
| Reid, Eva M.         | 103  | 45 | 00 |
| Robbins, Cecil C.    | 103  | 45 | 00 |
| Roscoe, Viola        | 103  | 45 | 00 |
| Sanford, Celia       | 103  | 45 | 00 |
| Sawler, Merinda      | 98   | 42 | 80 |
| Simpson, Lulu        | 103  | 45 | 00 |
| Spinney, Edith       | 101  | 44 | 12 |
| Swindell, Charlotte  | 103  | 45 | 00 |
| Tobin, Gertrude      | 14   | 6  | 10 |
| Weaver, Mabel        | 103  | 45 | 00 |
| Woodworth, Cora      | 103  | 45 | 00 |
| Blackburn, Laura     | 72   | 20 | 97 |
| Densmore, Audrey     | 89   | 25 | 91 |
| Denton, Helen        | 98   | 28 | 53 |
| Duff, Jessie         | 102½ | 29 | 85 |
| Easson, Mabel B.     | 103  | 30 | 00 |
| Hale, Sadie E.       | 103  | 30 | 00 |
| Henderson, Elizabeth | 84   | 24 | 46 |
| Illsley, Lila        | 5    | 1  | 45 |
| Illsley, Ruth        | 103  | 30 | 00 |
| Long, Gertrude       | 103  | 30 | 00 |
| Mitchell, Ida L.     | 103  | 30 | 00 |
| MacLean, Annie       | 101  | 29 | 41 |
| Ogilvie, Gertrude    | 103  | 30 | 00 |
| Sanford, Ethel       | 103  | 30 | 00 |
| Sanford, Marion      | 103  | 30 | 00 |
| Strong, Gladys, B.   | 84   | 24 | 46 |
| Thorpe, Kate V.      | 103  | 30 | 00 |
| Trenholm, Edith      | 88   | 25 | 62 |

**In Poor Sections.**

|                      |     |    |    |
|----------------------|-----|----|----|
| Archibald, Mary McK. | 88  | 31 | 89 |
| Ballon, Stella       | 69  | 25 | 01 |
| Fancey, Elizabeth    | 101 | 36 | 62 |
| Fox, Evelyn V.       | 89  | 32 | 25 |
| Frank, Flossie       | 89  | 32 | 25 |
| Hall, Ella C.        | 87  | 31 | 58 |

|                     |      |       |
|---------------------|------|-------|
| Holland, Beatrice   | 59   | 21 38 |
| Jarvis, Myrtle      | 87   | 31 53 |
| Kaulbach, Ella      | 98   | 35 52 |
| Levy, Addie         | 89   | 32 25 |
| MacCully, Florence  | 54   | 19 58 |
| Marshall, Nina      | 89   | 32 25 |
| Pentz, Myrtle       | 100  | 36 25 |
| Parker, Ruby H.     | 44   | 15 95 |
| Robinson, Ethel     | 102½ | 37 16 |
| Robinson, Victor B. | 89   | 32 25 |
| Rodgerson, Pearl    | 80   | 29 00 |
| Rose, Laura M.      | 87   | 31 53 |
| Sawler, Edith G.    | 83   | 30 09 |
| Schofield, Lily B.  | 87½  | 31 72 |
| Skerry, Jessie B.   | 98   | 35 52 |
| Smith, Nellie       | 93   | 33 71 |
| Swindell, Laura     | 66   | 23 92 |
| Ward, Edith R.      | 87   | 31 53 |
| Weaver, Annie L.    | 88   | 31 89 |

**Annuitants.**

|                   |    |    |
|-------------------|----|----|
| Godfrey, John     | 75 | 00 |
| Andrews, Henry M. | 60 | 00 |
| Banks, Alonzo     | 60 | 00 |
| Craig, James      | 45 | 00 |

**LUNENBURG.**

|                    |     |        |
|--------------------|-----|--------|
| Mack, R. T.        | 103 | 105 00 |
| McKitterick, B.    | 103 | 105 00 |
| McLeod, Jeanette   | 103 | 105 00 |
| Hewitt, M. C.      | 103 | 90 00  |
| Rafuse, Gertrude   | 103 | 75 00  |
| Bailey, Hazel      | 98  | 57 07  |
| Berringer, Ross    | 98  | 57 07  |
| Bruhm, Muriel      | 103 | 60 00  |
| Chesley, Mary A.   | 103 | 60 00  |
| Hebb, Bessie C.    | 98  | 57 07  |
| Herman, Bertha     | 98  | 57 07  |
| Holder, Harriet    | 98  | 57 07  |
| Knickle, Kathleen  | 103 | 60 00  |
| Millett, Susie     | 103 | 60 00  |
| Rafuse, Eva        | 98  | 57 07  |
| Ritcey, Lillas     | 103 | 60 00  |
| Ritcey, Winnie     | 102 | 59 41  |
| Silver, Lottie     | 103 | 60 00  |
| Thompson, Lillian  | 98  | 57 07  |
| Veinotte, Alice M. | 103 | 60 00  |
| Wentzell, Mary P.  | 102 | 59 41  |
| Wentzell, Minnie   | 103 | 60 00  |
| Whitman, Carrie    | 103 | 60 00  |
| Whitney, Lois      | 103 | 60 00  |
| Whynacht, Maggie   | 98  | 57 07  |
| Young, Helen R.    | 74  | 43 09  |
| Young, Mary E.     | 98  | 57 07  |
| Zinck, Minnie      | 103 | 60 00  |
| Bolivar, Oliva M.  | 103 | 45 00  |
| Brooks, Blanche    | 103 | 45 00  |
| Countway, Blanche  | 101 | 44 12  |
| Crawford, Florence | 103 | 45 00  |
| Dauphinee, Tessie  | 103 | 45 00  |
| Deal, Bernice      | 103 | 45 00  |
| Dolliver, Olive    | 103 | 45 00  |
| Eisnor, Idella     | 103 | 45 00  |
| Ernst, Jessie M.   | 103 | 45 00  |

|                     |     |       |
|---------------------|-----|-------|
| Fralic, Elsie       | 103 | 45 00 |
| Freeman, Inna       | 97  | 42 37 |
| Gaul, Ethel         | 63  | 27 52 |
| Greenlaw, Marion    | 103 | 45 00 |
| Hawboldt, Gertrude  | 102 | 44 56 |
| Hawksworth, Eva     | 103 | 45 00 |
| Hebb, Arthur W.     | 93  | 40 62 |
| Hebb, Jennie L.     | 103 | 45 00 |
| Hiltz, Annie L.     | 103 | 45 00 |
| Hirtle, Ethel       | 20  | 8 72  |
| Hirtle, Mary E.     | 103 | 45 00 |
| Hirtle, Nora        | 103 | 45 00 |
| Hirtle, Olive       | 103 | 45 00 |
| Keddy, Claude       | 103 | 45 00 |
| Langille, Edith     | 103 | 45 00 |
| Langille, Myrtle    | 103 | 45 00 |
| Lohues, Minnie      | 103 | 45 00 |
| Lohues, Stella      | 103 | 45 00 |
| Mader, Bessie       | 103 | 45 00 |
| Manning, Myra       | 103 | 45 00 |
| Mason, Jessie       | 103 | 45 00 |
| Millett, Sadie      | 103 | 45 00 |
| Mouzar, Laliah      | 84  | 36 68 |
| Naugler, Agnes      | 101 | 44 12 |
| Nichols, Leon       | 102 | 44 56 |
| Nicol, Minnie       | 103 | 45 00 |
| Parker, Carrie      | 24  | 10 47 |
| Rinehardt, Grace    | 103 | 45 00 |
| Remby, Lottie       | 102 | 44 56 |
| Richards, Edith     | 102 | 44 56 |
| Ritcey, Geraldine   | 103 | 45 00 |
| Rodenheiser, Lettie | 99  | 43 24 |
| Romkey, Mary C.     | 103 | 45 00 |
| Silver, Florence    | 103 | 45 00 |
| Smith, Eva M.       | 98  | 42 80 |
| Smith, Lola         | 98  | 42 80 |
| Smith, Minnie B.    | 101 | 44 12 |
| Spidle, Lillie      | 103 | 45 00 |
| Tobin, Ellen M.     | 103 | 45 00 |
| Tobin, Mary E.      | 103 | 45 00 |
| Wamback, Vera       | 103 | 45 00 |
| Warner, Emma L.     | 103 | 45 00 |
| Wentzell, Lois      | 103 | 45 00 |
| Young, Edith        | 103 | 45 00 |
| Young, Eldora       | 103 | 45 00 |
| Zwicker, Rohda      | 103 | 40 00 |
| *Allen, Christie    | 103 | 38 06 |
| *Bailey, Cora       | 98  | 40 00 |
| *Baker, Cora        | 103 | 29 41 |
| Bell, Gertrude      | 101 | 40 00 |
| *Bolivar, Bernice   | 103 | 40 00 |
| Bolivar, Minnie     | 69  | 20 09 |
| Brooks, Jessie      | 103 | 30 00 |
| Brooks, Lena        | 103 | 30 00 |
| Burgoyne, Mildred   | 101 | 29 41 |
| Bushen, Oda         | 78  | 22 71 |
| *Chesley, Isabel    | 98  | 38 06 |
| Conrad, Grace       | 78  | 22 71 |
| Conrad, Rhoda       | 98  | 28 53 |
| Cook, Leda          | 88  | 25 62 |
| Cook, Lulu          | 103 | 30 00 |
| Crouse, Georgina    | 101 | 29 41 |
| Crouse, Viola       | 103 | 30 00 |
| Dalton, Hilda       | 103 | 30 00 |
| Eisenhaner, A. J.   | 20  | 5 82  |
| *Ernst, Amyneella   | 94  | 36 50 |
| Ernst, Gladys       | 103 | 30 00 |

|                       |     |       |
|-----------------------|-----|-------|
| Ernst, Oressa B.      | 103 | 30 00 |
| Ernst, Winnifred      | 15  | 4 36  |
| Fancey, Charlotte     | 103 | 30 00 |
| Feener, Gladys        | 84  | 24 46 |
| Feener, Lettie        | 103 | 30 00 |
| Feindell, Hilda       | 102 | 29 70 |
| Green, Elizabeth      | 59  | 17 17 |
| Hebb, Beatrice        | 103 | 30 00 |
| *Heckman, Belle       | 55  | 21 36 |
| Hilton, Muriel        | 93  | 27 08 |
| Himmelman, Carrie     | 74  | 21 55 |
| Hirtle, Gladys        | 79  | 23 00 |
| Johnson, Mary         | 103 | 30 00 |
| Kaulback, Birdie      | 103 | 30 00 |
| Kaulback, Ruby        | 103 | 30 00 |
| Keddy, Pearl          | 82  | 23 88 |
| Kennedy, Lois         | 103 | 30 00 |
| Knickle, Jennie       | 103 | 30 00 |
| *Lantz, Hazel         | 89  | 34 56 |
| Mailman, Violet       | 12  | 3 49  |
| *Morgan, Frances      | 89  | 34 56 |
| Morgan, Percy         | 103 | 30 00 |
| Morgan, Sadie         | 103 | 30 00 |
| Morton, Daisy         | 62  | 18 05 |
| Mossman, Ada          | 103 | 30 00 |
| Mossman, Cora         | 103 | 30 00 |
| McGuire, Mary T.      | 103 | 30 00 |
| Naugler, Emma         | 78  | 22 71 |
| Parks, Jennie         | 103 | 30 00 |
| Rafuse, Margaret      | 103 | 30 00 |
| Saltman, Ernst        | 103 | 30 00 |
| Sarty, Eva            | 98  | 28 53 |
| Schrader, Carrie      | 98  | 28 53 |
| Simpson, Edith M.     | 84  | 24 46 |
| Sperry, Rhoda         | 103 | 30 00 |
| Slauenwhite, Florence | 92  | 26 79 |
| Smith, Ada            | 103 | 30 00 |
| Strumm, Emma          | 103 | 30 00 |
| *Thompson, Albertha   | 103 | 40 00 |
| Veinot, Lillian       | 103 | 30 00 |
| Walters, Margaret     | 89  | 25 91 |
| Westhaver, Jennie     | 103 | 30 00 |
| Wentzell, Edith       | 103 | 30 00 |
| *Wentzell, Elsie      | 98  | 38 06 |
| *Wentzell, Melvin     | 78  | 30 29 |
| Wentzell, Sadie       | 102 | 29 70 |
| Wharton, Zella        | 99  | 28 82 |
| Wile, Dora            | 103 | 30 00 |
| Whynot, Katie         | 103 | 30 00 |
| Wolfe, Beatrice       | 103 | 30 00 |
| Wolfe, Blanche        | 103 | 30 00 |
| Young, Amy            | 74  | 21 55 |
| Zinck, Sadie          | 40  | 11 65 |

Annuitants.

|                 |       |
|-----------------|-------|
| Riser, Daniel   | 60 00 |
| Faulkner, James | 45 00 |
| Stoddart, Marie | 45 00 |
| Heckman, A. W.  | 30 00 |
| Kaulbach, Laura | 30 00 |

Chester.

|                |     |       |
|----------------|-----|-------|
| Harvey, Bessie | 103 | 60 00 |
| Hill, Clara J. | 103 | 60 00 |

|                     |     |       |
|---------------------|-----|-------|
| Hawboldt, Susie     | 103 | 60 00 |
| Houghton, Cyretha   | 103 | 60 00 |
| Zinck, Austin       | 103 | 60 00 |
| Zwicker, Flora      | 103 | 60 00 |
| Canavan, Annie E.   | 102 | 44 56 |
| Mills, Mary E.      | 103 | 45 00 |
| Webber, Olie B.     | 103 | 45 00 |
| Zinck, Florence     | 103 | 45 00 |
| Zinck, Sydney       | 103 | 45 00 |
| Aalders, Jesse M.   | 90  | 26 21 |
| Backman, Olo        | 103 | 30 00 |
| Boylan, Alice E.    | 89  | 25 91 |
| *Corkum, Ethel M.   | 50  | 19 41 |
| Corkum, Mildred     | 103 | 30 00 |
| Corkum, Minnie      | 103 | 30 00 |
| Etter, Coraline     | 101 | 29 41 |
| Fleet, Cora D.      | 102 | 29 70 |
| *Gray, Nellie       | 86  | 33 39 |
| Hawboldt, Ida E.    | 103 | 30 00 |
| Hiltz, Karl M.      | 103 | 30 00 |
| Hyson, A. E.        | 84  | 24 46 |
| Keddy, Sadie        | 102 | 29 70 |
| Kilkup, Edith       | 103 | 30 00 |
| Lantz, Verta        | 98  | 28 53 |
| Millett, John S.    | 98  | 28 53 |
| *Murphy, Ruth       | 96  | 37 28 |
| *Phillips, Winifred | 81  | 31 45 |
| Rafuse, Sybil       | 103 | 30 00 |
| *Russell, Harrietta | 20  | 7 77  |
| *Spidell, Sadie M.  | 94  | 36 50 |
| Wentzell, Elsie W.  | 103 | 30 00 |
| Zinck, Jessie       | 103 | 30 00 |
| Zwicker, Bessie     | 103 | 30 00 |

PICTOU.

East.

|                      |     |        |
|----------------------|-----|--------|
| MacLeod, John T.     | 103 | 105 00 |
| Baillie, A. G.       | 98  | 71 32  |
| Hunt, G. E.          | 98  | 71 32  |
| Skinner, L. R.       | 98  | 71 32  |
| Scott, Margaret      | 98  | 71 32  |
| Amos, R. Maud        | 103 | 60 00  |
| Bannerman, Margaret  | 98  | 57 07  |
| Balcom, L. S.        | 98  | 57 07  |
| Ballantyne, Esther   | 103 | 60 00  |
| Clarke, Adelia       | 98  | 57 07  |
| Fraser, Margaret     | 98  | 57 07  |
| Fraser, M. Louise    | 98  | 57 07  |
| Grant, Maria         | 103 | 60 00  |
| Grant, Clara A.      | 103 | 60 00  |
| Guild, Lulu J.       | 96  | 55 91  |
| Grey, Maude          | 98  | 57 07  |
| Lent, F. I.          | 98  | 57 07  |
| MacBean, Jennie      | 103 | 60 00  |
| MacKay, Robetta      | 98  | 57 07  |
| Macpherson, Eliza    | 98  | 57 07  |
| MacLean, Sarah E.    | 98  | 57 07  |
| Macleod, Isabelle E. | 103 | 60 00  |
| McLean, Cassie       | 98  | 57 07  |
| Munn, Nina           | 98  | 57 07  |
| Murdoch, Louisa M.   | 103 | 60 00  |
| Murray, Sadie        | 98  | 57 07  |
| Ogilvie, A. Marie    | 103 | 60 00  |





|                       |     |       |
|-----------------------|-----|-------|
| MacKay, Lena          | 100 | 43 68 |
| MacKay, A. Olivia     | 103 | 45 00 |
| MacKay, Beatrice      | 103 | 45 00 |
| MacLeod, Annie M.     | 102 | 44 56 |
| MacIntosh, Jennie     | 88  | 38 43 |
| MacLellan, Charlotte  | 101 | 44 12 |
| MacTavish, Elizabeth  | 98  | 42 80 |
| McGirr, Gertrude      | 73  | 31 88 |
| McCunn, Isabel        | 103 | 45 00 |
| McInnes, Anna         | 102 | 44 56 |
| Moore, Maude          | 103 | 45 00 |
| Murray, Christine     | 103 | 45 00 |
| Patterson, F. H.      | 103 | 45 00 |
| Payne, Sadie A.       | 101 | 44 12 |
| Rose, Jessie F.       | 103 | 45 00 |
| Rogers, Marion        | 103 | 45 00 |
| Ross, Annie M.        | 103 | 45 00 |
| Sutherland, Mina      | 102 | 44 56 |
| Brown, May R.         | 90  | 26 21 |
| Clarke, Mary O.       | 103 | 30 00 |
| Cox, Blanche          | 102 | 29 70 |
| Creighton, Maymie     | 88  | 25 62 |
| Elliott, Annie L.     | 102 | 29 70 |
| Hamilton, Mary        | 74  | 21 55 |
| Johnson, Lillian      | 99  | 28 82 |
| Langille, Agnes       | 89  | 25 91 |
| Langille, Mabel       | 101 | 29 41 |
| Langille, Harry B.    | 89  | 25 91 |
| MacBain, Jennie H.    | 82  | 23 88 |
| MacKay, Jennie M.     | 55  | 16 01 |
| MacKay, Mary E.       | 103 | 30 00 |
| MacKenzie, C. Estelle | 89  | 25 91 |
| MacKenzie, N. W.      | 69  | 20 09 |
| MacKenzie, Florence   | 96  | 27 95 |
| MacQuarrie, Jessie    | 102 | 29 70 |
| MacTavish, Caroline   | 101 | 29 41 |
| Maxwell, Lilla I.     | 89  | 25 91 |
| Murray, Lena          | 103 | 30 00 |
| Munro, Edna M.        | 68  | 19 79 |
| Munro, W. F.          | 103 | 30 00 |
| Reid, Catherine       | 97  | 28 24 |
| Sutherland, Blanche   | 102 | 29 70 |

**In Poor Sections.**

|                      |     |       |
|----------------------|-----|-------|
| Creighton, Ruth      | 89  | 34 56 |
| MacKay, Annie C.     | 103 | 40 00 |
| MacQuarrie, Almira   | 83  | 32 23 |
| Matheson, Georgia C. | 103 | 40 00 |
| Murray, Grace A.     | 103 | 40 00 |
| Rae, Margaret        | 80  | 31 06 |
| Sutherland, Lexie    | 70  | 27 18 |

**Annuitants.**

|                 |  |       |
|-----------------|--|-------|
| Fraser, William |  | 60 00 |
| Gollan, John    |  | 60 00 |
| MacKay, John    |  | 60 00 |
| McArthur, Alex. |  | 60 00 |
| McDonald, D. W. |  | 60 00 |

**QUEENS.**

**South.**

|                    |     |        |
|--------------------|-----|--------|
| Morton, R. F.      | 103 | 105 00 |
| Mullins, Jennie E. | 103 | 90 00  |

|                     |     |       |
|---------------------|-----|-------|
| Coulter, Christina  | 103 | 75 00 |
| Baltzar, Mary       | 103 | 60 00 |
| Freeman, Winnie     | 103 | 60 00 |
| Ford, Gertrude      | 103 | 60 00 |
| Harrington, E. B.   | 103 | 60 00 |
| Harrington, Georgie | 103 | 60 00 |
| Hatt, Laura         | 103 | 60 00 |
| Mader, Annie A.     | 103 | 60 00 |
| Patterson, Cordelia | 102 | 59 41 |
| Wylde, Mary A.      | 103 | 60 00 |
| Freeman, Allene     | 103 | 45 00 |
| Freeman, Nellie B.  | 103 | 45 00 |
| Hartlen, Ida        | 103 | 45 00 |
| Huskins, Pearl      | 102 | 44 56 |
| Kempton, Abbie      | 103 | 45 00 |
| Mack, Theresa       | 103 | 45 00 |
| McGinty, Katherine  | 103 | 45 00 |
| MacQuarrie, Gladys  | 103 | 45 00 |
| Reinhardt, Mildred  | 91  | 39 75 |
| Spurr, Annie M.     | 102 | 44 56 |
| Brannen, Ruby       | 32  | 9 31  |
| Gaskill, Emma       | 78  | 22 71 |
| Gerhardt, Francis   | 89  | 25 91 |
| *Gibbons, James M.  | 103 | 40 00 |
| Godfrey, Bessie     | 103 | 30 00 |
| *Harlow, Emma       | 90  | 34 95 |
| Hiltz, Elizabeth    | 103 | 30 00 |
| Hunt, Gladys        | 102 | 29 70 |
| Hupman, Effie R.    | 103 | 30 00 |
| *Latham, Hattie     | 94  | 36 50 |
| Mack, Winifred      | 94  | 27 37 |
| Mackay, Gertrude    | 102 | 29 70 |
| MacLeod, Annie W.   | 102 | 29 70 |
| Oxner, R. E.        | 14  | 4 07  |
| Pierce, Margaret J. | 94  | 27 37 |
| Rhynard, Gertrude   | 102 | 29 70 |
| *Wamback, Myrtle    | 103 | 40 00 |

**North.**

|                    |     |       |
|--------------------|-----|-------|
| Acker, Hattie      | 103 | 60 00 |
| Fancy, Lydia       | 102 | 59 41 |
| Freeman, Nettie    | 98  | 57 07 |
| Ramey, Jessie M.   | 98  | 57 07 |
| Weldon, Alice C.   | 103 | 60 00 |
| Ennis, Hilda B.    | 102 | 44 56 |
| Feindell, Hilda M. | 75  | 21 84 |
| Fransel, Letitia   | 103 | 30 00 |
| Hartlen, Maud      | 102 | 29 70 |
| *Kaulbach, Louise  | 84  | 32 62 |
| Kempton, Florence  | 102 | 29 70 |
| *MacNair, Lelia    | 71  | 27 57 |
| *Rhynard, Alma     | 82  | 31 84 |
| Smith, Henrietta   | 103 | 30 00 |
| Snow, Florence     | 102 | 29 70 |
| Blackman, Winifred | 97  | 28 24 |
| *Bayers, Olivia    | 89  | 34 56 |

**RICHMOND.**

|                        |     |        |
|------------------------|-----|--------|
| Maxwell, Margaret Lola | 103 | 105 00 |
| Beranger, Alvina       | 98  | 57 07  |
| Bissett, Clara V.      | 103 | 60 00  |
| Boyd, Christina        | 103 | 60 00  |
| Gillis, James D.       | 103 | 60 00  |

|                          |     |       |
|--------------------------|-----|-------|
| Grady, Alice Maud        | 103 | 60 00 |
| LeBlanc, Sabine Rose     | 103 | 60 00 |
| Sister Marie St. Firmine | 103 | 60 00 |
| Boyd, Laura E.           | 103 | 45 00 |
| Burke, Eva M.            | 103 | 45 00 |
| Burke, Hattie Mabel      | 103 | 45 00 |
| Coffey, Julia B.         | 101 | 44 12 |
| Forgeron, Eva May        | 103 | 45 00 |
| Hynes, M. Evangeline     | 46  | 20 08 |
| LeBlanc, Marie M.        | 83  | 36 25 |
| Leslie, Alfreda M.       | 98  | 42 80 |
| McCuish, Dan A.          | 92  | 40 18 |
| MacDougall, Margaret     | 103 | 45 00 |
| MacKillop, Ewen D.       | 103 | 45 00 |
| MacLeod, Marie S.        | 103 | 45 00 |
| McLeod, Peter A.         | 93  | 40 62 |
| MacLeod, Tena H.         | 103 | 45 00 |
| MacNeil, Florence        | 103 | 45 00 |
| MacNeil, Margaret A.     | 103 | 45 00 |
| MacNeil, Minnie V.       | 103 | 45 00 |
| Mauger, Lena             | 103 | 45 00 |
| Murphy, Margaret A.      | 103 | 45 00 |
| Mury, Simon              | 103 | 45 00 |
| Nelson, J. Scott         | 89  | 38 87 |
| Power, M. Gertrude       | 103 | 45 00 |
| Boucher, Mary M.         | 103 | 30 00 |
| Boyd, Florence C.        | 103 | 30 00 |
| Brymer, Lottie M.        | 103 | 30 00 |
| Cameron, Katie A.        | 103 | 30 00 |
| Cameron, Henrietta J.    | 45  | 13 10 |
| Campbell, Alexander      | 86  | 25 04 |
| Campbell, Katie          | 98  | 28 53 |
| Cash, Elizabeth J.       | 64  | 18 63 |
| Daigle, Joseph           | 103 | 30 00 |
| Etienne, George W.       | 103 | 30 00 |
| Jackson, Annie J.        | 101 | 29 41 |
| Johnston, Ethel          | 86  | 25 04 |
| DeRoche, Gertrude        | 103 | 30 00 |
| Langley, Gertrude        | 98  | 28 53 |
| LeBlanc, Harriet A.      | 42  | 13 10 |
| LeBlanc, John H.         | 20  | 5 82  |
| MacDonald, Annie         | 103 | 30 00 |
| MacDonald, Maisie        | 45  | 13 10 |
| McDonald, Mary A.        | 82  | 23 88 |
| McDonald, Mary A.        | 19  | 5 52  |
| MacDonald, Neil E.       | 94  | 27 37 |
| MacKichan, Annie I.      | 103 | 30 00 |
| McKillop, Kenneth A.     | 92  | 26 79 |
| MacLean, Jessie Belle    | 103 | 30 00 |
| MacNeil, Mary Ella       | 103 | 30 00 |
| Maguire, Nola P.         | 98  | 28 53 |
| Mauger, Edmund           | 89  | 25 91 |
| Murphy, Frances          | 103 | 30 00 |
| Morrison, Ella H.        | 98  | 28 53 |
| Ross, Finlay A.          | 88  | 25 62 |
| Ross, Jessie F.          | 15  | 4 36  |
| Samson, Mary Louise      | 103 | 30 00 |
| Sister Marie du Cenacle  | 103 | 30 00 |
| Sister Marie St. Yolande | 103 | 30 00 |

**In Poor Sections.**

|                          |    |       |
|--------------------------|----|-------|
| McDonald, Mary A. (1910) | 10 | 00    |
| McIntyre, Margaret L.    | 14 | 5 44  |
| McKenzie, Sadie A.       | 87 | 33 78 |
| McKinnon, John H.        | 91 | 35 34 |
| McNeil, David A.         | 73 | 28 34 |

|                     |     |       |
|---------------------|-----|-------|
| MacRae, Jessie A.   | 85  | 33 00 |
| Nicolle, Stanley P. | 102 | 39 61 |
| Sutherland, Don. A. | 97  | 37 67 |
| Thibeau, P. Wilfrid | 90  | 34 95 |
| Thibeau, Peter      | 97  | 37 67 |

**Annuitants.**

|                 |  |       |
|-----------------|--|-------|
| Boyle, D. R.    |  | 60 00 |
| McLeod, Malcolm |  | 60 00 |

**SHELBURNE.**

|                      |     |        |
|----------------------|-----|--------|
| MacLeod, A. N.       | 103 | 105 00 |
| Craigie, John A.     | 102 | 74 26  |
| Allen, Jane R.       | 103 | 60 00  |
| Brannen, Lottie G.   | 102 | 59 41  |
| Capstick, Grace      | 100 | 58 25  |
| Freeman, Grace D.    | 103 | 60 00  |
| Perry, Emma F.       | 103 | 60 00  |
| Turner, Flora A.     | 103 | 60 00  |
| Allen, Iscilda V.    | 103 | 45 00  |
| Davis, Hattie H.     | 102 | 44 56  |
| Etherington, Lillian | 103 | 45 00  |
| Grant, Ellen         | 103 | 45 00  |
| Grant, Estella       | 103 | 45 00  |
| Hanley, Ruth H.      | 102 | 44 56  |
| Kean, Evelyn S.      | 102 | 44 56  |
| Kempton, Jessie      | 103 | 45 00  |
| Lyle, E. R.          | 103 | 45 00  |
| Nickerson, Charlotte | 103 | 45 00  |
| Pennington, J. G.    | 103 | 45 00  |
| Smith, Myrtle L.     | 103 | 45 00  |
| Vance, Luther C.     | 17  | 7 41   |
| Crosby, Florence B.  | 87  | 25 33  |
| Curry, Frank W.      | 58½ | 17 03  |
| Devine, Harriet      | 19  | 5 52   |
| Firth, E. Louise     | 97  | 28 24  |
| Freeman, Louise      | 103 | 30 00  |
| Golden, Lola D.      | 103 | 30 00  |
| Hamilton, Mary A.    | 90  | 26 21  |
| Harding, A. C.       | 89  | 25 91  |
| Hemeon, W. B.        | 103 | 30 00  |
| Hogg, Mrs. Laura     | 103 | 30 00  |
| Jones, E. Dora       | 89  | 25 91  |
| Laing, Isabel J.     | 84  | 24 46  |
| Lloyd, Florence V.   | 102 | 29 70  |
| MacDonald, Kathleen  | 103 | 30 00  |
| MacKay, Margaret     | 99  | 30 00  |
| MacKay, Myrtle       | 98  | 28 82  |
| McKenne, Lulu        | 103 | 28 53  |
| Nickerson, Grace D.  | 103 | 30 00  |
| Pentz, Arthur G.     | 78  | 30 00  |
| Perry, Lola E.       | 97  | 22 71  |
| Ross, Nora A.        | 103 | 28 24  |
| Scott, Edna          | 58  | 30 00  |
| Shupe, I. Maude      | 103 | 16 88  |
|                      |     | 30 00  |

**In Poor Sections.**

|                   |    |       |
|-------------------|----|-------|
| Colp, Alice M.    | 79 | 30 58 |
| Decker, Isabel J. | 83 | 32 23 |
| Perry, Ora E.     | 91 | 35 34 |

**Annuitants.**

|                     |  |       |
|---------------------|--|-------|
| Goodick, J. D.      |  | 45 00 |
| McMillan, Elizabeth |  | 45 00 |

**Barrington.**

|                       |     |       |
|-----------------------|-----|-------|
| Doane, Jennie A.      | 103 | 60 00 |
| Fox, A. D.            | 102 | 59 41 |
| Nickerson, Matilda A. | 103 | 60 00 |
| Reynolds, Avis E.     | 103 | 60 00 |
| Rolph, Arthur A.      | 103 | 60 00 |
| Scott, Martha         | 103 | 60 00 |
| Smith, Annie S.       | 15  | 8 73  |
| Bethune, Annie B.     | 103 | 45 00 |
| Brannen, Lennie M.    | 82  | 35 81 |
| Christie, K. E.       | 65  | 28 39 |
| Decker, Bertha C.     | 83  | 36 25 |
| Firth, Alice W.       | 103 | 45 00 |
| Goodwin, Genesta      | 20  | 8 72  |
| Hogg, Garnet W.       | 100 | 43 68 |
| Hopkins, Bella L.     | 103 | 45 00 |
| Langille, E. H.       | 103 | 45 00 |
| McGinnis, Annie H.    | 102 | 44 56 |
| Murphy, C. Helena     | 99  | 43 24 |
| Nickerson, Bessie S.  | 98  | 42 80 |
| Nickerson, Kate K.    | 103 | 45 00 |
| Nickerson, Mildred C. | 49  | 21 40 |
| Nickerson, L. Isora   | 49  | 21 40 |
| Smith, Elsie B.       | 103 | 45 00 |
| Thomas, Elvah B.      | 103 | 45 00 |
| Brannen, Pearle, V.   | 103 | 30 00 |
| Cunningham, Leone     | 77  | 22 42 |
| Goodwin, Berenice A.  | 103 | 30 00 |
| Knowles, Meda L.      | 102 | 29 70 |
| McGuire, Maggie I.    | 103 | 30 00 |
| Powell, Samole E.     | 103 | 30 00 |
| Robbins, F. Willard   | 82  | 23 88 |
| Saunders, Luella M.   | 103 | 30 00 |
| Spinney, Amy L.       | 103 | 30 00 |
| Taylor, Lillian       | 103 | 30 00 |
| Thomas, G. B.         | 103 | 30 00 |
| Whitman, G. R.        | 102 | 29 70 |
| Wilson, Edna W.       | 103 | 30 00 |
| Wyman, Vera R.        | 103 | 30 00 |

**In Poor Sections.**

|                      |    |       |
|----------------------|----|-------|
| Bethell, Lucy        | 69 | 26 79 |
| Hagar, Leora G.      | 89 | 34 56 |
| Harding, Muriel      | 74 | 28 73 |
| Morton, Elizabeth M. | 68 | 26 40 |

**Annuitant.**

|                 |       |
|-----------------|-------|
| Matheson, W. H. | 45 00 |
|-----------------|-------|

**VICTORIA.**

|                           |     |        |
|---------------------------|-----|--------|
| MacLean, Christina, O.    | 103 | 105 00 |
| Anderson, Annie C.        | 103 | 60 00  |
| MacLeod, Martha E.        | 53½ | 31 15  |
| Brennan, Maude E.         | 103 | 45 00  |
| Christie, Margaret        | 99  | 43 24  |
| Coady, Rebecca E.         | 98  | 42 80  |
| Currie, Michael D. (1911) | 5   | 2 18   |
| MacAskill, Flora B.       | 98  | 42 80  |
| Macdonald, Louise         | 103 | 45 00  |
| MacInnis, Dan F. (1911)   | 34  | 14 84  |
| MacKenzie, Margaret M.    | 103 | 45 00  |
| MacLeod, John D.          | 103 | 45 00  |
| MacLeod, Catherine A.     | 100 | 43 68  |

|                        |     |       |
|------------------------|-----|-------|
| MacPherson, Barbara    | 87  | 37 99 |
| Lent, Georgie A.       | 54  | 23 58 |
| O'Brien, Rufus B.      | 72  | 31 44 |
| Watson, Annie M.       | 101 | 44 12 |
| Watson, Ella Mae       | 103 | 45 00 |
| Anderson, Carrie G.    | 103 | 30 00 |
| Boyle, Thomas A.       | 86  | 25 04 |
| Campbell, Mary J.      | 103 | 30 00 |
| Campbell, Jean E.      | 103 | 30 00 |
| Campbell, Flo D.       | 103 | 30 00 |
| Carey, John A.         | 49  | 14 26 |
| Coady, Francis P.      | 64  | 18 63 |
| Devean, Lillian May    | 74  | 21 55 |
| Horton, Annie          | 102 | 29 70 |
| MacAulay, Marguerita   | 103 | 30 00 |
| MacDonald, Dollie C.   | 89  | 25 91 |
| McInnis, Dan H.        | 102 | 29 70 |
| MacIvor, Louise C.     | 103 | 30 00 |
| McIvor, Hannah         | 89  | 25 91 |
| MacKay, Agnes M.       | 103 | 30 00 |
| MacKay, Jean           | 97  | 23 24 |
| McLeod, Roderick, N.   | 103 | 30 00 |
| MacLeod, Annie M.      | 40  | 11 65 |
| MacLeod, Donald A.     | 38  | 25 62 |
| McNeil, Lizzie A.      | 84  | 24 46 |
| MacQueen, Roddie       | 102 | 29 70 |
| MacRae, May D.         | 103 | 30 00 |
| Montgomery, Christine  | 74  | 21 55 |
| Morrison, James H.     | 40  | 11 65 |
| Nicholson, C. Margaret | 103 | 30 00 |
| Watson, Mary Katherine | 87  | 25 33 |

**In Poor Sections.**

|  |     |       |
|--|-----|-------|
| Buchanan, Kenneth N.                             | 103 | 40 00 |
| Cameron, Christena                               | 98  | 38 06 |
| MacAskill, Anabel                                | 96  | 37 28 |
| MacDonald, Jessie E.                             | 88  | 34 17 |
| McDonald, Florence C.                            | 103 | 40 00 |
| McIver, Christena                                | 88  | 34 17 |
| McKenzie, Daniel C.                              | 52½ | 20 38 |
| McLennan, Margaret R.                            | 103 | 40 00 |
| MacLeod, Malcolm                                 | 81  | 31 45 |
| McLeod, Donald F.                                | 68  | 26 40 |
| McNeil, Katherine A.                             | 84  | 32 62 |
| MacNeill, Catherine                              | 80  | 31 06 |
| MacRae, Gordon                                   | 84½ | 32 81 |
| Morrison, Josie Anne                             | 74  | 28 73 |
| Nelson, Gustave Adolf                            | 103 | 40 00 |
| Rice, Annie E.                                   | 89  | 34 56 |
| "Kempt Head" Consol-<br>dated Section, D. (1911) | 99  | 28 82 |

**Annuitant.**

|                      |       |
|----------------------|-------|
| McDonald, Michael B. | 60 00 |
|----------------------|-------|

**YARMOUTH.**

|                  |     |        |
|------------------|-----|--------|
| Bingay, Norna B. | 51  | 37 12  |
| Blackadar, G. D. | 103 | 90 00  |
| Horner, A. W.    | 90  | 78 62  |
| Kempton, W. F.   | 103 | 105 00 |
| McGray, M. W.    | 80  | 58 24  |
| Wyman, H. J.     | 103 | 90 00  |
| Allen, E. C.     | 103 | 75 00  |
| Allen, Letha S.  | 103 | 75 00  |

|                     |      |       |
|---------------------|------|-------|
| Hall, Florence B.   | 79   | 57 50 |
| Spinney, Mary E.    | 96   | 69 88 |
| Allen, George W.    | 103  | 60 00 |
| Allen, S. B.        | 103  | 60 00 |
| Beveridge, Helen B. | 102  | 59 41 |
| Bond, Mary G.       | 103  | 60 00 |
| Burrill, F. T.      | 13   | 7 56  |
| Cameron, Margaret   | 103  | 60 00 |
| Churchill, Nelson   | 99   | 57 66 |
| Churchill, H. W.    | 103  | 60 00 |
| D'Eon, J. Octave    | 102  | 59 41 |
| Durland, Addie W.   | 103  | 60 00 |
| Ellenwood, M. H.    | 103  | 60 00 |
| Floyd, Pearle       | 103  | 60 00 |
| Frost, Isabel F.    | 103  | 60 00 |
| Goodwin, Effie B.   | 103  | 60 00 |
| Grierson, Jean E.   | 103  | 60 00 |
| Hopkins, M. J.      | 96   | 55 91 |
| Huestis, Hannah     | 103  | 60 00 |
| Kinney, Laura       | 103  | 60 00 |
| Maxner, M. O.       | 103  | 60 00 |
| McGray, Jean D.     | 103  | 60 00 |
| McLeod, A. J.       | 103  | 60 00 |
| Moses, Della B.     | 103  | 60 00 |
| Platt, Bessie H.    | 17   | 9 98  |
| Potts, Louise S.    | 4    | 2 32  |
| Raymond, Luella     | 103  | 60 00 |
| Scott, Margaret     | 103  | 60 00 |
| Whyte, M. G.        | 101  | 58 83 |
| Allan, Frances L.   | 103  | 45 00 |
| Bain, Ethel M.      | 102½ | 44 78 |
| Baker, Ermina M.    | 50   | 21 84 |
| Bancroft, Helen     | 103  | 45 00 |
| Bond, Anna B.       | 10   | 4 36  |
| Brown, Maude S.     | 101  | 44 12 |
| Bryant, Arletta D.  | 103  | 45 00 |
| Chipman, Agnes J.   | 103  | 45 00 |
| Corning, Nellie R.  | 103  | 45 00 |
| Crosby, Jessie H.   | 58   | 25 33 |
| Crowell, Iona       | 97   | 42 37 |
| Delamere, S. P.     | 103  | 45 00 |
| Gavel, Margaret A.  | 101½ | 44 34 |
| Hurlbert, Bessie R. | 103  | 45 00 |
| Kavanagh, E. A.     | 93   | 40 62 |
| Landers, Mary McL.  | 103  | 45 00 |
| MacKay, J. MacP.    | 97   | 42 37 |
| Moses, Agnes        | 103  | 45 00 |
| Pentz, Harriet M.   | 102  | 44 56 |
| Platt, Ada M.       | 103  | 45 00 |
| Porter, Florence H. | 103  | 45 00 |
| Roach, Flo. L.      | 24   | 10 47 |
| Vickery, H. B.      | 103  | 45 00 |
| Wyman, C. W.        | 103  | 45 00 |
| Baker, Genie A.     | 103  | 30 00 |
| Burill, Fanny       | 52   | 15 14 |
| Forbes, M. G.       | 103  | 30 00 |
| Gavel, W. B.        | 97   | 28 24 |
| Hamilton, Stella G. | 88   | 25 62 |
| Jones, Estella A.   | 102  | 29 70 |
| King, Fanny         | 101  | 29 41 |
| McGray, A. Edna     | 103  | 30 00 |
| Pitman, Marion V.   | 103  | 30 00 |
| Pitman, Helen V.    | 103  | 30 00 |
| Porter, Herman L.   | 103  | 30 00 |
| Purney, Maria I.    | 98   | 28 53 |
| Randall, Eva A.     | 89   | 25 91 |
| Winter, M. B.       | 90   | 26 21 |

**In Poor Sections.**

|                    |     |       |
|--------------------|-----|-------|
| Doane, Lavina      | 103 | 40 00 |
| Hatfield, Etta M.  | 94  | 36 50 |
| Robichand, Emily   | 98  | 38 06 |
| VanAmburg, Hildred | 35  | 13 60 |

**Annuitant.**

|                 |  |       |
|-----------------|--|-------|
| Hilton, Mary M. |  | 45 00 |
|-----------------|--|-------|

**Argyle.**

|                       |     |       |
|-----------------------|-----|-------|
| D'Entremont, Rhoda M. | 103 | 60 00 |
| Fleet, Sarah J.       | 98  | 57 07 |
| Gray, Eva I.          | 103 | 60 00 |
| Hines, Nora G.        | 102 | 59 41 |
| Lombard, Marie A.     | 103 | 60 00 |
| McGill, Charlotte     | 103 | 60 00 |
| Sister M. Victorie    | 103 | 60 00 |
| Ahern, Mary E.        | 24  | 10 47 |
| Amirault, Edith S.    | 103 | 45 00 |
| Amirault, Simon A.    | 103 | 45 00 |
| Babin, Mary T.        | 103 | 45 00 |
| Bourque, Elizabeth    | 103 | 45 00 |
| Bourque, Mary A.      | 103 | 45 00 |
| Bower, Elizabeth F.   | 102 | 44 56 |
| Carver, Ida M.        | 98  | 42 80 |
| D'Entremont, Edna C.  | 103 | 45 00 |
| D'Eou, Laura F.       | 103 | 45 00 |
| MacKay, Nettie M.     | 103 | 45 00 |
| Mius, Mary N.         | 103 | 45 00 |
| Rose, Ivan M.         | 98  | 42 80 |
| Sister M. Seraphia    | 103 | 45 00 |
| Sister M. Eugenie     | 103 | 45 00 |
| Surette, Ada          | 103 | 45 00 |
| Surette, Rose D.      | 103 | 45 00 |
| Swaine, Mysie M.      | 103 | 45 00 |
| Thomas, Ida M.        | 103 | 45 00 |
| Amirault, Edith S.    | 103 | 30 00 |
| Amirault, Rose I.     | 103 | 30 00 |
| Amirault, Muriel A.   | 103 | 30 00 |
| Babin, Chantale       | 103 | 30 00 |
| Babin, Bertha         | 103 | 30 00 |
| Belliveau, Genevieve  | 103 | 30 00 |
| Belliveau, Mary S.    | 103 | 30 00 |
| Bourque, Rosie        | 84  | 24 46 |
| Bourque, Margaret E.  | 49  | 14 26 |
| Doucette, Alma M.     | 103 | 30 00 |
| Goodwin, Rosa P.      | 93  | 27 08 |
| Hopkins, Anita W.     | 103 | 30 00 |
| LeBlanc, J. B.        | 103 | 30 00 |
| Melanson, Leonie A.   | 102 | 29 70 |
| Moode, Regina M.      | 78  | 22 71 |
| Pothier, M. Annie     | 103 | 30 00 |
| Pothier, Mrs. Martha  | 98  | 28 53 |
| Prouty, Lillian       | 103 | 30 00 |
| Raynard, Kenneth      | 98  | 28 53 |
| Robicheau, Isabella   | 103 | 30 00 |
| Sister M. Gouzaga     | 103 | 30 00 |
| Smith, Marjorie C.    | 103 | 30 00 |
| Surette, Anne E.      | 103 | 30 00 |
| Surette, Nemerise     | 103 | 30 00 |

**In Poor Sections.**

|                   |     |       |
|-------------------|-----|-------|
| Boudreau, Rose    | 87½ | 33 97 |
| Bourque, Mary M.  | 103 | 40 00 |
| Burrell, Fanny    | 50  | 19 41 |
| Hatfield, Emma M. | 83  | 32 23 |
| Reeves, Flora D.  | 87  | 33 78 |
| Titus, Elvah B.   | 76  | 29 51 |

[Final report of the Committee to the Provincial Education Association, August, 1912.]

## COURSES OF STUDY IN THE COMMON SCHOOLS.

### EDUCATIONAL AIMS AND VALUES.

Omitting consideration of the mysterious processes of physical and mental inheritance and of individual unfoldment, the object of education is to transmit to the young the best inheritances of our race and civilization: their religion, their moral and social order, their science and industry, their literature and their art. Not, however, merely to inform the child concerning these, but to actually and effectively adjust him to these conditions of our civilization.

It follows, therefore, that the school program should be no merely arbitrary or whimsical scheme of studies. On the contrary, it should definitely aim at bringing the child into intelligent, active, and purposeful relation with the world in which he is to live. There are, accordingly, two main considerations which determine the choice and development of the several courses of study, with their pedagogic selection of material and arrangement of topics, viz., the nature of the child, and the nature of the universe that surrounds him, material, social, and spiritual.

Since the child, even during his school days, is a member of the complex organization functioning as family, society, church, industrial and civil order, the teacher must regard the school not as an institution apart from these, but as their unifying and clarifying element. In other words, education, so far as the school undertakes to control and direct it, is the purposive effort to unify and to implement the ideals of home, of religion, of social and civic duty. From the school as a point of vantage, the child is to find his bearings in the vast universe; to take a fitting place there, not merely thru knowledge, but by virtue of feeling, willing and doing aright.

Thus, the teacher is entrusted with one of the most important of all offices in society. In the true sense, his work as an educator as distinguished from the mere administrator of a program, can hardly be said to begin until he realizes in some degree the grave responsibility of his task. Authority he has, in sufficient measure, both material and moral; for it is of universal remark in our public schools that to the child the teacher is the embodiment of an authority more constant, more persuasive, more compelling than either church, state, or perhaps even home. Happy the task then and happy the teacher, when the cares of his high office are assumed not lightly and indifferently, but with intelligence, devotion, and goodwill; where the tasks of each succeeding day are guided by an increasing knowledge of the

material, social, and spiritual order in which we are involved, by a clearer insight into the mysteries of child-life and growth, and by a consciousness of opportunity to correct and raise the standards of thought, feeling, and conduct in the little world of his school.

Growth in knowledge, in human sympathy, and in efficiency on the part of the teacher, is a condition vital to proper growth in the pupil. Where the teacher is content merely to add to his stock of facts, he is not growing in knowledge. What is essential to true knowledge is that he should relate these to his own life and needs or to those of his pupils. Equally so, in his endeavors to promote the growth of knowledge in the young, he must realize that the end is not attained thru blind conformity to the prescriptions of the program; for this practice, far too common, is in reality a teaching of subjects rather than of children, and it is this procedure which is largely responsible for the dispersed attention, want of confidence, feeble will, and slack morals so conspicuous in the poorly taught school.

Further, knowledge, of itself, is not education. It is only one of the elements in education. The mastery of military drill and tactics does not complete the education of a soldier. There may still be wanting resourcefulness, spirit, self-renunciation, will—in brief, the true personality of the soldier. Moreover, to children, the pursuit of knowledge is not in itself always interesting; and, without interest on the part of the pupil, his seeming acquisitions of knowledge will have little reality, little permanence.

Much has been said and written on the importance of personality in the teacher. Writing to a young friend who had recounted to him the new studies engaging her attention, Emerson suggested to her that it might not so much matter what subjects she studied as with whom she studied. Clearly, the great philosopher sought to emphasize the value of personality in the teacher.

What is personality? it will be asked. Without seeking to define it fully, it may be asserted that for his pupils a teacher has personality when he possesses manifest interests, and, above all, interests which he can impart to his pupils. Interest, as everybody knows, is infectious: there is in it something of the emotional element; and nothing is so readily and unconsciously communicable to others as are our emotional states. Given a teacher, therefore, who, himself interested, seeks among his own interests a possible basis for those of childhood, one is then safe to look for an attentive class. And, if attention can be carried to the point where effort is necessary, well; for effort at attention is the essential element of will, of habit-forming, of character-forming.

We are now in a position to ask: What is interest? How shall one command it?

The answer is not easy. Still, we know some important facts concerning the nature of interest. To the teacher, the most important of these is that interest, being partly an emotional state, cannot be

maintained, indeed, scarcely aroused in things which are foreign and unrelated to our experience or environment and to our desires immediate or remote. Such things the mind rejects either as unknowable or as matters of indifference. Once, however, the fact, phenomenon, or material thing can be referred to or compared to some past experience or present need, its strangeness lessens. It becomes partially known, being partially recognized. It begins to have an interest for us. Accordingly, as Professor James has said, 'if we wish to ensure the interest of our pupils, there is only one way to do it; and that is to make certain that they have something in their minds to *attend with* when we begin to talk. That *something* can consist in nothing but a previous lot of ideas.' Once a thing comes to be recognized,—that is, referred to some previous experience,—it is assigned a place in our mental life as an added experience assimilated to the mind-stuff already there, and enlarging by its presence our ability to interpret new experiences. Only such ideas as are cognate to the circle of thought in which we habitually move are assimilated or assimilable. "Ideas too alien, tho you shout them in the ear or thrust them in the face, remain foreign and incomprehensible."

This process of mind-growth is commonly spoken of as the *apperceptive* process. Our body of mental experiences and mental states derived partly thru contact with things, partly thru reading and hearing, comprizes the *apperceiving* mass which we bring to bear upon the interpretation of new experiences. And each added experience organized into the body of our mental life takes its place there not as a unit functioning alone but as a pervasive influence conveying to the whole intelligence an increase of power to perceive, to feel, and to know.

The bearing of the doctrine of *apperception* upon educational aim and method will be readily apprehended by the thoughtful teacher. Given possession of this interpretation of mental growth, he is bound to recognize with increasing clearness the process of education as providing the pupil with a stimulus to the appropriate exercise of his mental, emotional, and motor activities. To effect this, his instruction will in each lesson proceed from those past experiences of the learner or from those states of mind which are likely to arouse curiosity or awaken feeling. Every lesson will seek to be "a renewal and an increase of that connected store of experience" which becomes knowledge, emotion, taste, will—which becomes, in other words, character and culture.

It is with this belief and upon this principle that the following program of studies has been framed. Much therein must necessarily be left to the teacher to interpret; and it is well that this should be so. To the intelligent and serious-minded it will be an all the more pleasing task to seek to utilize the materials of the several courses in such a way as to ensure the preparation of the child for the life of a good citizen, 'to create and foster the aptitude for work and for the intelligent use of leisure, and to develop those features of character which are most readily influenced by school life, such as loyalty to comrades and institutions, unselfishness, and an orderly and disciplined habit of mind.'

Let it be emphasized here that the value of any branch or lesson lies only partly in its direct, intrinsic utility. Over and above this there should be looked for an increased disposition in the pupil to act for himself and from his own initiative, not only in school problems but in all matters where some relation to the thing taught suggests itself. To take a simple illustration: A lesson on the life history of the cabbage-butterfly may have no direct value to the children of a fruit-growing district; but it is one that is very convenient to teach, and, when effectively taught, is fertile in suggestion of similar problems and study-processes; and the effectiveness of the teaching may be correctly measured by the intensity of the stimulus it applies to the study of related problems lying within the field of the child's interests and natural activities.

It is, indeed, in somewhat of this sense, that it is claimed for the common and high schools that they should in large measure function as the elementary technical schools of the province. There need be no antagonism to the purely cultural training which has so long dominated the school program. Vocational training is capable of being made, to a certain extent, cultural; just as a vocation is practised not in and for itself alone, but in all its relations and with all its implications, social, moral, domestic, and, sometimes, esthetic and traditional. Preparation for vocation, moreover, does not exclude direct and purposive efforts of a purely intellectual character. On the contrary, these must continue to form a considerable part of the program of school studies; for the intellectual, social, and spiritual qualities they are specifically designed to nourish will never cease to be regarded as the finest fruits of education.

What has been fundamentally lacking in the instruction of the common and high school is the disposition and the ability on the part of the teacher to take as the point of departure in any study the concrete example, the personal experience, of the pupil, that something which the environment always provides, did we but see it as our pupil sees it, and as it relates to the principle sought to be established.

The old vogue of proceeding from the abstract principle too often resulted in the ignoring of the concrete application; for there is a fascination in the study of abstract principles which lures teacher and pupil to compass more of this unreal knowledge than can ever be verified in school practice or than is needed in the actual affairs of life. Thus, for example, very abstruse knowledge of the properties of circles and triangles is often acquired at school by pupils who have only the vaguest conception of how this knowledge becomes a factor in dealing with bodies with circular and triangular surfaces, such as discs, cones, cylinders, buildings, plots of land, etc.

And so one day the community wakes up to the necessity of opening special schools to teach the practice—that is, the purport—of principles already skilfully taught, but in an unpractical and purportless way. The simple solution of a great deal of the difficulty proposed to be dealt with in night schools and other industrial schools is to develop in the common and high schools of the province more of



the method of the industrial and technical institute. For the ordinary mathematical problems of the smith, the carpenter and builder, the mason, etc., the common school and the lower grades of the high school ought to be made and can be made the industrial and technical schools of the province. They already profess to deal with a body of mathematics and science extensive enough to meet the requirements of those crafts: it remains, therefore, only to pay due regard to mathematics, drawing and science as actually related to them.

### THE PROGRAM OF STUDIES.

In our opening paragraphs education is set forth in large as a process not confined to school-houses, teachers, and courses of study, but rather as the net outcome of the world's influence upon the individual in respect of the sort of character he has become, what he knows, and what he can do. To each individual it is permitted to enter upon the best inheritances of our race,—its religion, its social and moral order, its science, its industry, its art,—inheritances transmitted from age to age thru church, family, and society, and only partly thru the school and its appointed teachers.

So far as the school undertakes to discharge its duty to the young, it may be said to do so in a threefold way. It chooses three ends: the cultivation of character, of practical efficiency, and of knowledge. To accomplish these aims, it proceeds not so largely thru the medium of positive instruction as thru that of the directed activities of the child, and, preferably, thru those activities which spring from impulse or from native interest. Such interests we speak of as spontaneous; the corresponding activity we call, technically, self-activity. These terms are reserved for further interpretation in the chapter on Method.

In order to arouse to activity the mind which it seeks to control, direct, and nourish, the school should carefully select from the realm of human affairs those subjects best fitted to awaken and maintain the child's interest and self-activity, and to contribute to its ideal development. That the subjects should, by preference, be chosen from the domain of the useful, goes without saying; for it is generally conceded that the really useful is likely to provide the best medium for training, the existence of an appropriate utility underlying the study contributing no little to its power of awaking and maintaining interest.

To clear away any possible obscurity in the use of the terms 'utility,' 'intellectual discipline,' it is as well to state that in the judgment of the educational world of today the proper justification of the presence of any subject or topic in the program of studies may be found in the answer to this question: Whether is the matter in question calculated to reveal or contribute to reveal to the pupil some important aspect of his environment and to stimulate thereby desirable mental, emotional, or motor activity? If it is so calculated, then the knowledge sought to be imparted is not only *useful* but *disciplinary*, in the true sense of those terms.

On this basis it is quite safe to include in the program all the subjects herein treated. Not easy is it, however, to determine with general approval the topics and sub-topics of the several branches of study. Circumstances vary in different communities—circumstances of nature and of industrial and social environment; circumstances, too, of unequal capacity and training in teachers, many of whom will recoil from the very abundance of the prescriptions drawn up for the average or super-average school. For these and for the teachers of miscellaneous schools the courses require to be re-made in respect of the number and treatment of topics and sub-headings. Condensed courses will, accordingly, follow later.

To forestall a possible charge of presumption or of finality of tone in their utterances, the Committee to whom is entrusted the making of the program would state that, far from being satisfied with their work as here presented, they look to a prompt and continual amendment of the courses in keeping with the growing educational intelligence of teachers and public and with the changing conditions of our social and industrial life. Definiteness of prescription and of suggested treatment is unavoidable, but it should be borne in mind that there is no intention to supplant a good method and to limit the teacher to one mode of treatment. On the contrary, what has been aimed at is to suggest a treatment that will ensure flexibility and variety of method, and to offer such guidance as appears necessary to the less experienced and resourceful. So far as concerns topics and illustrations, the Committee would protest that these are infinite in number and variety. Each field of knowledge as represented in each of the subjects of the common school is boundless; and the teacher who is original enough and ambitious enough to desire to improve upon or to modify the selection of topics and illustrations offered in the several courses, may safely be trusted to do so. Such experimentation is, indeed, desirable: only thru it will a gradual perfection of the program be accomplished.

Adverting now to the several subjects or branches of the present program of studies it is well to remark of them that they comprize several quite different constituents of school-knowledge. It is possible, for example, to classify them on the twofold basis of "form" studies and "content" studies. The distinction is an important one, and the more worthy of treatment here since the present generation has witnessed futile attempts on the part of reactionary teachers to oust from the elementary program practically everything except the "formal" facilities of reading, spelling, writing and arithmetic.

Now, the three R's, so called, while they are the invaluable instruments of education, are not in themselves educative. They represent merely the several skills or acquisitions that render true education possible of attainment. Of supreme value for the more ultimate purposes of life, they are of themselves empty of content and meaning. Hence it is that in schools where only the three R's are taught (and there are still many such schools) the child-mind starves. Instead of intellectual nourishment and stimulus to self-activity and growth, are provided puzzles in spelling, imitation of written forms, half meaningless vocables, processes in calculation known only in

their least interesting applications; in short, the acquisition of skills unlikely afterward to be turned to much account. Thus it is that the European peasant, compelled by law to learn to read, ceases to read once he leaves school. Thus, too, the Nova Scotian, drilled solely in the mechanics of reading, writing, and ciphering, has too often shown himself resourceless in the presence of diminishing fertility of soil and of changing industrial and economic conditions.

To compass the ends of true education, the school must provide an intellectual content from which the exercises in reading, writing, and arithmetic are to be drawn; and this content should not be circumscribed either by text-book or by tradition, but drawn from the whole realm of the child's activities, and, wherever possible, from matters dealt with in the other branches of school study. It will be found that even in the matter of acquiring formal skill in the three R's, the pupil will be the gainer by this procedure more than tho he were kept solely at exercises in word-naming, penmanship, and abstract calculation. Not that drill in these exercises is to be abandoned. Quite the contrary. But the best results will follow when in addition to giving frequent drills for accuracy and speed, the teacher is careful to note errors of pronunciation, spelling, and expression occurring outside as well as within the special reading and spelling classes; when she sees to it that every written exercise in arithmetic, or composition, or whatever it may be, is a neat and legible effort; when the studies of the earth and man are made to furnish problems to corroborate and illustrate arithmetical principles likely otherwise to remain abstractions.. In brief, to guarantee a creditable output of the formal facilities of reading, writing, and arithmetic, the teacher must correlate these with the other activities of the school.

Accordingly, to fulfil the purposes of education, a program of studies must be made up of courses not separate and self-contained but inter-related and coherent, indicating a unified educative process and a unified subject matter. The principle of correlation of studies is, in fact, one of the basal principles upon which program and courses should be founded. Indeed, to it must be accorded first place among the guiding principles of the maker of school programs:

1st. That knowledge should be presented as unified, not dispersed, the various topics being as fully as possible correlated.

2nd. That the knowledge which is likely to be of use in after life and those occupations which the pupils are likely to pursue furnish subjects for the school program quite as educative as those subjects traditionally consecrated to education.

3rd. That the courses of study should keep in mind the pupils that leave school at the sixth, seventh, or eighth grade, and should aim to render them so far conversant with the fundamental processes of commerce, agriculture, and other great industries as to ensure on their part a capacity for further study.

4th. That, while utility largely determines the subjects of the school program, illustrations and applications should spring from the

present needs, interests, and environment of the pupils as well as from considerations of prospective utility.

5th. That the courses of study should be outlined and detailed in accordance with the increasing capacity and the changing and developing interests of the succeeding grades; that is to say, of the increasing age and experience of the pupil.

6th. That in all instruction it should be aimed at to provide the pupil with abundant contacts with material things and with society, and from his own concrete experiences to proceed to an interpretation of the material, social, and moral order in which he lives.

7th. That it is not prudent for a course of study to comprize only what the average child can fully retain in memory thruout the school period or even thruout the year.

8th. That the program and courses of study should be such, in content and treatment, as to ensure not merely the instruction but the education of the child in point of character, culture, and efficiency.

To frame courses of study in accordance with these principles, it is manifestly impossible to depend upon prescriptions made by reference to pages of text-book. Prescription of the content of instruction should be made in terms absolute. To prescribe from books alone is to tempt the indolent teacher into substituting for instruction more or less mindless tasks of memorizing. The teacher who lacks initiative and the ability easily to organize the information contained in the text, finds the mere text-book prescription a partial justification for dull treatment and the traditional question-and-answer methods. The study of phenomena is supplanted by the study of books. Intelligence is stifled by shutting up against the pupil original sources of knowledge and by leaving him unpractised and ignorant in the art of acquiring knowledge except at second-hand, a condition of things still deplorably common in our schools, and one toward the correction of which the framers of courses of study should bend all his energies. For, while it would be the hight of folly to advocate dispensing with text-books or to underrate the ability to procure knowledge thru reading, it must nevertheless be claimed that high efficiency, intellectual and economic, will never be approached in schools which fail to recognize the superior value of ability to gather knowledge at first-hand. We live in a world of great opportunities, in a new land, and amid economic and social resources comparatively unexploited and unexplored. Our economic progress and the vitality of our civilization depend largely upon the capacity of our people to recognize *phenomena* and to deal with actual conditions and concrete realities. The methods of childhood and of school-days should be fashioned in view of the necessities, the opportunities, and the conditions which the child will meet with in manhood and womanhood years; and these methods will be sufficiently complied with where the necessities, opportunities, and conditions amid which the child now lives and moves are made the chief medium of instruction and the chief means of education. Accepting this principle in education, the text-book falls into its proper and useful place

in the well-conducted school as labor saver and partial guide to the teacher, as home-companions and mentor to the pupil. Often, too, it must remain the one and only source of information to both teacher and pupil.

Among the evils that resulted in the past from prescription of subjects in terms of the text-book alone, was the loss of due proportion among the subjects of the program. Very often, as is still the case in many of our own schools, worthless topics found their way into the various courses, or unimportant ones were set forth in detail while essentials received scant treatment. The arithmetic of such schools was likely to abound in problems of alligation, of grindstone partnerships, or curious puzzles, while little provision was made for practising pupils in common and useful calculation. Abstruse problems of grammar and analysis and formulas of parsing usurped the place belonging to the correction of common errors and the enlargement of the pupil's powers of expression. Geography was as likely to deal largely in inapposite problems of astronomy or lists of unimportant capes, bays and counties in strange lands as with observation of the phenomena exhibited in our immediate surroundings and the interpretation of the earth in its relations with man as an industrial and social factor.

Even worse, perhaps, was the failure to adapt the exercises of pupils to the varying interests and developing capacities of succeeding grades and ages. Since the same subjects were, in a general way, prescribed for grades three, four, five and six, it often followed that the same topics, sub-topics and illustrations were repeated thruout these grades with virtually the same treatment, until the substance and form of the instruction became a sing-song in the pupil's ears and came trippingly from his tongue. When this happy end was compassed it was fondly believed that the pupil had achieved something worth while. Ill organized as was such a condition of affairs, an even more chaotic state was reached, where, as in country schools, none except the vaguest record of the former teacher's work remained to guide the incoming teacher in his treatment of the various courses in the different grades.

Lest it may be presumed that in the upper grades of the common school, where text-books are used in various subjects of instruction, the teaching must of necessity be well graded, it is proper to affirm here the unwarrantableness of such a conclusion. In the first place, text-books are not used in nearly all of the subjects. A reading-book filled with choice selections of literature is not a text-book in reading; it does not in the remotest way touch upon the pedagogic principles or the art of reading. The same may be said of a writing-book.

To particularize further, there is no text-book prescribed to indicate to the teacher the scope and treatment of the history set down for grades five and six; no geography text for grades four and five; no nature-study text for any of the grades. True, the earnest and intelligent teacher has accepted the recommendations of the **Journal of Education** and found light and leading in the reference books from time to time brought to her notice. But what of the less earnest and

less intelligent? Having no book forced upon them, they have sought none, and they have pestered children with committing to memory facts within the range neither of their interests nor of their understanding.

In the second place, it is to be pointed out that the orthodox text-book in geography, grammar, history, natural science, or in mathematics, is no safeguard of methodical, well-graded instruction. Tho consecutive and logical in its treatment of a subject, it does not aim at being a treatise on method. It must, in order to sell well, be cheap. To sell cheaply, it must be brief. To be brief, it has to depend for emphasis chiefly upon the mechanical devices of the printer. It can afford neither repetition, lengthy explanation, nor varied illustration. It presumes a well-informed teacher or a very well-trained pupil. In short, it confines itself to the strictly scientific treatment of the subject which appeals effectively only to the mature mind. It follows the strictly logical order.

Now, the logical order is not by any means the order which is always calculated to hold the attention of the child. There is a pedagogical order, recognized by all good teachers, which follows, when expedient, the order suggested by the present interests of the child, neglecting for the time being the strictly logical sequence. Children are not always, in the adult sense of the term, logical, and it is a wise teacher that recognizes the fact. In her wisdom, she reorganizes from day to day the material of instruction in accordance with the child's changing and growing apperception-masses. And thus the canned goods of the text-book maker are thru her skilful manipulation rendered not merely innocuous but palatable and nutritious.

A word is in place here relative to the principle enunciated as seventh in the list of recommendations to program-makers. There is no intention to undervalue memory or to discourage exercises calculated to render the memory more efficient. The intention is, rather, to emphasize the well-known fact that much that is taught in the history and literature classes, tho forgotten in substance or in setting, may accomplish the very best results in the power to appreciate what is worthy in human conduct or important in our social relations. Much that is studied in the "Nature" class may appear to be totally forgotten; but nothing is surer than that, if the method of study has been sound, there has resulted to the pupil a greater readiness to deal with similar or allied matters; and this is the end sought. The facts peculiar to the problem are incidental and accessory, and are no more necessary to remember than are the numerical facts in those arithmetic problems thru the study and solution of which the learner acquires a comprehension of the principles involved and disposes his mind to mathematical habits.

To dilate upon this principle here might seem inappropriate except for two reasons; first, because there are well-meaning people who suppose that since the youthful mind is permitted and practised to range over a fairly wide field of knowledge, this is done to the prejudice of thoroughness; secondly, because there are teachers who, discouraged

by the readiness with which children forget, but, determined to be on the safe side, trust to narrowing instruction to the meager dimensions that will ensure a specious facility at the written or oral examinations. But a pat statement of principle by a pupil is no evidence of thoroughness of comprehension. To be thoroly comprehended, the principle must be experienced in its application to real conditions. These conditions may be manifold and various; and, besides, while they may appear the simplest thing in the world when read or illustrated in the text, they may fail of recognition when met with in the material world—an experience familiar especially to the teacher of nature and of science. Hence it is that today it is recognized as the soundest procedure for the teacher to lead up thru a wide range of contacts and experiences (experiments, perhaps,) to a comprehensive and lucid statement of principle. The business of gathering knowledge for use in later life is, in reality, but a comparatively small part of education. Yet there are teachers who have not progressed beyond the ancient fallacy of regarding the chief business of the school that of furnishing the memory with ready made knowledge; to ensure the retention of so-called 'useful knowledge,' they practice their pupils in conning and repeating individually and simultaneously. Or, to secure a showy output of verbal reproduction of potentially valuable facts and processes, they compel attention to the task long after interest is exhausted and the fatigue point reached.

### METHOD IN TEACHING.

Under the heading, "Educational Aims and Values," is to be found (page 29) a general interpretation of the doctrine of apperception. In the light of this process,—i. e., the mind's assimilation of new knowledge by relating it to former experiences or mind-content,—subsidiary principles of method emerge into view.

Chief among these is the grouping of topics for study and instruction under comprehensive headings, or 'method-wholes', as they are sometimes called. As example, take, in history, the story of the growth of parliamentary power in England during, say, the Stuart period. The satisfactory study of this topic will involve consideration of sundry historical episodes, of divers times, places, and personages, of constitutional and social development, of the leading motives and circumstances contributory to change, thruout a long period of the nation's life. All that the pupils' mind contains bearing upon these matters should be brought into consciousness and utilized as a setting for the new knowledge or as a basis for new inferences and generalizations; and to effect this there will in turn be demanded a recall and a re-study of civic conditions at home. Imagination, memory, observation, and judgment will all be stirred to activity.

Or, in geography, take, for illustration, a study of the exports of Nova Scotia. This will, of necessity, demand an inquiry into the chief producing-districts, the industries involved, the export-points, methods of transportation, destination of commodities, and conditions creating demand for these.

In grammar-study, as in natural science, such groupings suggest themselves even more abundantly. For instance, the nominative case-relation as traceable in various parts of speech and in locutions; e. g., in verbs, adjectives, pronouns, nouns, phrases, and clauses. Again, the adjectival office as a general function; e. g., as performed sometimes by single adjectives, sometimes by nouns in the possessive case, sometimes by the word-groups known as phrases and clauses. Or, again, the 'antecedent', as an accompaniment of both relative pronouns and relative (conjunctive) adverbs; the nature and extent of inflection in the several parts of speech; the name, or noun, as applied not merely to things material but to things merely seen or heard, felt or thought. In nature-study, there are comprehensive studies of means of plant-propagation, of seed-dispersal, of various habits of climbing-plants, of injurious plants, of the course of insect life, etc. In fact, this artifice of 'method-wholes' when applied in natural science or in language-study, becomes nothing more nor less than the *inductive* method which is reserved for treatment in a later page.

Next, there will be readily recognized the desirability of extending this process of method-wholes, i. e., the process of relating knowledge under comprehensive headings. Facts derived from branches of study conceived as separate and distinct may be correlated in time and place, as well as in resemblance and purpose, and thru this unifying process acquire increase of interest and enhancement of value. For instance, in a seventh or eighth grade, a series of lessons may be prepared on means of transport and communication in Canada. This will demand a consideration of means of communication and routes of travel in olden times—an interesting correlation of historical knowledge with social and commercial geography. The reflective and imaginative processes will thus be called into action. The pupil's knowledge of transportation conditions in Canada will be enlarged in a measure that would not be effected by a mere description of present trade-routes, railways, postal and telegraphic lines. Not only this, but the pupil will have gained both in insight and in habits of thought and study. The teacher has called upon him to assemble not only the direct statements of the book but an extra store of apperceiving ideas necessary to the judicious thinking out of social, political, industrial, and even moral progress in our country as dependent largely upon the improvement of means of communication. Historical data, such as chronology, racial origins, primitive conditions, the narratives of early and later explorers, thus assume a new importance as members of a larger and powerful community of ideas. Should the teacher be so disposed, he will find a place in these lessons for the admission of another body of ideas—the moral—which enter in the form of more or less detailed reference to the motives that incited the early missionary and explorer; to the nature of the services, religions, civic, and commercial, indirectly rendered by missionary, explorer, fur-trader, railway-projector and engineer.

From well-directed teaching of this sort there accrues to the pupil an integration of consciousness, which is one of the ends sought in education. The 'correlation' of the branches of the school problem is a curtailment of the much-canvassed principle of "Concentration of



"Studies," which in its broadest application requires that all of the activities of the school should center around some one chief study,—a theory both pedantic and impracticable. Provided the teacher effects the conspicuously important and interesting correlations of a subject,—those which will afford a measurably certain stimulus to the self-activity of the pupil,—he may rest content with omitting those less obvious and more recondite.

Thus, the teacher might pretty safely count, as an outcome of the lesson detailed above, upon the pupil's desire or willingness to draw a map recording such historical and geographical data as contributed to his comprehension of the lesson; while, on the contrary, the obtrusion of arithmetical calculations or considerations of fauna and flora remotely associated with the main topic might prove disastrous to interest and self-activity in the class.

So, also, to pay too much attention to the penmanship of the pupil in his written theme drawn from such a series of lessons would contribute not to concentration so much as to a partial dispersal of the pupil's attention among minor issues of slope, form, and shading of letters. In such written exercises the teacher should look for neatness and legibility in the penmanship, nothing more.

In following out plans of utilizing "method-wholes" or comprehensive topics, the teacher will find that he has thereby put into effect a system of reviewing much more meaningful and pleasurable than the traditional one. Customarily, a review means little else but a laborious repetition of the consecutive pages of the text-book. Under the method-whole system, review becomes what it should be, the revision and rethinking of large units of study—an exercise in a high degree stimulating and educative. In the text-book, facts appear to the pupil as on an equality of importance because standing together on the same page. The treatment here suggested compels the arrangement of facts in proper perspective and proportion, because the attention of the learner tends to focus itself upon a central theme which, in effect, constitutes the organizing element of the otherwise scattered and meaningless facts. Moreover, thru the organizing power of a central theme, the pupil comes into possession of a means of distinguishing the important and essential from the incidental or accessory. His ability to study for himself similar problems is thus enhanced, and, with it, comes to him consciousness of power, a condition indispensable to the growth of will.

That this principle of methods is susceptible of a wider and more elaborate application in the higher grades than in the lower, is obvious. And yet it is the end sought in the series-lessons of the nature-class of the lower and intermediate grades. Let the teacher be careful not to suppose that every lesson is to proceed in accordance with so ambitious a method. This is to attempt too much. Where the tasks of the child are chiefly those of word-naming, sentence-saying, learning to write, to count, to talk, to sing, to play,—where, in fact, the store of experiences upon which he can draw is scanty,—it would be the height of difficulty and of futility for the teacher to adopt the principle of

method-wholes. What the young child needs most is scope for his curiosity, for his constructive and motor impulses. His part in the scheme is not so much to reason about things or to see things in any but their simplest relations, but to obtain experiences, most of them disconnected as yet and half-meaningless, altho directed with vague purpose by the teacher. Later, will come the time to organize these experiences, to give them a meaning by discovering their relations to each other; to turn the child's nature experiences and observations into nature-knowledge, his arithmetic to useful computation, his more or less mechanical reading to content-getting, his penmanship to real letter-writing. His attention to spelling, drawing, penmanship, punctuation, arithmetical process, etc., as tasks, will gradually cease. These are the purely formal and meaningless processes of the young learner. Hereafter, they will have a meaning for him, since they are seen to have a value in relation to a real need; and motive enough for continuing to attend to them incidentally will be afforded in the tasks which he undertakes in geography, history, science, and literature. The latter subjects thus supply the content and the meaning to the merely formal facilities of writing, reading, spelling, and counting; and the teaching of these formal facilities in connection with the content studies is the surest means of retaining interest in them. Moreover, as has been asserted in a foregoing page, there is an economy effected by bringing these two diverse classes of studies into mutual relation and support. Experience has shown that more progress is made in spelling, writing and grammar, when these subjects are taught as incidental to written work, recitation, and discussion of the history, geography, and science topics. Every lesson should thus be, in effect, a language lesson. Every written task should be, in a moderate degree at least, an exercise in neat and legible penmanship.

Altho the organizing of ideas and of study-effort in relation to central and unifying thoughts may correctly be regarded as the culminating principle of method, it is nevertheless obvious that in the great majority of teaching-periods teacher and pupil are at liberty to lose sight of major issues, confining study-effort within narrow limits where specific minor problems may have presented themselves. Thus, the central aim may be, for example, to locate and describe the chief agricultural areas in Nova Scotia, a lesson which will, of course, comprise many minor considerations, each of them an issue definite and distinct enough to be treated without immediate reference to the main topic. For instance, the phenomenon of the diked lands lying along our tidal rivers and estuaries may be subordinate to the main topic and yet a matter important and distinct enough to temporarily abstract attention therefrom.

Again, in the progress of school-work, the attention of the pupils may be temporarily directed to gathering information destined to supplement the statements of the book or the data presented in an unfinished lesson. Or, they may be absorbed in acquiring formulas, memorizing and applying mathematical tables, observing natural phenomena, analyzing sentences.

Again, the class lesson may be a problem or series of problems of limited reach arising out of the commonplaces of the text-book, or suggested by the pupils' experiences, private reading, need or curiosity, or necessary to the achievement of some specific purpose set by teacher or class. Wherever possible, the lesson should be conceived as a necessity. There should be an end sought, whether it be to enlarge one's comprehension of some matter of immediate or local interest, or to satisfy curiosity, or to meet some actual need. Such lesson will invariably prove a stimulus to increased curiosity and to new demands.

There should be no blind order of study. The text-book, it may be claimed, suggests it; but this suggestion is likely to prevail only with timid and resourceless teachers. The text-book order may or may not be a logical, thought-out order which the teacher may seem fairly bound to follow. It is so, for instance, in arithmetic, geometry, botany, and chemistry. It may, however, be a mere chronological sequence, as in school-histories. It may be an arbitrary arrangement, as in political geography or in English composition. Or, it may be a merely haphazard and whimsical arrangement, as in English spelling. With any and all of these the teacher is authorized to interfere—to interrupt, to amplify, to verify, to reconstruct. There need be no fear of confusing the learner. Even were there such, the resourceful teacher would take the slight risk rather than endure an unthinking adherence to the sequence of the text and a repression of all disposition to be guided by judicious suggestion and the interests of the moment.

As already pointed out, the line of individual curiosity and necessity is the line of true interest; and it requires only courage and moderate directive skill in the teacher to follow up the main avenues of knowledge along their devious, interrupted, but ever attractive byways of youthful interest. Just here it may be well to remark that a specious interest is often temporarily maintained among pupils thru emulation in reciting answers learned from the book. Care should be taken not to mistake this for genuine interest in the subject-matter of the lesson. A momentary cross-examination will reveal the error. For there is an essential difference between that activity which expresses itself merely in learning statements of fact for use in the question-and-answer process of the class-room, and that self-activity which is spontaneous and which arises out of the desire to satisfy a mental or material demand. The possession of facts is not scholarship in the true sense. True scholarship must be efficient: it can only be conceded to exist where there is a consciousness (not a mere cognizance) of facts in their relations, and a disposition to seek their bearing upon individual or human needs.

Intellectual resourcefulness, therefore, and not merely the acquisition of facts, must be regarded as the end of mental training in the public school. Where this aim is kept in view, method may stumble at times, and the teacher may suffer ultimate disappointment in the effort to keep the machinery of class-instruction running as smoothly as it often appears to run when entire reliance is placed upon text-book

order and the question-and-answer system. Nevertheless, there will be positive gains to the pupils which will more than make up for the lack of showiness. That most invaluable habit, Reflection, can never be developed in any other way than by the practice of setting aside from time to time the printed statements of the text-book and calling upon the pupils to discuss the matters under consideration in terms of their own environment and experience. For, reflection, in its origin, is not concerned with remote and impersonal matters: its primal exercise is with the realities of our own existence, of our own personality and our own surroundings. No text-book is likely of itself to beget the habit in the child. The intervention of the trained mind is here necessary. Were this not so, the teacher's office would be reduced to that of a monitor. Her intellectual functions would be entirely usurped by the book.

### Memorizing.

One of the gravest dangers to mental development arises from the circumstance that much of the study effort in the first four grades is and must remain an effort at memorizing. Much of this memorizing, too, is of a merely mechanical kind. Take, for example, the long and dreary task of learning to spell, the illogical word-naming inseparable from an inconsistent spelling, the indispensable drill on addition and multiplication tables. Unless the teacher is on her guard and careful to mingle and combine with these memory-efforts suitable exercises and applications requiring thought and purpose from the pupil, the latter, by the time he reaches grade five, has become steeped in the memorizing habit and convinced that it is the only method of study. Later, when he reaches the preparatory grade, and text books grow numerous and bulkier, or when he commences the study of French or Latin, the practise of mechanical memorizing is in danger of renewal. It is quite likely that much of the present-day prejudice against foreign-language study arises out of protest against the wretched methods of study practised. Indeed, in the first year of French or Latin, it is common to find a total absence of intelligent language method and in its place mere parroting of declensions, and written exercises in word-shuffling.

One of the weak claims made for this stultifying practice is that it 'cultivates the memory.' Now, memory cannot, in the generally accepted sense of the term, be 'cultivated.' It is not possible, thru practice, to enlarge its general power or capacity, or to improve its quality in point of quickness or retentiveness. What we may do is, thru practice, to render our memory more efficient. We may, in other words, *learn to use it with system.* We may improve our methods of memorizing. There are, for example, various tricks of mechanical and mental association worth acquiring, various comparisons and analogies that, in the effort of memorizing, spring to aid and *deserve* to be thoughtfully noted. Best of all, there is the practice of outlining a lesson, a poem, or whatever it is that we want to commit. To first outline the subject matter, catching and holding the main ideas in their correct order; then to attend closely to the details of thought; last of all, if required, to commit the actual wording, is the best order of effort. Naturally enough, with children, whose mental tasks have been

extensively memory drills, the tendency is to begin at the wrong end of the process and to commit line by line or sentence by sentence. This false method the teacher should correct. Some time should be taken now and then in teaching children *how to memorize*. Above all things, the teacher should frequently explain how she wants a lesson studied. She must not be content always to send the children home with a lesson merely assigned, for this will confirm them in the superficial memorizing already familiar to them. It must be remembered that false habits of study, once well seated, are hard to dislodge; and that, as a rule, by the time he has reached the sixth grade the pupil will, for good or ill, have already fixed his methods of study.

How to memorize is, in fact, one of the important considerations of the school; and yet it is only a part of the comprehensive matter of How to Study. It may be generally supposed that children will acquire proper habits and methods of study unconsciously, from being methodically and properly taught. This may be in part true; yet how often we find a class of bright and interested children left quite without initiative once the presence of the teacher is withdrawn. So long as the teacher is present to suggest motives, to indicate lines of thought, to frame leading questions, the class goes on smoothly, and a casual observer might suppose the children quite capable of independent study. But unless these pupils have been trained to initiate and prosecute inquiry, to outline a lesson, to discover and set up specific purposes or motives in its study, to judge of relevance and irrelevance, to distinguish the important and the non-essential, to note an author's treatment of a topic point by point,—to do all of these things according to the measure of youthful capacity,—study ceases almost as soon as the directive genius of the teacher is withheld.

The committing to memory of the actual wording of a passage being only one of the several forms of memorizing called for in study, the teacher must not confine attention to it. Many pupils lack the gift of memory for words who nevertheless have good capacity for committing and retaining the points of an argument or a sequence of coherent ideas. Of all exercises calculated to assist the pupil in committing the substance of a lesson and to teach him how to study, none is better than engaging him from time to time to express in a few words the principal thought in each of the succeeding paragraphs of a story or other well-constructed text, and then to gather up the whole in a brief *résumé*, oral or written. Memorizing of this kind is a highly intellectual process. The act of determining the 'point' of a paragraph is in itself an exercise to be recommended to pupils of high school and collegiate grades. The sequent act of expressing it in a correct, brief statement constitutes the very best kind of language lesson; and, as every teacher knows, it is very often the inability to express ideas in his own words that involves the pupil in failure. He has, it often happens, vaguely caught the ideas; but, not being able to recall the words of the book, and having no language of his own, he sits down, nonplussed. He had thought he knew his lesson, yet he doesn't know it. The case of this pupil is, however, not so bad as that of the one who proceeds to commit sentence by sentence or clause by clause. The sentence, he accepts as the unit of thought. Consequently, he

makes progress by sentences. Each is treated as of the same importance as its fellow. There are no peaks of thought. The field is a plain.

Now, the units of progress, in thinking, are not necessarily sentences. They may be *groups* of sentences, groups of ideas so related to one another as to make up a whole. Progress should be by these groups. The smallest unit of real progress in thinking will be one of these bundles of ideas. This condition accepted, there will then be some good chance of the substance of the thought being remembered.

There is no question here of training the memory. It is entirely a matter of training ourselves to habits of system. Take, again, the case of one studying under the influence of some specific purpose, or to solve some complicated problem. He perforce creates system in his study. The end he has in view will of itself compel the organization of the facts and inferences into thought-groups. It will set up standards of relevance and irrelevance; will bring about a coherence among the 'points of thought'; will test and corroborate suggested ideas in the light of each other or of one's own experience. There will be little fear of failure to remember the train of thought. Where the study-effort is systematic and intelligent, memory will function at its maximum of efficiency, and no amount of practice will improve its quality.

### Reasoning.

While it may be that one's reason, like one's memory, is not capable of general increase of power, it is nevertheless safe to assume that education can do much to establish specific habits of reasoning. Impelled by curiosity, the child is ever enlarging his circle of interests. These interests the school seizes upon and enlarges, seeing to it that in each connexion the experiences the pupil obtains are fundamental and general and not merely incidental and particular. Further, it requires that the pupil's increasing stock of experiences be subjected by him to continual recall and reorganization, procuring thereby a flexibility of knowledge and a readiness of recall in new situations. While promoting thus the habit of invoking past experiences, (i. e. knowledge), it cultivates, too, the disposition to apply this knowledge critically to situations purposely selected as well as to those arising casually.

A word as to the organizing process. Facts, experiences, phenomena, to be effective, cannot remain detached units. The human mind does not tolerate such a condition. Influenced by resemblances, analogies, or other associative factors, it arranges phenomena into groups or classes under headings which we call concepts, and which may be either mere class names, generalizations, definitions, rules, or the like. The process of observing resemblances, identities, and their opposites, and of classifying facts or phenomena on this basis, is called generalizing, and is the first step in inductive reasoning. Thus, in language, we classify words as nouns, verbs, transitives, plurals, objectives, etc.; in history, we classify events as wars, conquests, revolutions; conduct, as heroic, mean, rash, politic; in geography, we have classes of phenomena such as lakes, rivers, islands, table-lands, nations, re-

publics. In botany, such popular classifications as annual and biennial, evergreen and deciduous, are generalizations quite as much as are monocot and dicot, angiosperm and gymnosperm. Each of the terms mentioned is a *generalization* or general notion; that is, it is applicable to each one of the infinite number constituting the class.

In such a statement of observed fact as that unsupported bodies move toward the earth, there is the same process of generalizing; that is, of arranging experiences or propositions into a class, thus preparing the way for the step of making the proposition universal in its application; viz., All bodies tend to move toward the earth's center. This mind-process is known as induction or inductive reasoning. Thru it, man has come into possession of the organized knowledge called science. Thru it alone is any addition to human knowledge possible. For science is nothing more nor less than classified and organized knowledge; which is equivalent to saying that phenomena which do not admit of being classified and organized cannot, in the scientific sense, be said to be understood.

This being so, it will have to be admitted that children, as soon as old enough, should be consciously practised in the use of this mind-process: first, direct perception of phenomena; second, association on the basis of resemblance, with a view to forming concepts, making generalizations, and enunciating principles. The numerous categories of grammar, of history, of geography, etc., such as those mentioned above, should be grasped by the pupil as generalizations just as imperatively as are the categories or classifications of botany, physics, or chemistry. And the first essential of method is that the learner proceed as far as possible from *direct* and careful observation of the particular phenomena upon which he is to base his generalization. It is insufficient that the phenomena be presented to him in the form of statements of fact,—mere words,—when the concrete and actual plant-forms, earth-features, language-phenomena, etc., can be presented to the bodily senses. The phenomena of nature, which are to form the basis for generalizing should be sought out by teacher and pupil, or, if necessary, reproduced in the classroom. Lake, river, watershed, valley, beach, should be presented in the concrete, too, in miniature, if necessary; or, at worst, thru the agency of the sand-map, the relief-map, pictures, etc. Even in history, such fundamental ideas as government, representative government, protective tariff, revenue, nation, empire, arbitration, dynasty, constitution, executive, president,—all of these should be interpreted and illustrated in terms of things within the pupil's experience, if they are to be effectively comprehended, and the pupil's recitation to be more than meaningless chatter.

Proceeding, thus, by way of direct contact and observation, such generalizations as that of the expansive effect of heat upon bodies, of the formation of river-deltas, or of, say, the pluralizing of nouns in *s* or *es*, become conscious processes, and the learner acquires that habit of mind which we call the scientific habit, and which is nothing more nor less than the habit of cautious induction.

### Class-Conduct.

To obtain the best results in teaching, class-room conditions should be as natural and the discussion of the lesson by pupils as free from restraint as possible. Initiative in the discussion should be left largely with the pupils, the teacher's part being chiefly to correct, to advise, to regulate. Questions should come as freely from the pupils as from the teacher, and these should be addressed not only to her but to the class. Thus "the recitation becomes a social meeting-place; it is to the school what the spontaneous conversation is at home, except that it is more organized, following definite lines." (Dewey: *School and Society*.) Where the lesson or recitation is allowed to become merely an attempt on the part of the teacher to elicit the few facts of the text, we may be sure that the preparation of the lesson by the pupils will be little more than a preparation to state these bare facts.

Let the teacher's mind be less upon herself and her own performance than upon her pupils and their activity. Her worth as an instructor is not to be judged by her ability to expound a topic so lucidly and thoroly as to require no original effort from the pupil. Rather, she is to be considered the best teacher whose method of instruction merely reveals the *method of study* by which mastery of the lesson is possible. *It is the effort elicited from the pupil that counts.* It is for him as much as for her to discover purposes in study; to gather, sift, and arrange data; to consult authorities; to contribute information, illustration, opinion; to determine facts; to note irrelevancies and inaccuracies.

### Teacher and Pupil.

The teacher should frankly recognize the right of her pupils to just and respectful treatment and to the exercise of a becoming self-respect and individuality. She should never impose her authority in intellectual matters where the pupil has a right to question, object, or decline to be convinced. She should never reject, or wholly ignore any answer given in good faith by a pupil, no matter how wide of the mark it be. It is, of course, quite another case when the answer is that of a sycophant who, in order to please, answers what he imagines will be acceptable rather than what he sincerely thinks.

She should recognize, further, what is due from pupil to pupil. Especially is this important in the course of the recitation, where there may be pupils so timid and repressed in conduct that their spoken answers are inaudible to their fellows. Let the pupils understand that each one of them has a right to hear the answer, and encourage them to assert this right.

The teacher should endeavor to preserve a businesslike but tolerant and cheerful attitude, eschewing arrogance and sarcasm; frowning with unaffected disappointment and disgust upon deceit, meanness, and indolence; exercising patience with honest blunderers; and always remembering that she is in the school for the good of the scholars. When she has erred in what is due to a pupil, she should be prompt to



redress the wrong. Showing a readiness to accord his due to another, she will experience less difficulty in requiring courtesy toward herself.

These are not mere matters of school *morale*. Attention to the courtesies of life is of the highest importance to the development of that free and natural intercourse between teacher and pupil whose atmosphere is necessary to the growth of individuality. Something more than an obedient knowledge-getter is wanted to make a desirable pupil. Boldness, originality, courage to speak out one's mind, to question, to object, to admit ignorance or incapacity, to resent neglect, to doubt printed statements when disproved by our experiences,—these are qualities in danger of being smothered in the press of school studies and school discipline.

### Condensed Recommendations.

#### 1. Assignment of Lessons.

This should be simple and explicit, and it should be put in such form as to create an interest in the new lesson.

#### 2. Questioning.

Think twice before putting a question. Avoid modifying or patching up a question once it is put. Make one question go as far as possible. In other words, see that it elicits the maximum of thought from the class.

Do not waste time asking questions which you know the pupils cannot answer; trying to force an answer from an ignorant or unwilling pupil; waiting too long for answers from obviously backward pupils; disputing with pupils.

#### 3. Attention.

Endeavor to secure and to hold the attention of *the whole class*.

Utilize brief physical exercises, change of occupation, singing, or any other resource to preserve freshness of mind. Be watchful against improper physical conditions in the class, against monotony, long-continued exertion, etc.

*Insist* upon every answer, every written exercise, every piece of blackboard work being the pupil's best. Merely asking for this is not enough: *insist*, and you are bound to secure increased attention to the task.

#### 4. Teaching a Lesson.

Avoid lecturing. Rather, guide your class thru the lesson; and do not explain what the pupils may well be expected to think out. Have your lesson proceed as much as possible

from concrete examples. Obtain these, whenever possible, from your pupils and from the home surroundings. Cultivate your own power to illustrate and amplify by recall of experiences, by rapid sketch-drawing, by graphic representation. Avoid loud, persistent talking. The more you talk, the less your pupils think, and the better cover you make for whisperers and inattentive pupils.

Frequently require pupils to reproduce your explanations.

### **Blackboard Work.**

In oral teaching, use the blackboard to outline the lesson while talking. Permit your pupils to see nothing but careful work from you on the blackboard.

## **READING.**

### **General Prescriptions.**

#### **Grades I, II, III.**

The initial effort of the teacher is to awaken an interest in stories hidden in books, and thru this interest, to command the child's attention to the process of recognizing words as wholes, of making words out of separate sounds or letters (phonic synthesis), and of finding out new words by phonic analysis.

Children often learn to read quite a little without knowing the letters of the alphabet: they learn whole sentences, or thought-units, from the book, and, incidentally, they perceive word-elements. This fact furnishes the teacher with a hint as to how to begin; *i. e.*, with whole sentences learned as wholes; or, at least, with words learned as wholes. Most of the words that the child will learn during the first year will be acquired by the whole-sentence, or whole-word, or "Chinese" method. The whole-sentence method has a special value in its ensuring a measure of expression in reading, saving the exercise of primary reading from degenerating into a mere naming of words in their order without coherence or meaning.

Word-making, should, later, accompany this exercise. The teacher may begin analytically, thus: Let her write or print short and regularly spelt words on the board, pronouncing each word slowly and repeatedly, so as to bring out the component sounds. For example, the words *net*, *pet*, *pen*, pronounced slowly; then pronounced n-e-t, p-e-t, p-e-n. The children should join in this exercise, which may be resorted to daily during the first half of the year.

In the course of five or six weeks a new step may be taken concurrently with the daily reading lesson: the words may be taken apart and their component sounds associated with the letters that represent them. The letter thus acquires a meaning.

The next step—anywhere during the second or third month—is word making, a constructive exercise. The teacher may begin by writing or printing slowly and repeatedly on the board a vowel such as *a*, giving its short sound only (and, if she so chooses, its name). Three or four consonants that will form words with this vowel should similarly be given; *e. g.*, *r*, *t*, *c*, *p*, and their sounds (their names are of no assistance) uttered very distinctly by teacher and pupils. Words, such as *rat*, *cat*, *cap*, *tap*, *rap*, *pat*, may now be put together. Later, each of the vowels, in their short sounds, as in *ten*, *pet*, *top*, *pit*, *tub*, may follow; and the remaining consonants may be picked up one by one in forming words with these. The long sounds of vowels should be deferred, as they are often misleading to the beginner.

The entire process of word-making is thus illustrated. Step by step, during the first and second years this process should go on, three or four minutes of each reading lesson being devoted to word-analysis and word-making, until, in process of time the whole gamut of vowels and consonants shall have been practised. Excessive use of this exercise may produce a tendency to stammer. At first, only those words should be studied whose spelling perfectly agrees with their pronunciation.

No book is necessary during the first months, as the blackboard better serves the purpose of fixing the attention of the class. Later, when the First Book is taken up the child will be prepared to make good progress with the printed page.

No matter at what stage the pupil may be, the teacher should be unremitting in her effort to keep his imaging power active. He must visualize—that is, *mentally see*—what he reads. Reading is thus made the process not merely of recognizing and uttering letters and sounds but of associating mentally these sounds or words with the things they signify. Failure to make this effort will result in the easy and disastrous habit of 'saying things off' without imaging or understanding them—a condition fatal to the educative process, and one which will continue to manifest itself in the habit of mindlessly memorizing lessons in history, geography, etc.

In analyzing words and in sounding the consonants for word-making, the teacher should be careful to make the sounds of *f*, *k*, *h*, *p*, *s*, *t*, *x*, *ch*, *sh*, *th*, (as in *think*) as mere friction-sounds with no aid or accompaniment from the throat. The safest way is for her to get a trained teacher to give her the correct sounds. She should learn, too, very carefully, the respective counterparts of *f*, *k*, *p*, *s*, *t*, *ch*, *sh*, *th*, (as in *think*), *viz.*, *v. g.* *b*, *z*, *d*, *j*, *s*, (as in *measure*) and *th* (as in *this*), and should produce the latter as the same friction-sounds accompanied, not followed, by the throat or vocal chords.

The digraphs *th*, *sh*, *ch*, *ng*, *nk*, cannot be analyzed and must therefore be taught as tho each were a single letter.

The names of the letters of the alphabet in their regular order ought to be given at some time during the first or second year, it being

remembered that these names do not greatly assist the child in learning new words. The letter-cards with pictures are useful; so are song-rimes and rhythmical divisions of the alphabet. Once the names of the letters are known, the teacher can resort to the exercise of spelling, keeping in mind that one learns to spell words only in order that he may be able to write words.

The literary faculty, it should be remembered, is capable of some development, even in the primary grades. The literary element is not wanting in the Second Reader. Thus, the little story on page 5 is a model of conciseness and of wholesome sentiment artfully concealed. There is humor in *Bell the Cat*, *The Dandelion*, *The Rainbow*; a pleasing moral in each of the several fables found in this book; a frank and charming imagery in *The Wind*, page 22, and *The Daisies*, page 55. In the jingles, pages 1 and 9, there are at least melody, rime and rhythm, so captivating to the juvenile ear and tongue. *A Pleasant Day*, page 40, expresses the child's delight in sunshine and play. These lessons are not mere pages to be monotonously spelled out and droned out. The teacher must in each one strive to catch the sentiment and to awaken in the child the proper response to her own feelings and, thus, to the feeling and melody of the piece. If she can find nothing in the reader but words, material for spellings, for grammar questions, or for dull queries as to, *Who said so and so? Who did that? How do you spell that word? etc., etc.*, the higher purpose of reading is unknown to her, and the emotional life of the child is left to starve.

A warning must be issued here against racing thru the school reader. In case the teacher intends to use a supplementary reader, the class need not review; but where no supplementary reader is to be used, the class should proceed more slowly and with more complete mastery of each of the words, the expression, etc.

### The Higher Grades.

During the first three or four years, so irregular and perplexing is the spelling of English, the efforts of the child are of necessity mainly directed toward finding out words—word-naming. Word-naming is, however, not reading; and the pupil must not be permitted to leave a passage until he has expressed the thought of it fluently and in the natural tone of one talking. As time goes on, the word-naming effort diminishes, and the pupil's effort becomes more and more that of uttering the thoughts of the text, and of seizing and conveying the emotional element that may inhere.

Subsequent grades of reading call for no new development in method. Nothing, however, that has been emphasized in the treatment of the lower-grade reading should be ignored in the higher grades. The easy and erect posture, the natural poise of the head, the distinct enunciation of consonants, the full and sonorous utterance of vowels, the frank but flexible tone of voice,—effort to maintain these should never be relaxed.

A word as to what is meant by good utterance. Of primary importance is the sounding of the vowels free from nasality and free from throatiness. Practise the vowels separately and as found in words, and one will find he has three voices, a nasal, a guttural or throaty, and a clear, bell-like one. (Cultivate this last one.) Next in importance is the preservation of the time-length of vowels. Ignorance or neglect of the time-value of vowels is largely responsible for the inaudibleness, the undue rapidity, and the general meanness of school-reading, recitation, and conversation. English vowels uttered in speech have each a time-value which can be measured by the watch. Neglect to sustain the vowel tone destroys its carrying power and obscures the accompanying consonant sounds. To illustrate: The careless, ill-spoken person says "I w's g'n dow' th' street" or "I w's go'n' dow' th' street;" or, "He w's empt'ng th' water ou' 'v th' ol' boat," almost annihilating the vowels and consonants indicated by the apostrophes.

In the reading of poetry, capital opportunity is afforded for giving due value to vowels, as well as for distinct utterance of consonantal sounds and syllables. The power to sustain the voice at the end of a line or thruout the line is identical with the sustention of the long vowels. Take, for example, a stanza from the Sixth Reader:

*"O rivers, rolling to the sea  
From lands that bear the maple tree,  
How swell your voices with the strain  
Of loyalty and liberty."*

The very long vowels are in the italicized words. Shorter are, rivers, bear, maple, your, voices, loy. Very short and almost inaudible are the remaining vowels. The untaught pupil reads the passage so that all the vowels are about equally short, choppy and ineffective. His rate of reading is, consequently, far too rapid; and the general effect is wretched. No wonder such pupils with such teaching never get to enjoy the rhythm of poetry.

If a pupil be practised to note the identity in sound and the great difference in length of the vowels in the following pairs, the lesson will come home to him; taste, tame; pot, pod; note, old; not, loll; yet, yell; pert, herd; egg, ell; week, ring; folk, fold. Worth while will it be, to practise him on words containing very short, unaccented vowels; e. g., notice, spirit, immense, mountain, orange, obey, window, tomorrow, pudding, going. In careless speech all of these vowels are sounded alike obscure, the effect on the critical ear being that of illiteracy and vulgarity. Then there is the frequently mispronounced vowel in the first syllable of carriage, marriage, and the last syllable of prepare; in pass, glass, path, which should be the same as in mark; in food, foolish, which should be the same as in too; in again, which in conversation is often sounded like agin; in was, which too often sounds like wuz; in get, forget, which are corrupted into git, fergit; in can go, often sounded kin go; scared, pronounced skeered, etc.

Teachers who consider themselves sticklers for pronunciation often slight these familiar and seemingly easy words, devoting their

attention solely to the correct placing of the accent of unfamiliar words. Far better to begin by cultivating an ear for vowel values, accurate enunciation of consonants, and well-placed, sonorous speech. Once a speaker has learned to read slowly, to listen to his own voice, to criticize narrowly his own speech, he will not fail of effectiveness in improving his pupils and in developing in them an ambition to excel in purity of utterance. Besides, nothing will do more to heighten the self-respect of teacher or pupil than will the consciousness that his utterance is correct and refined. It is a most important fact that when a young person leaves the kindly and uncritical environment of his native village to go among strangers, the social position accorded him depends more upon his speech and manners than upon the academic or technical scholarship he may possess.

There are thus two main reasons why reading aloud holds so important a place in the school program; viz., its correcting and refining influence upon the speech, and its stimulus to emotional expression. The latter is even more important than the former. The reading period is the one, *par excellence*, where the teacher and pupils are oftenest lifted into the realm of emotion; where the purer passions are stirred by tales of kindness, heroism, sacrifice, and suffering, or by the genial touch of poesy. The human element in literature being the most powerful in its appeal to children, as to older persons, will require less effort to interpret than the nature element. Since, however, a large part of our literature, both prose and poetry, is concerned with the interpretation of nature in its emotional aspects, or, rather, as awaking emotion in mankind, there is an additional incentive to the teacher to stimulate in children an emotional attitude towards nature, towards sky and sea, mountain and stream, sun, moon and stars, night and day, plant and animal life, color, form and sound in nature. The nature lesson, the lesson in plant and animal life, in elementary astronomy or physical geography, the lesson in drawing,—each affords opportunity for this. And this emotional factor in nature-teaching should never be forgotten or neglected; so that, when in school a piece of natural description constitutes the reading-lesson, it may be interestingly and profitably dealt with as picturing aspects of nature by us only imperfectly observed, and as throbbing with a feeling native to all humankind. Let the teacher who has not yet developed this feeling for nature be not discouraged. Increased acquaintance with nature and with poetic interpretation of nature will supply the deficiency. Indeed, a few good pieces carefully and slowly read and carefully imaged will work a miracle with the spiritual vision. For this purpose the most familiar pieces may prove the most effective, even as by reason of this very familiarity they are likely to be the ones least regarded. The prescribed readers have excellent examples in Tennyson's "Brook" and Bryant's "Lines to a Waterfowl."

Once a teacher has come to take delight in emotional expression and well uttered English, she will easily be tempted to follow the practice of all judicious teachers in reading aloud from time to time to her pupils. This will occur not only on the occasion of the regular reading-lesson, where it may be desirable for the teacher to set the

tone and sentiment of the prescribed passage, but at other times, and, indeed, whenever she may have come across something suitable or entertaining to the pupils. The further she can admit her pupils into her own intellectual life, the more pleasing and purposeful the relations established in school. The practice of reading to pupils has an economic value, too, in its presenting to the latter material which they may work over and reproduce either orally or in writing.

Lastly, let the teacher stimulate among her pupils all the private reading possible. Set the pupils reading. Aid them in their choice, letting interest be the chief ground of recommendation. Question them as to what they are reading, what books they like best, what the book deals with, who the characters, etc. Do not insist too much upon the child reading "to improve his mind." Be content that he reads, so long as what he reads is not unwholesome.

## ENGLISH LANGUAGE.

### General Prescriptions.

For convenience of treatment here, as for convenience in the school-room, elementary language study may be thought of as

#### 1. Constructive.

Learning to speak distinctly, in a good tone of voice, grammatically, and in appropriate language.

Learning to write legibly, fluently, in correct orthography, and in correct and appropriate language.

#### 2. Analytic or Interpretative.

Learning to interpret the printed page and to give expression to both its thought and its sentiment.

Deficiencies in teaching are to be found on both the constructive and the interpretative sides. The latter is dealt with partly under the heading "Reading" and partly in the following remarks which bear upon the grammar of the language.

Noting that the task of the learner is, first, to speak well, and, secondly, to express his thoughts in writing, the teacher will from the outset endeavor to provide in her own language a high standard of spoken English for the pupils. It is unfair as well as futile to expect from the school a facility which the teacher does not possess. On the other hand, it will be a rare case where the voice, language, and written-work of the pupils do not improve from the mere example of a teacher who takes pains to speak distinctly, in a good voice, and correctly, and to execute her written work carefully.

Correct example costs less effort the more it is practised. Correct utterance and correct language will be reflected in the spelling and written composition of the pupils—results painlessly achieved and at no outlay of energy comparable to that required in the continual correction of written mistakes due to ill-formed speech. Most important it is, therefore, that the practical results of the voice-training of the reading class be carried over into the other branches and into all the spoken language of the pupils.

### Grammar.

So far as grammar is concerned, it is well to note that one acquires grammatical habits from example rather than thru instruction. The direct value of grammatical study for children is small; but it is well that whatever effort is put upon this subject should dispose the pupil to proper habits of thinking, and not to the memorizing of obscure or meaningless statements. The phenomena of grammar should be studied exactly after the same method as the phenomena of nature. Parts of speech, grammatical relations, rules of government and agreement, declension, mood, tense, number, are only grouping of intelligible phenomena under strange headings. The groupings themselves are easily made and easily understood by pupils and teachers: in each case it is only the technical *name* given to the group, or it is the form in which the generalization is expressed, that causes the difficulty.

The terminology of English grammar being of foreign derivation is therefore difficult for children. Besides, pedantries of definition and rule are strewn so abundantly thru the ordinary text-book that the unskilled teacher is liable to lose sight of practical values in the maze of artificial difficulties conjured up from the shades of dead languages. From the first, stress should be laid upon the useful element in grammar study, to the disregard of merely academic classification and distinction. The business of the teacher is to secure the use of correct forms of speech thru imitation and by stressing those rules and distinctions which bear directly upon correct usage.

The first feature of language to demand attention is the sentence. The nature of the sentence is not to be apprehended, however, thru a definition. One must practise the children with expressions illustrating incompleteness and completeness until the language-feeling is rendered sensitive and discriminating in regard to sentence and non-sentence. Let there be no hurry. Exercise upon the sentence—building sentences from ideas, about concerns of the children, their games, occupations, etc., around words suggested by the teacher and by the pupils, completing unfinished expressions, enlarging given sentences, etc.—may continue at intervals thruout the second, third, and fourth grades, and later. By this practice only, will the use of the period and of the capital be rendered intelligent and certain.

The next consideration is that of the two elements of the sentence, the subject and the predicate. The latter word is a strange one to the child. It is not the term, however, but the function, that is im-



portant. The term *predicate* is merely one of those labels that are useful in discussing the meaning or thought-relations of a passage read and in questioning the pupil upon these in the course of the reading class.

Parts of speech may be conveniently considered in the following order: noun (common and proper), pronoun (personal), verb, adjective, adverb, preposition, conjunction. The conception of the noun as a part of speech is easily formed by having the pupils give names for the objects, persons, etc., around them. Everything has a name: each part of our clothing, of the window, of the desk; every feeling, pain, disease; every feature of the earth's surface, every town, river, etc.; every animal, plant, etc.

At this point, it is easy to substitute the grammatical term *noun* for *name*; and quite easy to pass from the general or common nouns, river, mountain, boy, dog, people, to the particular or proper nouns *Avon, Cobequid Mountains, Fred, Carlo, the Smiths, James*. The important principle of method is that the generalization be made by the pupils from consideration of the actual names they have collected. To start the lesson with a definition of noun and then to proceed to the search for examples is the wrong way about.

Still more injurious to mental habit is it to attempt a definition of adjective and then to seek examples. The several parts of speech are almost impossible to define. Each of them is recognizable only thru a certain function or thru some change of form or some relation in thought. Thus, adjective is in effect most easily recognizable thru its fastening itself in thought to some noun or pronoun; in the absence of noun or pronoun there can be no adjective. In function, the adjective always puts a limit or inclusiveness upon a noun. Hence all adjectives *limit*. *Good apples*. The apple is *red, that window, ten men, all men*. In each of these expressions the function or effect of the adjective is limitation. The lesson should begin by having the pupils name various objects. The names so obtained should then be used as subjects of sentences, each noun having a word attached to it that serves to distinguish it. The several limitations—of number, quality, position—should be noted and named. Such exercise might be continued thru several days until the function of the distinguishing or limiting word takes its place in the consciousness of the pupil. Recognizing thus a common property in all such words, his mind generalizes them into a class. All that is wanting is the name *adjective*, which may now be given him.

The conception of *pronoun* likewise should be arrived at thru the supplanting of nouns in sentences by those other words which the youngest pupil already uses. These words are not *names*. Exercise should be given calling forth parallel sentences containing these substitute words. Good opportunity is furnished here for written exercises. The apprehension of these words as substitutes for nouns or names comes gradually to the pupil *thru practise in effecting the substitution*, not by simply telling him that they are pronouns. The term *pronoun* should be kept back until the mental apprehension is well

formed. The name will then serve to strengthen his conception of this part of speech.

Here it is important to note that parts of speech are not safe to be dealt with except where they occur in sentences. A string of incoherent words is not language; and words are not really *parts of speech* except when used in speech or writing. Thus the word *black* when standing alone cannot be said to be a part of speech; for, if asked which part, one would not know whether it is an adjective, a noun, or a verb. This fact is important; for where ignored, the pupil is likely to think that the part of speech of a word is fixed, whereas in English, almost any word may rove around now as noun, now as adjective, now as verb. For example, The *book* is thick. I have *book* debts. I *book* a passage. This liberty of the individual word to function as several parts of speech is one of the distinguishing features of English and one of the marks of its high development as a language. In no other tongue has so high a degree of flexibility been achieved.

The foregoing examples of the generalizing process as applied in grammatical study are intended to serve the teacher as types for lessons not only on the other parts of speech and their sub-classes, but on the cases, the moods, the several governments, agreements, etc., which constitute the syntactical relations of English.

One of the most difficult conceptions of grammar is the *Verb*. No adequate definition of this part of speech is possible. As a part of speech it is, however, easily recognized thru its power of budding out predicate-endings or inflections to satisfy an accompanying *thou* or *he*. This point of vantage gained, attention may be directed to its indispensable presence in every sentence; to its intimation of time (*tense*); to its varying tones of positiveness (indicative); of doubt or uncertainty (subjunctive); of command (imperative); to the activeness or passiveness of its subject (*voice*); most important of all, to the necessity of choosing such endings as will be appropriate to its subject when the latter changes from singular to plural, and to the necessity of associating with it only the nominative case forms, *he, she, they, we*. (Syntax).

The *pronoun* presents an interesting study of shifting of function in its transition from interrogative to relative. Pupils should study first the personal and the interrogative pronouns. Pupils may then be required to bind into one sentence such pairs as: I gave Tom the ball. He has it in his hand. Yesterday I saw Fred. He is at home sick today. Here is an apple. It has a long stem. Do you see this flower? I took it from Mary. Here is a pen. I have broken its point. Abstaining from the use of *and* as the connective, the pupil brings into play the relative words, *which, who, etc.*, and will note their connective or conjunctive power, their pronoun function, their dependence for number and gender upon an associated word (the antecedent), and will thru this first-hand study of the word and its relations come to an intelligent appreciation of the term *relative pronoun*. Almost identical with this will be the later study of the relative adverb (commonly called the conjunctive adverb).

The *adverb* presents no difficulties except in the few words which fluctuate between the forms in (-)ly and those which lack the (-)ly form—such words as *cheap, dear, low, high, wide, deep, near, fast, far, etc.* Usage is the only guide to the choice of the form. It is not the (-)ly form that makes a word an adverb, but rather its reference or relation to some verb or adjective; for several adjectives have (-)ly forms, such as, *comely, sickly, goodly, timely*. Usage sanctions "highly praised," "praised highly," "the bird soared high," but not "high praised" or "praised high"; and *usage is the basis of all grammatical rules*. This truth should be made clear and emphatic thru the teacher's producing citations from authors, which should form the point of departure of the lesson. Grammar study is nothing but the study of good usage, with the intention of reducing it to system in order that we may more promptly call it into action in speaking and writing.

The first-hand study of words as they occur in sentences will serve best to bring out all those relations of agreement and government which we know as syntax—especially those relations that are important in speaking and writing. Thus, the noting of the identity of person in the first two words of the following sentence serves as the first step in comprehending the relation known as apposition. "John, my cousin, has gone away". The identity may easily be caught by pupils, and the punctuation of this and similar passages taught, even tho the children are too young to be burdened with the technical term *apposition*. Indeed, correct punctuation may be easily learned and practised by pupils entirely ignorant of the technical terms of grammar.

What is known as parsing may easily be overdone in schools. So, too, analysis. Tabular parsing, unless given with discrimination to advanced pupils who have been well trained to independent effort in noting language phenomena, is likely to result in thoughtless rigmarole. Minute dissection of predicate expressions into subjective and objective complements, indirect predicates, extensions of concession, accompaniment, etc., are refinements of logic out of place in the common schools. The obvious functions of noun, adjective, and adverb are easy of comprehension; and, once fairly settled, they may be sought for in those word-groups or speech-forms known as phrase and clause. More than this is unnecessary, and elaborate classification and sub-classification should be condemned. The quasi-algebraic symbols, A, a1, 2a1,, may well be discarded in favor of the letters A, B, C, D, etc., accompanied by an abbreviated statement of relation or clause-dependence for each clause.

Those five or six rules of syntax which are operative in keeping our speech grammatical should be stressed. Facts, rules, and definitions of no practical effect in speech may be passed over. So, too, minute classification of conjunctions and adverbs; of verbs into weak regular, weak irregular, and strong; of tenses into progressive, perfect, and perfect progressive tenses; distinctions of factitive verbs, intransitive verbs used as transitive, should be omitted. On the other hand, the child needs to know the principal parts of each verb, especially the few verbs whose past and past participle differ, and to be practised in compounding tenses with the past participle (not with the past indicative).

### Composition.

Composition is a constructive art, to be mastered chiefly thru imitative effort. Of course, the act of imitation, especially in its higher phases, involves a certain effort of analysis of literary forms, qualities, and conventional practises; but the conception of composition as chiefly the rhetorical analysis of the literary production of authors and the definition of literary forms, is false.

What the teacher is expected to do is, first of all, *to set a good example* of correct and varied speech-forms and of coherent and appropriate expression, and to cultivate thru practise the growth of similar possessions in the pupils.

The judicious teacher will therefore view the teaching of composition as first and chiefly the cultivation of the powers of oral conversation, narration, and description, in the children. Example is the potent influence; and it is consequently absurd to think of an ill-spoken teacher accomplishing anything worth while in this branch. The child's first thoughts will often be expressed in bits of sentences. These he must be practised in amending; and, as time goes on, he must grow into the habit of thinking and speaking in complete sentences. Very important it is, too, that in every class the pupils should be required to attend carefully to the exact form of the teacher's question and in each case *to answer the exact question asked*. Careful, correct expression is the outcome only of exact thinking.

Oral composition being dwelt upon as essential, written composition will be found to have been deprived of almost all distinctive elements except those of spelling, capitalizing, and punctuation. In written composition, the writing of letters may be made the medium for the practice of everything pertaining to literary usage. Very early, the child evinces a desire to communicate in writing to his relations, friends, to Santa Claus, to his teacher; and upon this basis of interest it is safe to continue to rest the teaching of almost everything that the common schools are expected to achieve in English composition. The letter may contain the narrative of a day's doings; the description of things seen and heard; an account of some person or place or phenomenon studied in another class: the method of playing a game; the reproduction of stories read by pupils or teacher or told by teacher; the conveyance of a request, of an expression of thanks, of sympathy; the offer to exchange articles such as stamps, coins, minerals; letters to schools in distant parts of the Empire, to be forwarded by the teacher; letters to merchants ordering goods, asking for samples or information, complaining of non-receipt of goods, paying an account; letters subscribing to and withdrawing subscription to newspaper or magazine; letter to the clergyman or the physician asking for certificate of character, of health, or of vaccination; letter of apology or regret; letters of invitation and declination; letter of application for a situation, etc.

Drill lessons, from dictation on the uses of capitals, of abbreviations, of contractions containing the apostrophe; on the disposing

of the several parts of the letter on the paper; on forms of address in letters and on envelopes; on complimentary closing, forms of courtesy. Correspondence is the one form of literary composition that everyone is called upon to execute, and the teacher who makes fair success in this branch may justly be excused if she entirely omits the formal essay, the abstract and the paraphrase. These higher efforts are, in any case, appropriate only to the highest grades.

As many of the errors in written work arise from difficulties of spelling, much written drill is necessary in this branch, especially on words of similiar sound but of different orthography; and it should be kept in mind by the teacher that dictation and written work are the only safe means whereby to render the pupil accurate in the writing of these. Pupils who spell orally with accuracy cannot be depended upon to spell correctly on paper unless a good deal of supervised written practice is required from them.

Thruout the grades, to some extent in every lesson,—geography, nature, history, etc.,—opportunity should be embraced to amend and enlarge the child's vocabulary; to practise him in choosing the precise word needed, in arranging his statements in a proper order, in making the connection of thought plain either by the use of formal connectives or of repeat-words. Of course, one must not make composition the dominant element in such lessons. Nor should the teacher correct the language of the pupil while the latter is engaged in thinking out an answer. Nor should the same child be corrected to the point of discouragement.

In the correction of written exercises, which for drill purposes should be short ones, as much as possible should be left to the pupils. The teacher may often be able to forecast prevalent errors, or, by the hasty examination of a few exercises, to discover these, thereupon requiring the pupils to make the corrections. Additional suggestion may be made as to the order of thought, the order of sentences, the sentence-structure, the paragraphing; and the composition, or letter, or whatever it may be, may then be assigned for re-writing by the pupils. The pupil's own correction and amendment of his written work is far more profitable to him than that done for him by another. Moreover, the teacher's time and energy are thus husbanded for other purposes.

**Handbooks, etc.:** Teacher's handbook recommended for grades I-VI: The Mother Tongue, part I, price 50 cents., published by Ginn & Co.; for grades VII, VIII, "Lessons in English," by Marshall and Kennedy; or, Sykes "Elementary English Composition," which also has stories and poems suitable to tell or read to pupils.

Stories suitable for younger children will be found in Bryant's "How to Tell Stories to Children," published by Houghton, Mifflin & Co., price 50 cents.

A good and cheap series of supplementary readers is "The Bright Story Readers," for grades I-VI, published by Macmillan Co.; Grade

I, 7 cents; Grade II, 8 cents; Grade III, 9 cents; Grade IV, 10 cents; Grade V and VI, 11 cents each.

A suitable dictionary for pupils will be found in Collins' Pocket Dictionary, 15c. and for the higher grades Chambers' Etymological Dictionary, published by Morang & Co.

## ENGLISH.

### Special Prescriptions.

#### Grade I.

**Reading:** First, from blackboard, script as well as print; later, from Reader No. I; brief phonic practises, analytic and synthetic.

**Language:** Directed conversation centering around children's homes, amusements, pets, and around nature topics. The conversation may be between teacher and pupil and among the pupils themselves, the aims being (a) to promote familiarity and freedom, (b) to cultivate distinctness and purity of utterance, (c) to develop a sense of grammatical correctness and a perception of the sentence.

(The conversation will provide opportunity to correct common errors such as *there is, there was two boys; aint; him and me were playing; them books; he don't.*)

**Recitation** of short poems that the children like.

Reading (and re-reading) of short stories, fables, etc., by teacher to pupils.

**Spelling and Writing:** Copying words and short sentences from blackboard. The period; the question mark; the capital letter for first word in sentence and for pronoun I.

#### Grade II.

**Reading:** From blackboard and from reader No. II, script and print. Brief phonic exercises covering most of the consonant and vowel sounds; names of letters of alphabet; easy oral spelling. Sight-reading from wall-cards or blackboard.

**Oral Composition:** Directed conversation on nature topics and on the children's games and doings. Story reproduction by the children, the children being encouraged and assisted to make complete sentences. Telling stories from pictures.

**Grammar:** Incidental correction of common errors such as *he speaks quick; It was John and me; He told Fred and I to come; Who did you see?* as well as those mentioned above in grade I. These

should be drilled by asking questions the answers to which will involve the use of the correct form or idiom.

**Writing and Spelling:** Commence making a "school dictionary" of words sounded alike but spelled differently, such as *here, hear; eye, I; know, no*; this list to be practised and to be enlarged in the next grades above; spelling of words in reading lesson. Capitals for days, months, names of people and places, Mr. and Mrs., Dr. for Doctor.

Period, question mark, period after abbreviations. Short sentences written by pupil telling about something done or seen by pupil or describing something shown or suggested by the teacher.

(For suitable handbook for teacher, see grade I, above.)

**Recitation:** By pupils, and reading by teacher to pupils, as in grades I, II.

### Grade III.

**Reading:** Reader No. III, demanding that the child visualize and intelligently express what the book says. (Mere word-naming is not reading). Occasional phonic practise for the benefit of enunciation.

**Spelling** of words of reading lesson; enlargement of the school dictionary of homonyms (see grade II). Sight-reading from black-board, or wall-cards, or reader.

**Oral Composition:** Story-telling and reproduction, as in grades I and II. Conversation, especially in nature class; correction of errors mentioned in grades I, II, also frequent drill to correct the misuse of the negative, of the superlative of adjectives for the comparative, of *learn* for *teach*, *can* for *may*, of *did* for *done*, *came* for *come*, *seen* for *saw*, *done* for *did*, *come* for *came*, etc. (Have the pupils memorize the three parts of these verbs: thus, *do, did, done*. Practise them in answering correctly, orally and on paper such questions as: *When did you come to school? Have you done your work? Has John come?*)

**Recitation,** with intelligent expression, distinct utterance, and in clear and audible tone.

**Written Composition:** Capital letters, as in grades I, II, and in writing names, initials, first word of each line of poetry, titles (such as Doctor, Reverend), terms of the Deity. The period, the abbreviation mark, the apostrophe in possessives, the question mark; the comma, to take the place of an omitted *and*. The "school dictionary" of homonyms, as in grade II, and the construction of sentences illustrating the use of each word. Dictation exercises to test and fix the spelling, punctuation, abbreviations. Short stories to be written from memory.

### Grade IV.

**Reading:** Reader No. IV. Mere word-naming should begin to give way to a natural impulse to read with intelligent expression. Sight-reading, from reader or supplementary book.

**Spelling,** of words of reading lesson, oral and written. Homonyms, as in grades II and III, practised and added to.

**Grammar:** Correction of common errors of speech; those of grades I, II, III continually reviewed, adding the correct use of the pronoun after the verb *to be*; e. g. *It was John and I. It was he.* Also, wrong words such as *somewheres, nowheres, a good ways* or *a long ways*, he is *some* (somewhat) better; wrong uses such as *There is two books on the table; there was three boys in the hall.*

Drill on saw, seen; did, done; came, come; went, gone; lie, lay; sit, set. If a few of these are well drilled, the pupil will become discriminating in his use of strong verbs in general. Have the children practised in riming off the three parts of each verb. Exercise them in answering such questions as *What do I do?* (Ans. You sit down); *What did I do?* (Ans. You sat down); *What have I done?* (Ans. You have sat down).

Teach the sentence (a) by having children careful to speak in sentences; (b) by having them complete unfinished thoughts, orally and in writing, requiring them in writing to use the period properly.

Teach subject and predicate by practising the pupils (a) in dividing given sentences into these parts; (b) by having them supply a predicate to a given subject, and *vice versa*.

Teach noun, pronoun, verb (in its finite relation only, where it is recognizable by its capability to change its endings to suit the subject).

**Oral Composition:** Story-telling, story reproduction, and directed conversation, as in grade III. Every class in geography, history, etc., should to some extent be a conversation class.

**Written Composition:** Abbreviations, as in grades II, III, reviewed, adding a. m., p. m., Jan. 3rd, Feb. 14th, etc., arithmetical abbreviations (lb., ft., in.). Contractions: don't, isn't, aren't, I'll, you'll, it's, there's, can't—these to be used in sentences written by the pupil, original and dictated.

Teach and practise the use of the comma to indicate an omitted *and, or, nor*; and to mark off the word or words by which we address a person (e. g., *Come, Fred, and bring your pencil. Come, boys and girls*).

Capitals reviewed and their use extended to national names, title, titles of books.



Letter-writing, with attention to margin, superscription of place and date, addresses, salutation, complimentary closing; a letter to a schoolmate, to a dealer ordering goods.

**Recitation:** With intelligent expression and good utterance, of short prose and poetical selections.

### Grade V.

**Reading:** Reader No. V, demanding audible tone, distinct utterance, and intelligent expression, with increasing perception of rhythm and of varying vowel-lengths. (See General Prescriptions: "Reading.").

Sight-reading, from reader, newspaper, or supplementary reader.

**Spelling:** Of words in reading lesson, oral and written; dictated passages of prose calling for period, question mark, comma. Continued practise on homonyms, that is, words of similar sound but different spelling (See Grade II).

**Grammar:** Spoken English purged of error and vulgarity; (See grades I-IV, above). Attention to the spoken English of every subject of study and to the English of the playground.

Review, with practise, subject and predicate, noun, pronoun, and verb; teach singular and plural, possessive case. (Omit classification of nouns, of pronouns, and of verbs as strong and weak). Establish by investigation the idea of agreement between the verb and its subject in respect of number. Derive by investigation the rule (a) for noun plurals in -es, (b) for noun-plurals in -ves. Teach adjective and adverb, if thought desirable; but merely the recognition of these parts of speech, not their classification.

**Oral Composition,** as in grades III, IV. In geography or nature lessons, see that the pupils speak in complete sentences, and encourage them to incorporate into their actual speech the conjunctions *but, altho, unless*.

**Written Composition:** Chiefly letter-writing, describing to your chum the day's doings; to a pupil in India the winter and summer sports. Letters to a merchant asking for samples; to a dealer, enclosing money, and ordering goods. Letter to the teacher explaining absence or tardiness.

Review the abbreviations, punctuation, use of capitals, etc., of preceding grades.

Teach the use of the comma to mark off the second member of two identities: e. g., *I met Mr. Wilson, our minister. Do you think Lucy, the girl in the front seat, writes fast?* Extend the use

of the comma to indicate an *and*, *or*, *nor*, omitted between longer expressions than single words.

**Recitation**, in good voice, with distinct utterance and with intelligence, of appropriate selections.

### Grade VI.

**Reading:** Reader No. VI. For discussion of aim and procedure, consult the introductory article, "Reading: The Higher Grades."

**Spelling:** from reader. Homonyms, continued, in dictated sentences. Word-building. The teacher should train the children to the use of the dictionary.

**Grammar:** The several parts of speech, their functions and relations. (The adjective, the adverb, and the verb, can each be recognized with certainty only by its relations with other words in the sentence.) Change of function involves change in the part of speech of the word, as in the sentences, The leaves *fall*; Thomas had a bad *fall* on the ice. Extensive practice should be given in this subject, in order to develop the perception of 'part of speech.'

There are four chief rules of syntax that bear upon the correction of errors of speech. What are these? Have the pupils derive and state these, each from sentences given them by the teacher. See that these rules remain operative in their speech.

The following are the rules:

(1) A plural subject requires a plural verb; as, The two boys *have* their books; Each person *has* his book; Neither John nor James *has* a pencil. People *are* queer. The boy and his sister *are* here. Many of us *have* seen them.

(2) The plural adjective requires a plural noun; as This sort of apple; That kind of man; These sorts of apples; Those kinds of potatoes.

(3) Transitive verbs and prepositions govern the objective case; as, *Whom* did you meet? *Whom* did you give it to? I see the girl (*whom*) you like best. The boy (*whom*) I spoke to is my cousin, Fred. She spoke to *him* and *me*. Between *you* and *me*.

(4) The subject of a verb must be a nominative case; so must the subjective complement; as, *Those* books (not *them*) are mine. *These* are my books; He and I are going to have a race. Do you know *who* came in? It was *he* that did it.

In order to teach these rules, the teacher must teach transitive verb, preposition, object and objective case, subjective complement.

**Oral Composition**, as in Grade V; history stories retold and rewritten by pupils.

**Written Composition**: Letter-writing, as in Grade IV, extended, with increasing attention to material form, neatness, forms of courtesy; making out an account, a receipt in full, a receipt on account. Punctuation, reviewed, with repeated practise.

The use of the comma to mark off expressions beginning with *if, altho, because, when, unless*, etc., when these occur anywhere but at the end of the sentence. Other uses of the comma reviewed, with written practise.

Story-reproduction, taking care that sentences are complete and that the period, comma, abbreviations, apostrophes, capitals are correctly used.

**Recitation**, as in Grade V.

### Grade VII.

**Reading**: Annual Prescriptions (Consult the introductory article, "Reading: The Higher Grades."). Simile, metaphor, metrical accent recognized.

**Spelling**, from reader, and, as in Grade VI, the dictionary to be freely used. (See Grade V.) Word-building from common roots, such as peace, (peaceful, pacify, pacific); joy (joyful, joyous, joyless); white (whiten, whiting). A few affixes, such as, *trans, less, re, in, un, ex*; a few roots noted, such as *port* (export, import, porter); *volv* (involve, revolve, revolution, convolvulus); *frag* (fragment, fragile, fraction). The dictionary in the hands of the pupil for continual reference.

How a simple and rational method of spelling would promote education and especially the education of the masses. An average period of two years spent by each person in learning to spell according to present system, under a rational system spelling could be mastered in two months.

**Grammar**: The several parts of speech reviewed, with *firsthand* inquiry into the function of the adjective as a limiting word; of the adverb as the modifying associate of adjective or verb; of the verb as finite and as non-finite (omitting the names of the three non-finite moods); of case in nouns and pronouns; of the subject as active and the subject as passive. Practise pupils to recognize word-groups when they occur as subject or as object (noun-groups); when they limit some noun or pronoun (adjective-groups or enlargements); when they explain some verb or adjective (adverb-groups or adverbial expressions).

Review the four rules of syntax and have class apply them to doubtful expressions heard in school or playground.

**Oral Composition**, as in Grades V, VI, encouraging the growth of vocabulary of the pupil and a variety of thought-connectives, as in Grade V and in written composition, below.

**Written Composition**, as in Grade VI, exacting closer attention to detail, forms of courtesy, completeness of statement, use of period, comma, abbreviation marks, capitals. Telegrams, advertisements, business letters, practised. The uses of the comma reviewed; those affecting nominatives of address (See Grade IV), appositional expressions (see Grade V) and adverbial expressions or "adverb-groups" (see Grade VI) explained and reworded in grammatical terms. Exercises in changing from direct to indirect narration and from indirect to direct, with use of quotation-marks.

Exercises in combining short sentences into longer ones.

**Abbreviations:** C. O. D., via, vol., inst., prox., ult., viz.

Practise, orally and in writing, use of the thought-connectives, *however, still, nevertheless, moreover, in spite of.*

**Recitation**, as in Grade V, but cultivating the power of speaking slowly and deliberately and of sustaining the voice on long vowels.

### Grade VIII.

**Reading:** Annual Prescriptions. (Consult introductory article "Reading: The Higher Grades.").

Metrical feet and metrical accents recognized and applied in the pupil's reading of poetry. Metaphor and simile, personification, allegory, recognized.

**Spelling**, as in Grade VII, continued and scope somewhat enlarged. Increasing use of home-dictionary.

**Grammar:** The parts of speech recognized by function and relation. The relative pronoun, its number and gender, its relation with its antecedent, and its case relation with some verb or preposition within its own clause.

The clause, a word-group which contains subject and predicate.

The phrase, a word-group which has no finite verb, and which therefore lacks subject and predicate.

Testing of clauses and phrases to discover whether they are (a) noun clauses with case-relation, (b) adjective clauses limiting some

noun or pronoun, or (c) adverbial clauses; noun phrases, adjective phrases, adverbial phrases (omit the useless classification into infinitive phrases, gerundial phrases, etc.).

The complex sentence analyzed into principal and subordinate clauses. Each clause to be analyzed into simple subject, enlargement (if any), predicate verb, object (if any), complement, and adverbial extension (if any).

Moods and tenses of verbs (see "General Prescriptions: Grammar.").

**Oral Composition**, as in Grades V and VII. Practise also use of *accordingly*, *in accordance with*, *provided*, *in view of*, and their equivalents. The importance of synonyms illustrated by a few cases such as *discover*, *invent*; *only*, *alone*; *description*, *narration*; *can*, *may*.

Practise on antonyms: e. g., *delicate*, *robust*; *valuable*, *worthless*.

**Written Composition**, as in Grades VI and VII. Letters in reply to advertisements; letter of application for position; letter subscribing to newspaper; discontinuing same; letter of invitation; letter declining same; letter to clergyman asking certificate of character; to physician, asking certificate of vaccination. If time affords, letters from pupils to pupils in an Australian school, to be forwarded thru the League of the Empire, London, England.

Punctuation practised, as in Grade VII. Teach the use of the semicolon. (When a sentence falls manifestly into two or more independent thought-units, some of which already contain a comma or commas, then separate the thought-units by a semicolon; e. g., "We visited the pretty village of Grand Pre; Kentville, the shire town; and Wolfville, the seat of Acadia College." "If you can answer, do so; but don't speak unless you can say something to the point.")

**Recitation**, as in Grade VII.

## WRITING.

Children will in time learn to write somehow, no matter how poor the instruction, and some may even learn to write well with a minimum of teaching. Undoubtedly, all normal children can learn and will learn to be good penmen if their instruction is of that sort that begins right and continues right. The pedagogy of writing is an easy subject to master, and it is inexcusable in a teacher to be content with the penmanship of her pupils unless it is at all times neat and legible, and unless the progress of a year marks an increase of fluency.

Neatness in writing proceeds from uniformity, chiefly uniformity of height and slant; from a well-kept margin, and from cleanliness.

Legibility, while partly due to the distinct fashioning of the letters, is dependent also upon uniformity of height and slope.

Fluency comes from well-directed practise (which is an easy thing to say), and it is just how and when to accomplish this that teachers are often uninformed. Uniformity and legibility are qualities which persistent watchfulness will secure; but fluency will be secured only at the expense of some intelligent effort on the part of the teacher. Any teacher who will study a little penman's manual like McIntyre's "Guide," (Copp, Clark & Co.,) will easily learn to administer the exercises calculated to render penmanship fluent. The most conspicuous omission on the part of our teachers is that of requiring frequent writing-exercises on loose practise-paper: exercises in tracing scrolls, spirals, continuous m's, e's, i's, circles, loops, parallel lines, etc., by wrist and whole-arm as well as by finger movement.

To do the work properly, the teacher must not trust to distributing copy-books and allowing pupils to write at will and without instruction, suggestion, correction. Instruction, too, must be individual as well as to the whole class, for in the same grade there may be pupils of various degrees of proficiency.

Observation of the child in the earlier efforts of writing shows that there is always an excess of muscular activity, the nervous impulse being diffused thru muscles that should be at rest. Thus, the child is likely to grasp the pencil too tightly, to pucker his face, to move his head or his body. These movements, tho unnecessary, are natural, and can be overcome gradually. The teacher can contribute to overcome them by seeing to it that the child's desk is not too high or too low, that his bodily posture is comfortable and correct, and that paper and arm are correctly placed.

One must not expect good writing earlier than grades five or six. Good writing requires not only a steadiness of the members chiefly concerned, whether fingers, forearm, or arm, but a steadiness of the whole body which no child can maintain except for a very brief period. Especially are good and easy finger movements not to be looked for; for the minor muscles that control the fingers develop their control much later than the fundamental muscles such as those of the arm. From the sixth to the ninth or tenth years, the fingers appear not to gain at all in power of control; after that, until about the sixteenth year, they gain steadily. On the other hand, the control of the wrist develops earlier than that of the finger, and that of the forearm much earlier than that of the wrist. All of which implies that the child's best work in the first four grades will be in whole-arm writing on the blackboard, and next to that in forearm movements at his desk, altho these do not entirely exclude finger coöperation.

In the first stages correctness in perceiving and forming the letters is the chief consideration. The child's natural efforts will be slow finger-movements. Very little exercise should, however, be given on the letters of the alphabet as separate and detached. Better results are obtained by practising the child to write whole words, the aim being as quickly as possible to make the correct writing of the word an automatic feat. Any lines except the base as guide lines are a positive hindrance to beginners. The eye will keep track sufficiently of align-

ment and spacing, while the formation of the letters is chiefly a muscular and tactile result which is sought to be rendered automatic. Writing periods should be very brief. Only successful practise counts; the protraction of the task until the movements become irregular and inaccurate, means the establishment of irregular and inaccurate automatisms. Indeed, the law of short exercises is of almost universal validity.

In the earlier efforts the child will produce all the strokes and curves, upward and downward, at equal pressure. The word which he writes is not produced as one total impulse but as an aggregation of separate impulses. In shaping the letters dependence will be placed almost entirely on sight and very slightly on muscle and tactile sensation. Training in writing, therefore, is accomplished by patient and repeated practise having in view the dependence more and more upon muscle sensation and upon making writing an automatic feat.

Careful investigators have decided that for uniformity of slant, accuracy, and speed, the forearm movement is by far the best of all movements used in writing. By this movement is meant the free movement of the forearm supported upon its pad of muscle. The whole of the forearm need not be upon the desk, only the pivotal muscle-pad. By the time he reaches grade five the child should have some fluency in forearm writing. His rate of writing should then be hastened, the increase of speed necessitating and encouraging the co-ordination of finger and wrist movements.

Finally, as to practise: The copy-book must not be much depended upon except as a guide to the correct form and construction of the letters. Ornament, shading, and flourish form no part of the requirements. Penmanship must be pronounced excellent when the movement is fluent, when the letters are correctly formed and uniform in slant and height. Do not increase the child's difficulties by introducing new and bizarre forms of the capitals or small letters. Choose the simplest forms; use these and these only; and insist upon the pupil using them. Do not let the school see any untidy or careless writing on blackboard or elsewhere. Take pains with your own writing, and be vigilant and exacting with pupils. Copybook practise puts the emphasis upon visual control, not upon muscle control, and it therefore tends to discourage that automatism which is a proper aim of the lesson. The bulk of the practise should be done upon loose paper, either with pencil or with pen.

Too much direction of the beginner in holding the pen is not prudent. The pupil should sit erect and forward near the desk, both feet squarely on the floor, both forearms on the desk, the right forearm supported on its muscle pad, the copybook nearly but not quite parallel with the desk, the left arm wholly supported in order to steady the body and to hold the copybook steady. The pen is correctly held when grasped lightly between the slightly bent thumb and first and second fingers, the penholder crossing the hand at the upper finger joint. The hand should glide forward upon the little finger.

Even when reduced to its simplest terms, the art of writing a word is a very complex feat. First, the form of the letter must be perceived in detail, and to aid the pupil in visualizing it various devices are practised; for example, the teacher slowly and repeatedly traces it on the blackboard, or the pupil traces it on dotted lines: Direction of path in forming the letter must be noted. Then the muscular coordinations required to trace or to write the letter must be practised until they are automatic. In the meanwhile the position of pupil, of arm, of book, of pencil, must be gradually brought to conform with correct method, and reduced to a fixed habit. To secure this a short formal lesson must be given each day. Method and watchfulness in the first four years will leave no essentials to be dealt with later, but for a teacher to set out with the comfortable doctrine that things will come right of themselves, is intolerable. Things may come right, but in the meantime, the child may have expended undue time and energy upon this merely mechanical task; or he may have left school, and, thru deficient penmanship, may have forfeited golden opportunities.

In the first two or three grades no copy-book need be used, the blackboard supplying the copy. The writing may be done with crayola and lead pencil. In Grade III, pens (rather coarse) may be substituted for pencils, and the copy-book may be introduced in the progress of the year. From this time onward the teacher should look for steady improvement and should follow a progressive series of copy-books involving no change of slant or of general make of letters.

As soon as convenient the child should be shown how to make use of his powers of penmanship. Writing is not an end but a means, and this the child realizes to his great delight when he has been taught to write a note to parent, to Santa Claus, etc. A motive is now provided for doing his best, and this motive should be kept operative in subsequent exercises, in correspondence, business forms, themes, etc., thruout the grades. The execution of the written tasks presents a field of skill not only in composition, but in margining and spacing, and in the tricks of penmanship; and the pupil should grow to regard as discreditable a written production lacking in form.

## ARITHMETIC.

### General Prescriptions.

The teacher should regard arithmetic and arithmetical training solely as a utility. The processes taught are taught for their usefulness present, or prospective, and not for any fancied disciplinary values. Mathematical thinking is in a class by itself. Arithmetical training enables us to think quickly, accurately, and logically in terms of number or number-relations; not in terms of qualities, forms, people, or natural phenomena.

This being the case, recent school arithmetics have pruned this subject of all dead-wood, unproductive limbs, and false growths. Among these are such topics of school study as apothecaries' weight,



troy weight, the surveyor's table, prime factors, greatest common measure, least common multiple, true discount, cube root, equation of payments, partnership.

The duties of life call for accuracy and rapidity in the four fundamental processes operating on integers and fractions, and in simple problems applying these processes to the common and real problems of life; a knowledge of the tables of measurement in common use; ability to reduce these tables within three places; a clear notion of percentage, and familiarity with its application to ordinary affairs wherein it operates; some general information concerning business practises in accounting; and, lastly, familiarity with the methods of finding the surfaces of a few geometrical figures and the volumes of a few solids. Whatever is given in the eight grades that goes beyond these essentials consumes time which might better be devoted to other ends.

In the primary grade use should at once be made of number knowledge already possessed by the child; for example, of his ability to count, which may immediately be exercised in various ways, and which should be enlarged and rendered quicker and more certain. Thus, he may be asked to count the number of boys present, the number of girls, the number of absentees, the number of pencils or slips of paper needed for distribution; to count the inches on the foot-rule, the hours on the clock-face; to name the numbers on pages of the primer; to measure with the foot rule; to divide groups into halves, etc.

New number facts and number relations should be presented in the concrete, provided the largest number involved is not greater than twelve. Illustrations or examples should preferably be taken from the activities, interests, or games of the children. Actual materials should be provided and the situations reproduced.

In the higher grades rules should not be given readymade. The pupils should be led to perform the process and thus to discover and formulate the rules they are to memorize and apply.

The reality of arithmetical processes is enhanced by grouping these around some business or institution, or some work that is being done. For example, a store gives point and reality to processes of weighing, measuring; calculating cost, change; making out accounts, receipts. The post office or bank suggests various related problems suitable to the upper grades.

Reality may be given to a problem by having pupils take the tape line, rule, measuring cup, or balance, etc., to obtain the data for a problem outlined by the teacher or, better, suggested by the pupils. Pupils, if encouraged, will bring to school original problems analogous to those of the book but suggested by mechanical processes, fence-building, farming operations, crop results, etc., problems which they will go to work upon with more zest than upon the stereotyped ones of the book. Then there are problems connected with the population of the several provinces; the representation, the mines, education, and the like, the

working of which helps to fix in memory important knowledge of our country and its activities.

Arithmetical practises should have regard not only to exact calculation but to mental approximation of values, additions, interest due, quantity of material needed for stated purposes. Besides this, the senses should be practised to judge heights and distances, longer and shorter; volumes, such as pint, gallon, cubic foot, cubic yard; weights, such as pound, two pounds, ten pounds.

The value of drill,—mechanical drill, mental and written, on abstract and on concrete numbers,—‘in season and out of season,’ cannot well be overestimated. Exercises should be continual in addition, in multiplication, in fractions, in reducing, in dealing with fractions, etc. The first essentials are accuracy and neatness. To these must be added later, speed. Drill must not be abandoned in the upper grades, for here is the place to make much of “speeding-up” processes. It must, however, always be kept in mind that drill-exercises for accuracy and speed are very fatiguing. Ten minutes at one time is a long enough lesson of this sort.

Finally, as to the written statement of the arithmetical problem. The so-called Unitary Method is overdone in many schools. Carried too far, it is a waster of time and an enemy to good arithmetical habits. In the first application of a process or rule, the unitary statement is desirable because it requires a full explanation of the process. Once, however, the pupil has become familiar with the arithmetical reasoning involved, the full and labored statement should be omitted, or at least greatly condensed. It may be entirely omitted where the teacher assiduously practises the pupils in oral statement of the method, clearly and accurately expressed—a practise of some value, too, in improving and enlarging the language of the pupil. The bulk of the class-work and written work should consist of the working of problems without the words of explanation written down by the pupil, altho his figures may follow the order and obey the relation of the omitted statement.

#### CAUTIONS:

- 1, Against fatiguing the pupils by long and unvaried tasks;
- 2, Against giving the pupil a second trial on a drill problem; have him understand that he *must* not make mistakes, for every mistake is so much training for another;
- 3, Against proceeding too fast and before absolute mastery has been attained;
- 4, Against preferring the text-book to yourself as a teacher;
- 5, Against forgetting to review frequently;
- 6, Against trusting much to singsong repetition by pupils simultaneously.

**Handbooks Recommended:**—D. E. Smith's Arithmetics, pub. by Ginn & Co., Primary, 35c.; Intermediate, 40c.; Advanced, 45c.; Handbook to accompany these, 50c.

**ARITHMETIC.**

**Special Prescriptions.**

**"Mental " Work: For All Grades.**

"Mental" arithmetic should be given at least twice a day, in periods varying from five minutes in grade I to ten minutes in the upper grades. Such exercise may take the form of

- (a) practise in recognizing at a glance the sum, difference, etc., of two numbers written on blackboard;
- (b) oral practise in the four fundamental operations on abstract numbers;
- (c) practise in solving concrete problems by the quickest and most direct methods.

There are forty-five combinations in addition of numbers from one to nine; and these may be learned best by practising them in the following order, each group being thoroly mastered before passing to the next. (The combinations may be used to build up columns for addition; they may also be used for practise in adding twenties, thirties, fifties, etc.)

**GROUP 1.**

$$\begin{array}{r} 3 \ 4 \ 3 \ 2 \ 6 \\ 2 \ 5 \ 9 \ 2 \ 4 \\ \hline 5 \ 9 \ 12 \ 4 \ 10 \end{array}$$

and reverses

$$\begin{array}{r} 4 \ 2 \ 9 \ 5 \ 2 \\ 6 \ 2 \ 3 \ 4 \ 3 \\ \hline 10 \ 4 \ 12 \ 9 \ 5 \end{array}$$

**GROUP 2.**

$$\begin{array}{r} 3 \ 4 \ 3 \ 2 \ 2 \\ 6 \ 9 \ 3 \ 6 \ 8 \\ \hline 9 \ 13 \ 6 \ 8 \ 10 \end{array}$$

and reverses

$$\begin{array}{r} 6 \ 8 \ 3 \ 9 \ 6 \\ 2 \ 2 \ 3 \ 4 \ 3 \\ \hline 8 \ 10 \ 6 \ 13 \ 9 \end{array}$$

**GROUP 3.**

$$\begin{array}{r} 2 \ 8 \ 4 \ 5 \ 7 \\ 4 \ 6 \ 4 \ 8 \ 3 \\ \hline 6 \ 14 \ 8 \ 13 \ 10 \end{array}$$

and reverses

$$\begin{array}{r} 8 \ 3 \ 4 \ 6 \ 4 \\ 5 \ 7 \ 4 \ 8 \ 2 \\ \hline 13 \ 10 \ 8 \ 14 \ 6 \end{array}$$

**GROUP 4.**

$$\begin{array}{r} 2 \ 6 \ 5 \ 7 \ 5 \\ 5 \ 7 \ 3 \ 8 \ 5 \\ \hline 7 \ 13 \ 8 \ 15 \ 10 \end{array}$$

and reverses

$$\begin{array}{r} 8 \ 3 \ 5 \ 7 \ 5 \\ 7 \ 5 \ 5 \ 6 \ 2 \\ \hline 15 \ 8 \ 10 \ 13 \ 7 \end{array}$$

**GROUP 5.**

$$\begin{array}{r} 7 \ 6 \ 7 \ 9 \ 4 \\ 9 \ 6 \ 2 \ 9 \ 8 \\ \hline 16 \ 12 \ 9 \ 18 \ 12 \end{array}$$

$$\begin{array}{r} 8 \ 9 \ 6 \ 9 \ 2 \\ 4 \ 9 \ 6 \ 7 \ 7 \\ \hline 12 \ 18 \ 12 \ 16 \ 9 \end{array}$$

**GROUP 6.**

$$\begin{array}{r} 7 \ 3 \ 5 \ 9 \ 9 \\ 7 \ 4 \ 7 \ 2 \ 1 \\ \hline 14 \ 7 \ 12 \ 11 \ 10 \end{array}$$

$$\begin{array}{r} 7 \ 2 \ 7 \ 1 \ 4 \\ 5 \ 9 \ 7 \ 9 \ 3 \\ \hline 12 \ 11 \ 14 \ 10 \ 7 \end{array}$$

**GROUP 7.**

$$\begin{array}{r} 8 \ 9 \ 6 \ 7 \ 9 \\ 8 \ 6 \ 5 \ 1 \ 8 \\ \hline 16 \ 15 \ 11 \ 8 \ 17 \end{array}$$

$$\begin{array}{r} 8 \ 1 \ 8 \ 5 \ 6 \\ 9 \ 7 \ 8 \ 6 \ 9 \\ \hline 17 \ 8 \ 16 \ 11 \ 15 \end{array}$$

**GROUP 8.**

$$\begin{array}{r} 1 \ 5 \ 7 \ 2 \ 8 \\ 8 \ 9 \ 4 \ 1 \ 3 \\ \hline 9 \ 14 \ 11 \ 3 \ 11 \end{array}$$

$$\begin{array}{r} 3 \ 1 \ 9 \ 4 \ 8 \\ 8 \ 2 \ 5 \ 7 \ 1 \\ \hline 11 \ 3 \ 14 \ 11 \ 9 \end{array}$$

**GROUP 9.**

$$\begin{array}{r} 1 \ 1 \ 1 \ 1 \ 1 \\ 1 \ 3 \ 4 \ 5 \ 6 \\ \hline 2 \ 4 \ 5 \ 6 \ 7 \end{array}$$

$$\begin{array}{r} 1 \ 3 \ 4 \ 5 \ 6 \\ 1 \ 1 \ 1 \ 1 \ 1 \\ \hline 2 \ 4 \ 5 \ 6 \ 7 \end{array}$$

In regard to concrete problems it is to be recommended that these be practical and as far as possible associated with the children's interests and activities. Children should be encouraged to make up problems and to give them in school.

In the higher grades a premium should be put on the use of shortened methods.

**ARITHMETIC.****Grade I.**

**Counting:** Objects in room, on desk, boys, girls, windows, things in pictures, spots on dominoes; length of desk in feet; of room; height of pupils, of desk, etc.,

**Combinations:** Of numbers to 20, with frequent excursions into higher numbers. For example, after teaching  $4+2=6$ , refer to  $24+2$ ,  $34+2$ , etc. Analyzing group of pebbles, beads, beans, etc., into constituent groups in order to discover the combinations producing the total.

The ounce, the pound, the pint, the quart, the foot, the inch, — their relations incidentally touched on. (The teacher, for example,

may supply pound and half-pound bags of sand, paper vessels to hold a pint, a quart.)

**Busy-work:** Copying and writing of figures; of number combinations discovered from objects; measuring lengths of book, of desk, etc.; playing games and keeping score.

**Mental Arithmetic:** Practise in addition and subtraction from the nine "groups" given above. (The two numbers should be written on board and the sum of the two numbers put down, the teacher then requiring the full statement, e. g., *six and three make nine*. Then the sum of the two numbers may be erased and the statement required.) Practise the pupils also in giving merely the sum of two numbers written on board, without making the statement.

### Grade II.

**Reading and writing** of numbers to 1000.

**Adding and subtracting** of numbers to 1000 involving no carrying; or 'borrowing'; adding and subtracting numbers to 100 involving carrying and borrowing.

**Multiplication table** begun to be built up by pupils from their knowledge of addition; drill on *two times, five times, and ten times*; other tables, as time may permit. Terms *half* and *quarter* used of material things; the square inch and the square foot.

**Mental work**, the nine addition groups continued with rapid addition of columns based on them. Easy problems on cost of a dozen articles at two cents, four pounds at five cents, three quarts at ten cents, etc.

### Grade III.

**Reading and writing** of numbers to 100,000.

**Adding and subtracting**, with borrowing and carrying.

**Multiplication-table** complete.

**Short division**, for finding half, quarter, and eighth of numbers less than 100. Drill on making change from \$1.00. Statement of process in solving concrete problems. Drill in factors of numbers less than 100.

### Grade IV.

**Long division:** Long division with divisors of two digits. Multiplication by factors; shortened multiplication by 25, 125, 11; division by factors.

Oral multiplication, addition, and subtraction of halves, quarters, eighths and sixteenths, illustrated in the foot-rule; oral reduction of mixed numbers and improper fractions taken from the foot-rule. The same relations may be illustrated by means of circular discs of cardboard divided into halves, quarters, eighths, etc.

Long Measure, omitting *rod* and *furlong*; and Avoirdupois Measure, omitting the *quarter*, practise in use of, as well as practise in judging lengths and weights.

### GRADE V.

**Tests for divisibility**, by 2, 5, 3, 9, 11, 4. Cancellation. Multiple and Common Multiple, dealing with small numbers only.

Fractions taught: reading and writing of fractions; the terms *numerator* and *denominator*; *improper fraction*, etc. In addition and subtraction of fractions, denominator not to exceed 100. Changing easy vulgar fractions to decimal form, and then adding them or subtracting them; multiplication and division of easy decimals not less than one tenth; drill in reading and writing decimals to one hundredth.

Use of decimals as involved in practical abstract problems with Canadian money.

### Grade VI.

**Easy complex fractions**, and the solution of practical problems involving their use.

**Decimal fractions**: Processes and applications extended. Aliquot parts of 100. *Per cent.* as the business man's decimal fraction; drill on the percentages corresponding to one half, one quarter, one third, three quarters, etc.

**Long Measure completed**, omitting use of furlong; practise in estimating the units *inch*, *foot*, *yard*; also 10 feet, 100 yds., 220 yds., 440 yds, half mile.

**Avoirdupois Measure completed**, omitting the *quarter*; practise in estimating weights up to ten pounds; practise with home-made balances and weights.

**Surface Measure**: Easy problems in shingling, painting, papering, plastering, carpeting; approximating cost of such operations; exact cost. Board-measure.

**Cubic contents**, of rectangular solids, masonry-work, etc., where dimensions are given in only one denomination (i. e. in either inches, or feet, or yards).

**Reduction**, involving only three terms; thus, yards to feet and inches, miles to yards and feet, and *vice versa*, but not miles, rods and yards to feet and inches, or miles to rods, yards, inches.

Changing Canadian money into £ s. d., and *vice versa*.

### Grade VII.

**Compound addition and subtraction**, with not more than three terms in any problem.

**More practise on the Weights and Measures**: Measuring dimensioned lumber. Various problems involving percentage.

**Simple Interest**, the process of finding this developed by the pupils. Ready reckoning of simple interest by the sixty-day method. The promissory note; its conditions of payment.

**Discount** allowed for cash payment—compute this. Discount allowed for present payment by holder of promissory note,—compute. (No allusion to True Discount permitted).

**Taxes** on Real Estate (explain), on Personal Property (explain), on Income (explain),—how computed. Assessment, assessor, exemptions—explain.

**Area** of parallelogram, of triangle, of circle, of trapezoid; of surfaces of cylinder and cone; practical problems involving these.

**Problems**, in computing customs duty.

### Grade VIII.

**Volume** of any right solid, of cylinder, of cone, Area of irregular quadrilateral obtained by plotting same, (see Mathematical Drawing textbook). Simple problems in specific gravity of lead, of iron, of wood. Metric weights and measures (made by teacher) shown; rulers provided with linear divisions; the English equivalents given approximately.

**Application of percentage** to fire insurance, etc., commission and brokerage.

**Mortgages and debentures explained**; stocks; ordinary practical problems in these.

**Paper money**,—what gives it value? How it differs from ordinary promissory note. How to remit money; how to make a draft.

**The Day Book,** Cash Book, Ledger,—how kept. Capital, Shares or Stock, Dividend, Bonds or Debentures, Preferred and Common Stocks, Watering of Stock,—explain.

† **The use of x** to solve easy arithmetical problems as equations, and the evaluation of ordinary mathematical formulae involving literal quantities.

## GEOGRAPHY.

### General Prescriptions.

**Teacher's Handbooks:** For first year grades, "Lessons in Home Geography," by H. Fairbanks, published by Educational Publishing Co., Boston (price 50 cents); for Grades V and VI, "Our Home and its Surroundings," published by Morang & Co., Toronto; for Grades VII and VIII, handbook on commercial geography, Mill's "Elementary Commercial Geography," published by Cambridge University Press, (price, one shilling); Sir A. Geike's, "The Teaching of Geography", Macmillan Co., (price 60 cents).

In the first three grades the term geography need not be employed. During that time, however, the teacher should endeavor to bring the pupil into sensible contact with the most conspicuous phenomena of earth, sky, sea, plants, animals, and mankind, detailed treatment of many of which phenomena is indicated in the Nature-Study course. The sense experiences obtained by the child in these contacts with nature; the elementary conceptions of position, form, size; of physical forces and changes; of man as an industrial and social factor; of soil and of the products of nature and of cultivation; of color, landscape, clouds, hill, pond, brook, slope, forest, marsh, constitute a medium of interpretation of what he later will read in text-book and elsewhere. They form the apperceiving massés into which new experiences and new facts obtained from reading will seek to incorporate themselves.

In other words, during the first three years, the teacher's task is to provide materials for observation and experiences for the child's mind to work upon. No special effort need be made to relate these experiences to one another. It is enough that the child's sense-organs be kept active upon the simplest earth phenomena, and that from time to time his power of recalling things seen and heard be exercised. This first step in this latter exercise is made by the teacher's recalling nature-experiences that have been shared by the pupils as well as by her. The pupils may then be induced to join in the description, the net result of which will be the sharpening of the mental image which otherwise might have remained obscure or become obliterated.

This power of re-presenting mental images is a mental function of the highest importance. It is one of the forms of memory and is the basis of imagination. Without it neither geography nor history has mental content—they degenerate into a memorizing of mere words.

In the fourth year, some attempt may be made to relate earth-phenomena; and here, accordingly, the study of geography proper



begins. Not that a text-book is to be used by the pupil. That is neither necessary nor desirable. What is intended is that merely the particular hills, brooks, slopes, riverbeds, etc., should come to be thought of, first, as typical of hills, brooks, etc., in general, and, secondly, as related in position, direction, size, and causal function. The relation between brook and brooklet or ditch is to be thought of as typical of rivers and their tributaries. So of lakes and swamps and basins; of snow, rain, the clouds that discharge them; the slopes that shed them, the ditches and brooks that receive them.

The study of causal relations ought not to be carried too far, especially in the realm of natural phenomena. Much more interesting to the child, and, consequently, more educative, is the observation of human activities in relation to the earth and sea and their products. Home geography, indeed, may well begin with a view of the industries of the neighborhood. Everywhere in Nova Scotia either farming or gardening is practised. In it the teacher has available a type of human activity occasioned by the needs of mankind. Other industries are practised in the district, all of them directed to the end of supplying man's wants. Mankind must work, or perish. All men and women do not pursue the same calling. Diversity of industry necessitates exchange of products—trade or commerce. A detailed survey of the industrial activities of even the humblest school-section will provide material for many thought-provoking lessons of surpassing interest to children—lessons to which each child can contribute. No little measure of the value will accrue, in fact, from this very participation of the child in the radiant, unrestrained conversation upon the farming, dairying, gardening, orcharding, cider and vinegar-making, canning, preserving, fishing, curing, boat-building, mining, quarrying, lumbering, sawing, wood-working, tanning, shoe-making. Then there are the transportation facilities by road, river, sail, sea; the means of communication by post, telegraph, telephone; the churches, schools, societies, the country-town or nearest market-town and its relation to the surrounding country.

The mention of towns, etc., that lie immediately beyond the horizon suggests still another topic of the fourth year—the outer world and our relations to it, in trade, race, language, religion, custom. The importance of such a method of approach as that indicated in the work of the first three grades will now be manifest. We have arrived at a point where we must deal with places, people, and processes that lie for the most part beyond the vision and the actual experience of the child. Facts are to be presented—facts relating to material things; not merely statements of fact, but images. And how?

The presentation of distant places, people, institutions, industries, calls for mental pictures composed of simple elements—just such elements as those treated in the preceding grades. Thru contact and experience and thru the exercise of imagination and recall, the child has already obtained a body of geographical notions capable of combining to produce fairly definite and complete mental pictures of other places not unlike ours and even of far distant lands and peoples. To illustrate, the study of British Columbia calls for the visualizing

of a large and varied panorama of lofty mountains, deep valleys, swift-flowing rivers; of forested slopes, and foot-hills overtopped by bare, rocky summits; of lumber and mining camps; of lakes, of valley and upland farms, ranches, orchards; of widely scattered towns and villages; of sea coast, bays, harbors, promontories and islands; of industries and activities similar to those of our own province; of people of our own race, language, customs and sentiments. Each view of this varied scene is capable of being constructed by the child out of fundamental ideas obtained either at first-hand, or thru pictures, or thru the medium of both when illumined by the imagination of the teacher.

No amount of text-book reading can be depended upon to effect this result. Reliance upon that agency is disappointing. From the book a child will easily enough learn to say, for example, that lumbering is one of the chief industries of a certain country, without his ever once considering what is implied by that statement. Probably he has seen logs floated down stream to the mill, or has witnessed some other part of the operation of lumbering. But that does not ensure his associating what he has seen with what is implied in the brief text-book statement. It is necessary that the teacher shall have bidden him inquire into the inception, the purpose, and the outcome of what he has seen, and in this way to put him in possession of the fundamental notions out of which to mentally picture the industry of lumbering and the people who practise it whether in Norway, Austria, or Quebec.

The discarded method of first teaching definitions of lake, river, island, and then proceeding to the committing of text-book statements bears no fruit in the power of mental imaging or in genuine interest of an intelligent kind. Permitting the child to recite what he reads without giving mental content to it is to establish mental habits as fatal to intellectual growth as to true knowledge-getting. It is the office of good teaching to practise the child in associating word-symbols with the things signified; accordingly, it is imperative that the child should bring to the consideration of the text-book and of distant lands and peoples a mind stored with clear and definite geographical ideas developed, as far as possible, thru actual contact with the phenomena of earth and man manifested in his own environment.

In the geography of the upper four grades the general method will remain the same. Innumerable are the teaching-devices to be resorted to; but, as the aim remains the same as in grade four,—that of extending the pupils' knowledge of the earth and of man's relations to it as an industrial and social factor,—it is only in details that the teacher can vary the procedure.

One more topic should be introduced in the fourth grade, or even earlier, viz., the map. Here, as elsewhere, the teacher must proceed thru the avenues of the child's experiences and evolve the idea of the map as a pictorial representation of the ground upon which we stand. The floor of the schoolroom affords a first problem in map-making; then the location, upon this plan, of the platform, the teacher's desk,

and the front seats. Drawing to scale ought not to be required at first, as this tends to complicate the problem. Next, the school grounds, the trees, fences, paths, gates, may form material for a new and larger map. Later, the public highway with its branchings, houses, buildings. The brook, the pond, the groves or forest, will find place in subsequent maps. So long as proportionate areas and distances are fairly well represented, there need be no worry about drawing to scale. Direction, in terms of the compass, is pertinent here. The first maps may be drawn with chalk upon the floor. They may be modeled in sand in a shallow box, buildings being represented by blocks, trees by tiny bits of evergreen, the brook or pond by a bit of mirror glass, the railroad by two wires—the result being an approach to reality which appeals to the child's interest.

From this point to the regular wall-map is an easy step; and the map of Nova Scotia may be presented in its simpler implications of land, water, coastline, distances, directions, localities, towns, industries, before the end of the fourth year. No point is gained by proceeding from the map of the school district to the map of the county. The county is a political, not a geographical unit, and consequently means nothing to the child. One might safely, on the other hand, proceed at once to the globe and the hemispheres, coming back later to the Province. Of course, the earliest study of the globe is to be, not the political divisions, but the larger earth-forms, land and water, continent, ocean; islands, seas, gulfs, and a few great countries and cities.

The introduction of the text-book in the sixth grade necessitates care on the part of the teacher to prevent geography from becoming a merely literary study. The text should be relied on chiefly to provide statements of fact for interpretation by the pupil under the stimulus of the question, suggestion, or interpretation of the teacher, special effort being made to set forth the facts in their causal or other relations to one another or to facts coming within the experience of the pupil. The text-book may, for example, state in disconnected fashion the facts of the size, surface, soil, climate, mountains, cities, and products of Russia, without at all indicating the necessary connection between any or all of these. What is aimed at in good teaching is to develop out of these statements and from map-study a picture of Russia as a large country of plains, forests, slow-flowing rivers, farms, grain-fields, villages and towns; of a climate and of seasons much like those of the same latitudes in America, and, therefore, with much the same vegetation and the same agricultural operations and industries; as villages and towns serving as markets and distributing-centers, as manufacturing centers and as seats of government; with rivers and lakes frozen in winter and closed to navigation, as with us; with a northern seaboard shut in by ice in winter like our own Northumberland Strait; with a population engaged chiefly in tilling the soil, raising cattle and horses, dairying, lumbering, and mining; with a Christian population devoted to family, country and other ideals like our own.

This elaborate mental picture is derivable from the map and from the disconnected facts of the text; and it serves as a type of the men-

tal imagery to be sought by the teacher in studying a country. Current events as recorded in the newspaper should always be utilized, and given their proper setting in place, politics, social or industrial conditions. Minor problems will continually present themselves, such as, for instance, the advantages of a certain location for a town, or the explanation of the rapid growth of a community, either of which problems is best understood when paralleled by the study of similar problems in Nova Scotia. Thus, Halifax, Sydney, Amherst, Springhill, Glace Bay and Yarmouth are illustrative of the conditions presented in the general problems of location and rapid growth.

Then there are the numerous physiographic problems of erosion, alluvial deposits, tidal phenomena, which, out of place in the lower grades except in their most obvious aspects, are capable of being understood as they concern distant countries once they are revealed as the counterpart to natural forces near home. These must not be overlooked. Again, there are the simple astronomical phenomena. Further, there are the events of Canadian and British history, whose geographical setting may at times properly absorb the periods set apart for geographical study.

In the seventh and eighth grades, since the pupils bring to bear a developed moral-religious sense and an increasing knowledge of history, of natural phenomena, of physical forces, of trade, of society and government, of the races of mankind, of the world's events, it is fitting that the interpretation of home and foreign lands, of distant peoples, should be conducted with a view to developing in the pupils a human interest in the people of strange lands and in alien races. The effort to appreciate what is worthy in men of other race and language and to promote a human sympathy between our people and those of other lands can hardly fail to bear fruit in temperance and tolerance at home, in a more intelligent Canadian patriotism, and in a saner and safer Imperialism. The annual recurrence of the festivals of July the First, Empire and Victoria Days, will afford in every grade occasion for Empire lessons, geographical and historical, appropriate to the age and intelligence of the pupils.

(Note on School Excursions. Plan beforehand, and inform the children what you want them particularly to make observations upon. Don't overlook the fact that winter has much to teach us, and that the same place may well be visited in each season. While on the excursion, halt the class now and then and have them consider, in class-room fashion, anything worthy of observation or discussion. On the return to school, or on the following day, review the event and the things seen and discussed. In a miscellaneous school, the teacher might utilize as assistants in conducting the younger children, older pupils or outsiders.)

## GEOGRAPHY.

### Special Prescriptions.

#### Grades I, II, III.

Talks with pupils about the seasons as they pass, with no attempt to explain them; the older people's occupations appropriate to each; the summer and winter pastimes and home-duties of the children; the low winter sun observed at noon, the early lamplight; the high June sun at noon, and the long day; the trees, their changes; the weather day by day; color changes in forest, field, meadow, and sky, as days and seasons pass; changed condition of ground, brook, pond, plants; our summer and winter foods; housing and feeding of farm animals, and storing of winter supplies for man and animal; the arrival and the departure of birds; preparations for winter made by squirrels, bees, bears, and by caterpillars and other insects.

The country store or the town shops. The things the farmer, the fisherman, the artizan must buy. The things he sells.

The mill, the quarry, the mine, the coke-oven, the factory, the blacksmith's shop, the fishing-boat and the catching and curing of fish, the shoemaker, the tanner, the post-office, the church, the school,—all and each will afford material for observation and explanation, the pupil taking the initiative in the conversation. The aim is to provide contacts and sense-experiences, to quicken a habit of inquiry, and to develop language.

Visits should be made after school or at other times to some convenient hilltop, to the brook, brooklets, ditches, to a valley, a forest, river, harbor, beach, or whichever of these may be accessible, especial attention being paid to these as serviceable to man.

#### Grade IV.

Home-geography, beginning preferably with a view of the industries of the neighborhood, the means of transportation, the institutions, elementary ideas of government, of trade and commerce, of postal and telegraph services. (In towns, the streets, sewers, water-supply, light, etc.)

Earth forms as related to one another; hill and valley; pond, lake, swamp, brook, and the surface contour determining each; soil and its formation by various agencies; the action of running water, of frost, of melting snow; mountain and valley; slope and watershed; (in maritime districts, coast, beach, bay, harbor, cape).

Man's direction of natural forces; draining swamps, clearing and tilling land, building bridges, breakwaters, mill-dams for water power; navigating lakes, rivers, seas, by wind, steam and other agencies, guided by light-houses, signals, weather-predictions, etc.

In all of the foregoing the aim is to quicken the pupil's power of observation and to deepen his insight.

Sketch-plans of school-room and grounds; plan or map of district showing roads and buildings, brook, pond, forest, etc. The sand-map as counterpart of the plan drawn on paper or blackboard.

The world that lies beyond our horizon: Nova Scotia: ideas of distance expressed in travel-periods by rail, on foot, etc. Map of Nova Scotia explained as the continuation of the plan of the district already made. Ideas of direction derived from the sun's position; the four points of the compass and their application to the map hung on the north wall or laid on the floor with the top to the north. Surface forms not found in the neighborhood comprehended thru the medium of miniature forms in nature and on the sand-map. The surface and coastal features of Nova Scotia, its chief towns and the means of access to them, its rivers, mountains, means of communication and transportation. (County lines and names mean little to children and may be omitted. The province, on the contrary, as a geographical unit will easily be apprehended.)

The world as a whole, from globe and hemispheres, merely to permit the general conception of its form, its great land and water surfaces and our position thereon.

### Grade V.

North America as a land form on the earth's surface. Its larger features, political, natural, climatic; its countries, cities, bays, gulfs, rivers, mountains, islands.

The Dominion of Canada in slight-detail; its greatest river, mountain range, islands; its provinces, chief cities, chief routes of travel and trade, distances measured in days' journeys, products of soil, forest, sea, mine.

Nova Scotia in considerable detail, not only its natural features but these in relation to its industries, its population, the location of its chief towns and to a few leading events in its history. Drawing of local maps, maps of Nova Scotia and Canada.

Day and night a turning of the globe or earth towards the never-moving sun: warmth and coldness as determined by sun and winds; the overhead sun and its long day-journey in summer, the low noon-sun in winter and the short day, as affecting climate and vegetation. The polar and the equatorial regions contrasted, with their low and high suns, and their differences of climate and products.

The equator on map and globe; parallels north and south

**Grade VI.**

The continents, oceans; European countries and their capitals, their great rivers, mountains, seas, gulfs, the chief countries of the British Empire. The peopling of Canada from various countries. Approximate latitudes of various countries, with inferences as to their climate and vegetable and animal products.

Canada, completed, with the aid of the text-book, the purpose having been to conceive of our country not as a place on a map divided into colored portions called provinces, but as a continuation of the school district in which the child lives. Its extent as conceived in terms of miles, of days' journeys, and of greater units of distance; its fairly uniform climate and products thruout the economically important area. The northern and unsettled regions. The coastal, mountain, and valley districts of British Columbia; their people, villages, towns, industries; the rapidly peopling provinces of the Middle West, their inducements to settlers; the immense prairie, its fertility, its loneliness and its monotony; the advantages of life in our Provinces with their varied scenery, milder seasons, invigorating sea-air, productive soil, abundance of fuel, fish and fruits, variety of occupation and of outdoor pastimes. The Saint Lawrence provinces and their place in the agricultural, lumbering and mining activities of Canada; their great size and population; their chief cities as manufacturing and distributing centres. The Atlantic Provinces similarly studied.

The great rivers and lakes of Canada as avenues of communication,—the canals fed by them; the great railroads built and building; the postal, telegraph and telephone services; the location of towns as determined by trade advantages; the various means of transportation and travel.

The nature of trade, foreign and domestic; our imports and exports; items of food, clothing, house-furnishings, where they come from; the several shops and where their several articles of merchandize come from.

The people of Canada, the races represented, the languages spoken; the religions, the great moral and philanthropic agencies and activities. The duties of a citizen; civic, social, moral and religious.

Map-drawing, not so much as a drawing lesson, as to clarify and fix ideas of area, distance, latitude, and means of communication. Longitude, meridians and parallels. The seasons and unequal day and night presented in an elementary fashion thru medium of globe and diagram.

Map-interpretation: the map as showing elevation of land, coast line, courses of rivers, and consequently the slopes and drainage basins of a country; as showing elevation, latitude, maritime or inland position and therefore permitting inferences as to temperature, rainfall,

prevailing winds, approximate length of day in summer and winter, vegetable and animal products; as showing location of towns and cities and therefore the general distribution of population and the trade routes.

### Grade VII.

Whatever physical features the particular district presents, to be studied by direct observation. For example, the natural and artificial drainage. The brook may be mapped in detail, not only its course, tributaries, levels, widths and depths, but the plants and trees along its margin, its aquatic plants and animal life. Then there are to be noticed the wearing-down and building-up processes carried on by it; the movement of stones by ice; the effects of rain and melting snows; its source and tributaries and the springs that feed it. So, in maritime districts, the effects of wind, frost, waves, and tides upon the edge of the land.

The map of Europe studied for great drainage slopes, highlands, lowlands, great plains, coastal indentations, natural highways of commerce like the Mediterranean, the Rhine, the Danube, the Elbe; great ocean ports and ocean routes; the chief commodities for export and import and their destination, especially those sent to our country; imports, and especially those from Canada; names of countries and their position on the map; great cities; languages and races, especially those that have been prominent in civilization, colonization and commerce; latitude, longitude and elevation as determining climate and vegetable products; the chief colonies of Britain and France; the religions of Europe; Europe as the chief seat of Christian culture.

The British Isles in some detail, attention centering chiefly on area, latitude, climate, surface, soil, natural products; the dense population; the great manufacturing centres, ocean-ports, river-ports; universities and schools; colonial enterprise, and nature of colonial and foreign trade. The English-speaking peoples of the world, their similar ideals of religious tolerance, self-government, personal liberty, civic duty, family relations, frankness, courage, individual resourcefulness.

France, studied as the land of origin of many of our Canadian people; its latitude, climate, products, great cities, its trade with Canada and with Britain.

### Grade VIII.

The seasons, long days and short nights, etc., observed and recorded. The direction and length of shadow of an upright stick at noon, [recorded at least monthly thruout the year. Latitude of place as determined by the sun's height or the length of stick's shadow at noon. Our longitude as shown by the difference in time between a watch keeping London time and the school clock.



Ocean currents, trade winds, periodical winds, rain and rainless winds, rainless regions, effects of mountains, forests, plains, lakes, seas, on moisture precipitation and climate generally.

The United States, studied in the same manner as in the prescription for the British Isles, in grade VII, with names and chief cities of the most important states.

Mexico, the West Indies, South America, studied first from the map, as Canada was studied in grade VI, with special attention to Brazil, Argentina, Peru, Chili.

Asia, especially Palestine, Japan, China, India.

Africa, especially the South African Republic, Egypt, Morocco.

Australasia, and the various island colonies and minor possessions of Britain.

Commercial geography: great trade routes, by rail, steamer, caravan; the world's great shipping ports, London, Antwerp, Liverpool, New York, Hong Kong, Hamburg, Montevideo, Marseilles, Singapore, Cardiff, Kobe, Genoa, Buenos Ayres, Rio Janeiro; their position relative to great ocean routes.

Classification of commodities as vegetable products, comprizing products of the forest, such as timbers of various kinds, rubber, cork, bamboo, turpentine; products of the farm, as wheat, rice, roots, fruits, sugar; products of wild and cultivated shrubs, as tea, coffee, indigo, spices; textile materials, as cotton, flax, hemp, jute, wood-pulp; products of animals, as meats, wool, hair, hides, fats, horn, ivory, furs, feathers, eggs, dairy produce; fish products, comprizing food fish, oils, fertilizers; products of insects, comprizing cochineal, lac, silk, honey, wax. Most of these the teacher will be able to trace to their sources in various parts of the world.

Facilities and restrictions to trade: *e. g.*, commercial treaties, customs duties, excise, paper money, coinage, posts, telegraphs, and means of transport.

Government, as despotic, democratic, or as partaking of each; the nature of representative government; its universality among highly civilized peoples.

## HISTORY.

### General Prescriptions.

As a formal study history need not begin earlier than the fifth or sixth grade. Previously to that, the mind of the pupil shall have been prepared for the study of the text by the informal history readings; the stories and biographies of great men of succeeding ages; the important historical associations of places that come under review in the geography, the reader, the newspaper; the geographical refer-

ences to lands, historic peoples, nations; the facts of the settlement and development of the neighborhood in which the school is situated.

Pains must be taken to develop in the pupil the perception of time, remote and recent. Mere notation of years by arithmetical numbers is not adequate. The century, to be perceived, must be measured by life-times, or by comparison with recent lapses of time, just as the mile is to be measured in number of times across the playground. The meaning of *anno domini*, of the terms ancient and modern, and the grouping of all history around the pivotal Year of our Lord, will be a subsequent development of the chronological process which is gradually to entold all events, peoples, and personages. This development will come about not as the result of direct efforts at parroting and memorizing dates so much as by incidental reference to the chronological setting of persons and episodes and peoples mentioned in the stories read by pupils or to pupils. The blackboard is useful here for fixing the time-impression visually, just as it is useful at many points in history teaching if the teacher but possesses the pictorial art, or is skilful in graphic representation.

The mainspring of juvenile interest however, is not the curiosity to know *when* so much as to know *what* happened and how it affected the fortunes or feelings of those concerned. The fairy tale, the myth, and the stories from the reader, have cultivated in the child a fondness for dramatic conclusions wherein the bold, the brave, the generous, the timid, the cowardly, and the mean, meet their appropriate rewards. The hearing, the reading, the contemplation of actions that possess dramatic quality may be counted upon to react emotionally upon the pupil and thus to furnish him a motive for expressing himself. To repeat or retell what he has heard or read will be a delight to him.

Clearly, therefore, if all history could be transformed into romance, the acquisition and retention of historical fact would present no difficulties. Such consummation can hardly be hoped for. Nevertheless, there is a pedagogic suggestion involved in the mere desire to make history romantic or at least dramatic. For, it is manifestly important in all historic narratives to keep prominent the human and personal element. Events do not merely *happen*, they are brought to pass through human agency, and generally at the instigation or domination of one person. His personality and doings thus form the centralizing topic around which may be organized a considerable body of historical fact. The mental challenge from the teacher as to Why he did this? or What was thus brought to pass? or What results followed? provided still other motives for rearranging the facts traversed and for examining them from different angles, the re-reading and review thus incited being made to serve the purpose of fixing in the memory of the pupils cardinal facts and historic waymarks. No amount of aimless wandering over dates and events, or of mindless review from cover to cover of the book will accomplish the end of memorizing; and, even if it did, it would still leave the facts without perspective, relation, or proportion.

In the seventh and eighth grades, beyond which the majority of children are not destined to go, something in the way of interpretation of historic values should be attempted by the teacher. History, which has been to the pupil only a pleasing pastime, appealing chiefly to his fondness for tales of adventure, heroism, endurance, loyalty, should be thought of also as a record of man's long contest with his own ignorance, prejudices, and intolerance. From another point of view, it is a story of his gradual mastery of the secrets of nature and of the control of natural forces. From still another, it is an account of a long and varied struggle for personal liberty, for the rights of the individual, and for popular government. Here and there, too, thru the fabric of history runs the golden thread of spiritual and artistic achievement, in religious endeavor, literature, music, poetry, painting, etc.

Finally, there is the pertinent consideration of the present doings of people at home and abroad as a page of history wherein the future reader will look to find how well or how ill we have used our privileges and contributed to better government, to increased industry and contentment, to the comforts and refinements of the home, to education, to the general diffusion of intelligence and good will, to the dispelling of prejudices of race and creed.

These considerations are basal in the history of our own race and nation. They thrust themselves upon us in each epoch and dynasty, at every turn of affairs, and wherever a great personage appears. They are a unifying element of several branches of study (history, civics, literature, music) which, left unrelated, reappear subsequently in memory only as phantoms of knowledge, of no validity or service. Too much must not be expected of the child in the way of interpreting these relations. It is unnecessary and undesirable for the teacher to work them out at length: nothing could be more fatiguing or more disappointing in its results. Occasional and opportune suggestion and reference must suffice. Perhaps, indeed, the philosophic element in history will be found to have sufficiently served its purpose when it is thought of by the teacher only as the quickening principle in her own study of the school history, working there as a leaven in an otherwise inert mass of fact.

Under the head of general method some illustration has been given of the organizing of fact around topics, persons, etc. This process is easier of application in the review lesson. In the daily lesson, what is of particular importance is for the teacher to prepare her pupils for the study of the new assignment. Some paragraphs of the new lesson are of little importance; some, vital. Left to himself, the pupil is likely to expend equal effort upon all. Rather than permit this, the teacher should tell him outright what are the important paragraphs, facts, etc., explaining their relation with what has gone before. Better than that would be for the teacher to have the class briefly consider with her the topics of the new lesson, calling upon them for exercise of their own judgment as to what are important and what less so.

The use of the school library for parallel readings, reference, or even for pictures, should be encouraged, a premium being put upon pertinent information obtained by the pupil on his own initiative.

Closely interwoven with history are matters of legislation, government, tariff, taxes; of the administration of public services; of civil privilege; of the constituent elements of our society; of organized social and moral reform; of benevolent societies, societies for self-improvement; of missionary and philanthropic endeavors, — some conception of all of which pupils of the higher grades are capable of forming. Absolute accuracy and fulness of detail are not essential. It may be omitted to learn the number of members, senators, or legislative councillors for Nova Scotia, so long as the principle of popular government thru elected or appointed representatives is understood in its bearing upon these functionaries. The meaning of law as custom and of law as the deliberate creation of our parliament, is more important than are details of finance, maintenance of the courts of law, method of appointment of the justices, or the salary of the policeman. The tariff, its purposes, general workings, and effects upon industry, are important, but not the rates of duty on nutmegs and cinnamon.

Civic studies, steadily enlarging in scope, should, like geography and nature studies, begin with and grow out of a first hand observation of our surroundings. The tiniest school is a civic organization. In the remotest section of the province one is amenable to law, obligated to pay taxes, endowed with individual and legal rights and rights of citizenship, and bound by individual, social, and civic obligation.

In close association with the study of civic and social institutions of the neighborhood is the inquiry into its early settlement. The teacher would do well to leave behind for the benefit of her successor a written summary of information she has been able to glean from old residents, from county histories, or from any other source, bearing on the early history of the district. Succeeding teachers might add to the record, until a fairly complete local history should thus come into being. How the early settlers lived; the condition of the country as they found it; what means of intercourse, of transportation; their pursuits; how they obtained the necessaries of life, — these are capital topics to stir the imagination of children as early as grades IV and V.

In most of the counties of Nova Scotia the history of the county is not a comprehensible unit, and the class may accordingly pass from the home district to places of historic importance and interest within the province, irrespective of county lines. The consideration of county is of interest solely in connection with civics. The county being a political and generally an electoral division, it compels attention as such, municipal government being an important part of our civil organization.

From Nova Scotia one may safely pass to our sister provinces and to Newfoundland, taking note also that the colonies of New

England were once sister provinces to Nova Scotia under the sovereignty of Britain. At this stage, such topics and characters of common history as are chosen ought to be taken up in chronological order—practically, the order of the text. In grade VI it is worth while to make an effort to link the history of our race with that of Rome, of Greece and then thru to the history of Europe and of Biblical times.

**Handbooks for Teachers:** in Canadian history, "Canadian History Readings," published by St. John Educational Review, St. John; "Romance of Canadian History," published by Morang & Co.

In English history, for reading to pupils: "Highroads of History, Book I, 25 cents; Book II, 30 cents (published by T. Nelson & Sons).

For the teacher's own instruction, Wrong's History of England (Morang & Co.).

## HISTORY.

### Special Prescriptions.

#### Grade IV. (Oral Teaching only).

Story of Columbus, of Cabot, told before the map. Pictures, descriptions, episodes, of the early settlement of Canada and Acadia. Imaginary picture of your own neighborhood before men came; of how the Indians lived; of how the white men built their first houses, cleared the forest, cultivated the land, worshipped, spent the long winter evenings, obtained food and clothing. How the first French settlers came to Nova Scotia; where they chiefly settled. How long ago—in years, in lifetimes, in centuries? How long after Our Saviour's time? How many centuries? Our King and Queen.

#### Grade V. (Oral Teaching only).

Story of DeMonts; of Champlain; of the early missionaries, Marquette and Joliet, told before the map. Story of the Pilgrim Fathers; of John Smith and Pocahontas; of Madame LaTour. Pictures and blackboard sketches. Map of Acadia showing French settlements chiefly around Annapolis, Grand Pre, Louisburg, Amherst, Windsor, and Truro. Capture of Port Royal in 1710; founding of Halifax in 1749; capture of Louisburg in 1758; Acadia now wholly an English province. The unhappy fate of the French expelled from Nova Scotia in 1755. The American Colonies and their revolt from Britain, 1775-1783; the coming of the Loyalists to western Nova Scotia. Empire Day and Dominion Day.

#### Grade VI. (Oral Teaching only).

Story, from map, of the French colonies on the St. Lawrence; of Frontenac; of Dollard; of Bishop Laval; of Wolfe and Montcalm.

Acadia, as in grade V, reviewed, before the map. The coming of the English to Halifax, in 1749; of the Germans to Lunenburg; of the Scottish people to Pictou; of the loyalists to Shelburne, Yarmouth, Digby, Kings and Hants counties; of the Scotsmen from Western Scotland to Cape Breton. Our Dominion Day, Empire Day, and Victoria Day.

**England's story;** of the Roman conqueror, Julius Caesar; of the Britons, and their ways of living and fighting; of the Roman withdrawal from Britain; of the Saxons; of the coming of Christianity to Saxon Britain; of the Norsemen; of Ethelred and Alfred; of William the Norman and the way he fought at Hastings; of the Norman Barons and their castles and great estates; of the wicked King John and Magna Charta; of the conquests of Wales and of Ireland; of Edward II and Bruce at Bannockburn ("Scots wha hae—"); of Edward III and the burghers of Calais; of Crecy and the Black Prince; of Elizabeth and the Spanish Armada; of the first Parliament and the desire of the people to make their own laws; of the obstinacy of James I and Charles I; of the execution of Charles I and the government of England by one of her plain people, Oliver Cromwell.

**Bible-lands:** Their position on the map, and the order of their antiquity; Egypt, Babylon, Greece, Rome; of Rome's conquest of Britain about the time Our Saviour lived in Palestine; of the coming of Christianity to Celtic Britain not long after.

**Rudimentary notions of government:** Everyone must obey authority and must respect the property and rights of his fellows.

**Taxes:** People must give part of their money to keep up schools, and roads, to care for the poor, and to educate the deaf, and the blind.

### Grade VII. (Textbook in pupil's hands.)

**England, from Cromwell to George III.** The pupil should learn the names of the sovereigns from Henry VII to George V, and should be made intelligently familiar with the following terms, persons, and events: The Petition of Right, John Hampden and ship money, the Civil War and its causes, Cavaliers and Roundheads, The Commonwealth, The Lord Protector, John Milton, John Bunyan, Sir Christopher Wren, *The Restoration*, The Act of Uniformity, *The Habeas Corpus Act*, The Test Act, The Declaration of Indulgence, The Toleration Act, Marlborough and Blenheim, Battle of the Boyne, *Utrecht*, Bill of Rights, *Battle of Plassey*, *Plains of Abraham*, *The Seven Years War*, *The American Declaration of Independence*, George Washington, Yorktown. Each of these names and events the pupil should be able to assign to its proper reign, and the dates of the events *italicized* should be learned as way-marks of history. Of each event the pupil should be able to give a brief explanation in his own words, orally, and in writing.

**Canada, from 1713 to 1867.** Instruction and home-study should center around the persons and episodes selected for oral instruction in Grades V and VI. The war of 1812-15 will form an added topic for study (not too detailed) before the map; likewise, the struggle of our people, led by Howe, for complete self-government (no historical details permitted).

Free schools and the statesmen to whom we owe them.

Confederation of the Provinces, and the statesmen who brought it about.

The nature of government by representation illustrated in the school-trustees, the church-managers, etc. Representative government in the municipal council, in the provincial legislature, in the federal parliament,—how provided for? Occasional stories read or told from early Canadian history and from early British, Roman, or Greek history.

### Grade VIII.

(Textbook in pupil's hands. The map must be constantly before the pupils, for consultation).

**Canada, from 1867;** especially, the nature and extent of the Confederation of 1867; the statesmen who brought it about; how it affected each province in revenue, in the control of mails, militia, wharves and lighthouses. Rights, revenues, and duties which each province retained (e. g., crown lands, minerals, highways and bridges, education).

The Hudson Bay purchase, the subsequent erection of new provinces, and the enlargement of Quebec, British Columbia and Ontario; Riel's rebellion. The admission of Prince Edward Island and of British Columbia. The development of means of transportation and communication thruout the Canadian Provinces; especially, the transcontinental railways and the railways of Nova Scotia; the trans-Atlantic and trans-Pacific lines of steamers. The protective tariff or National Policy and its effect on the manufacturing industry,—give illustrations. The preferential tariff with Britain. Canada's part in the South African War. Canada's army and navy; her militia, cadet corps, boy scouts. The Reciprocity proposals of 1911 and their defeat.

The two great political parties. Nova Scotia's representation in the federal parliament of Canada. Our Courts of law derive their authority from Parliament of Canada. Canada's great growth in trade, in immigration, in aggregate wealth.

Nova Scotia's growth not rapid. The revival of agriculture in Nova Scotia; prosperity of Nova Scotia dependent upon the training of her people to work the soil, the mines, the forests, and the fish-

ery intelligently, to cultivate industrious and economical habits and a spirit of co-operation in industrial enterprises.

The recent development of school education to comprize training of the body (hygiene, physical training); of the hand (manual training, sewing, drawing, etc.); of the habits, morals, manners (temperance, patriotism, honesty, self-respect, civic duty, courtesy).

Societies to promote virtuous objects; kindness to children, to animals; temperance; the interests of the working classes; the spread of Christianity. Provincial institutions for the blind, the deaf, the sick, supported from the provincial revenues; local hospitals, etc.

**England, from George III to the present time:** Napoleon's overthrow accomplished chiefly by England's ships and armies. Trafalgar (1805) and Waterloo (1815); Nelson and Wellington. The Reform Bill of 1832, the Repeal of the Corn Laws, the Crimean War, The Indian Mutiny, The South African War.

**The triumphs of peace:** The emancipation of slaves in British colonies; The Catholic Emancipation Act; The Elementary Education Act of 1870 (compare this with the date of Nova Scotia's free-school Act).

**Great inventions:** The steam-engine, the steamship, the spinning-machine, the electric telegraph, the ocean cable, the telephone, the needle-gun, the air-ship, the wireless telegraph. Commercial treaties, arbitration treaties,—explain. The penny-post, imperial postage.

**Foreign events:** The advance of Japan in science, popular intelligence, commerce; the awakening of China; the spread of republican government to France, Brazil and throught South and Central America; the American Civil War, 1861-5; the emancipation of the slaves in the Southern States (Abraham Lincoln).

**Great writers of the period:** Burns, Scott, Coleridge, Wordsworth, Macaulay, Dickens, Tennyson, Browning, Darwin, Longfellow.

## DRAWING AND CONSTRUCTIVE EXERCISES.

### General Prescriptions.

The aims of the school course in drawing are,

- (a) To develop accuracy and fullness of observation of material things;
- (b) To render the pupil capable of representing in the universal language of the draughtsman his images of material things, and his conceptions of form, color and combination;
- (c) To develop capacity for enjoyment of what is beautiful in nature, art, and craftsmanship.



The fashioning of artists is no more the function of the school than is the making of poets. But failure in efficiency in the school that does nothing to enlarge the child's sense of beauty of form, color, and composition, is of the same kind as would result if the school made no effort to develop the child's sense of beauty in virtuous conduct, in literary form and substance, or in music.

There are considerations of pure utility, also. As an adult, the child will later have his work to do in the real world. It is, indeed, possible that the vocation he chooses may not call upon him for skill in drawing; but the chances are that either his vocation or his avocations will do so; and, whether or not, it is almost absolutely certain that at important junctures the ability to express himself thru line, form or color will prove of considerable value to him.

The school has, it must be acknowledged, a highly important duty in respect of teaching drawing; for neither the pictorial, the decorative, nor the constructive power is likely to develop in the child without the stimulus and the instruction of the school. True, there may be the stimulus and assistance of a home in which forms of graphic and decorative or constructive art are practised; but, as a rule, the home, in its efforts at interior and exterior decoration, furnishing, dress and capacity for enjoyment stands to profit both economically and esthetically by the modest but well-directed efforts of the common school to develop simple, correct tastes.

From the first grades of the school it will be convenient for the teacher to recognize frankly three forms of activity in drawing:

- (1) Pictorial drawing, or rather, picture-writing,
- (2) Decorative drawing and designing,
- (3) Constructive work,

the last mentioned growing more and more conspicuous in utility as the child advances thru the grades. Under pictorial drawing come all such exercises as are intended as a means of free expression for the child's imaginative and reproductive powers, comprizing illustrative, imaginative and memory drawing; drawing from the object; picture-study. The lessons in the reader, in geography, history, and nature, prompt the pupil to depict scene, incident, weapons, buildings, costumes, flowers, plants, animals, natural features of the earth; and the interest of the moment may profitably be turned to account by having the pupils draw from memory, imagination, or from the object, that which has just passed under view. This form of drawing, too, associates itself with the environment and activities of the child; his games, sports, and recreations,—playing ball, snowballing, fishing,—the occupations of the home, of the farm, forest, mine and sea, all of which furnish subjects susceptible of pictorial treatment, varying from the amazingly crude efforts of the infant class, to the thoughtful drawings of the upper grades.

Under decorative drawing come exercises in studying, copying and fashioning units for harmonic repetition; designs for borders of pages, for book-covers, for Christmas and Easter cards, for blotters; for wall-paper, for print-cottons; combination of colors and tones for decorative purposes in mats, carpets, fabrics, dress.

Under constructive work come the paper cutting and folding, card-cutting, sewing, clay-modeling of the earlier grades, developing into the more purely mathematical drawing and the construction-work (cardboard, wood, and needlework) of the upper four grades. It comprizes plotting to scale, the solution of problems in constructive geometry, the drawing of plans of the school-house and school-district; plans and elevations of objects convenient to be worked out in card, paper or wood; the drawing of maps, designing of patterns, pattern-cutting in paper, in association with the sewing lessons for girls.

In no school should it be permitted to neglect exercises in the construction of objects appropriate to the interest and the ability of the pupil. To express form in terms of material substance such as paper, card, wood, is to bring the pupil into relation with material things and with the transformation of raw material into useful and beautiful forms. No activity of the school will contribute more to his understanding that education comprizes not merely a knowledge about materials but a power to manipulate them.

It is important for teachers to recognize that children's early efforts in drawing are excessively crude. Not only is the eye unpractised in determination of form and proportion, but the hand of the child is at first a mere fist, capable only of rudimentary finger movements and whole-arm movements. Accuracy, neatness, correct proportion, are out of the question; and the teacher must be content with maintaining the native interest of the child in depicting things, utilizing this interest to encourage him to observe with more and more accuracy. Little children cannot *study* but they love to be given things to do; and drawing and constructive exercises should be a frequent employment in school. During this stage the pointed pencil is a discouraging medium, the brush or the blunt crayons—preferably colored ones—offering a much more direct and effective medium of expression. Later, after the child has acquired some readiness in mass-drawing, the pencil becomes useful as a means of acquiring exactness and accuracy. The flat color-washes and the colored crayons, moreover, permit experiment and instruction in colors, tones, and their relations.

By "mass-drawing" is meant the blocking-in of the color, in a uniform mass—not outlining it first and shading the parts. Exactness of outline is kept secondary to general trueness of shape and proportion. This exercise when done with colored crayola is very fascinating to children, and practise in it develops the meaning of "outline" better than does the reverse process. At first the child's vision is not correct enough to discern clearly the outline of any but flat objects. His attention is drawn rather to color and to prominent features, which, of course, he is disposed to over-elaborate. His exag-

generations and false impressions must not be criticized severely, but gradually corrected.

The same effect in mass may be obtained by using diluted ink, and in the grades above the third this may be made in two or three degrees of strength, thus placing two or three tones of color at the disposal of the pupil. All the materials needed are a brush and two little saucers in which to dilute the ink. The colors are carefully washed on without shading, the darker tint being used for foregrounds and to indicate a different color from that which the lighter tint stands for. Thus, in drawing a daisy, the petals and leaves may be done in the lighter wash, the center in the darker tint.

**Hand-books recommended to teachers:** In color work, "Chase's Practical Color Work," 25 cents. (Milton, Bradley Co., Boston, Mass.)

In paper-cutting, etc., for grades I-IV, "Seat Work and Industrial Occupations," by Gilman (Macmillan Co.).

In card-board work, for grades V-VIII, "Cardboard Construction," by J. H. Trybom (Milton, Bradley Co., Springfield, Mass.).

In wood-work for grades VII-VIII, Foster's "Elementary Wood-work," price 60 cents., (Ginn & Co., Boston.).

The new Progressive Series of Drawing Books (Prang & Co., New York), in eight numbers, constitutes an excellent handbook for both teacher and pupil. It contains, besides, all the color-work and manual training in paper and cardboard needed in the eight grades. Nos. 1, 2, 3 cost 15c. each; nos. 4, 5, 6, 7, 8, 20c. each. This series gives the last and best word on common school art instruction.

In sewing, grades II-VIII, Johnson's "Progressive Lessons in Needlework," price 60 cents (D. C. Heath, Boston.).

## DRAWING.

### Special Prescriptions.

#### Grades I, II.

**Picture writing;** that is, the expression of ideas, stories, etc., by "mass" drawing. Thus, the child may represent any interesting objects or groups of objects, especially animals in motion, children playing, pets, toys, horse and wagon, the water-pail, a cap, a boot, fruits, trees, berries, vegetables, grasses. Anything talked about in the nature lesson will be appropriate. The drawing will be very crude, like the picture-writing of primitive peoples. It serves its purpose however. It is the expression of the child's first efforts to see and to record differences of color, size, shape, and relative position of objects. It affords a measure of hand-training. It enables the teacher to introduce a few technical terms relating to size, shape, position, etc.

The teacher must take the initiative by drawing on the black-board with the flat of the chalk. Color will be made interesting and instructive by using colored chalk and by having the child use crayola of color appropriate to the object, to the sky, the foliage, the water. Drawings should be large and vigorous. If small objects are to be drawn, one should be placed on each desk against a background of paper. Drawings of groups should bring out relative size, relative space and relative color.

Pupils of the second grade may cover spaces by repeating a group of spots or of lines, a circle or triangle, a simple flower form. They may be expected to produce rude outline effects of symmetrical objects such as an egg, an apple, a spruce tree, a twig with leaves, the window or door, the ink bottle, the stove.

Pictures appropriate to childhood, especially those portraying sacred subjects, children, mother and child, pets, shepherd and sheep, birds, should be shown to children or hung in the room. In addition to their spiritualizing influence they are incentives to pictorial work by the pupils.

**Construction work** should be occasionally given—such exercises as stick-laying, free cutting or tearing of paper into forms of animals, fruits, etc., winding with raffia, weaving. The cutting should embrace the circle, the square, the oblong, as well as simple natural objects and these forms should be added to in subsequent grades. With them should be used and rendered familiar the words, *high*, *vertical*, *horizontal*, *left*, *right*, *sphere*, *hemisphere*. The type forms of the room, such as the door, the pane of glass, the stovepipe, the pail, etc.

### Grades III and IV.

**Picture-writing**, as in grades I, II, to express ideas and to accompany stories.

**Drawing of natural and other objects**, such as trees, vegetables, buildings, table, basket, bowl, pail, Japanese lantern, squash, pumpkin, pumpkin-lantern, grasses, fruits, weeds, etc., with care in outline. (The smaller objects here mentioned should be placed on a level with the child's eye.) To this end the pencil must be brought into use. Plant specimens in the budding or sprouting stage will be found very interesting and quite easy; then there are corn cobs, pods, seeds, butterflies, beetles, squirrels, etc. Pupils in these grades will find pleasure in drawing fruit or berries on the branch or twig, and especially the autumn coloring of our wild shrubs such as the rose-bush, the blueberry. The drawing of the spring flowers as they appear and of the phenomena and typical farming operations of the succeeding seasons will enhance the interest in the effort. In maritime communities, in mining communities, there are additional features: boats, sailing craft, steamers, tall chimneys, horizons and sky-lines.

In the drawing of the larger objects in nature, the effects of nearness and distances of separate objects in the same picture should be expressed with increasing skill; likewise the distance between two objects when near and the same objects when more remote. These observations serve as a foundation for perspective and for the drawing of single objects in the three dimensions, length, breadth, thickness.

**Constructive Handicraft.** Making a wall pocket, a blank book, a cornucopia, etc. The cutting with scissors of geometrical forms and of easy natural forms. These may be cut from colored paper and mounted symmetrically and rhythmically on cardboard. Needlework.

**Ornamenting** a circle, square, or rectangular surface by breaking it up symmetrically and coloring the parts in proper balance and with regard to pleasing color-combination.

**Rhythmical repetition** of dots, or spots, or linked circles, or simple flower or leaf forms, so as to produce a wall-paper effect, an ornamental border; a border made by repetition of a square or by alternating square and circle, square and dots, etc.

**Mathematical Drawing.** Drawing squares and rectangles of given dimensions. Dividing these into square inches. Measuring with footrule, involving half, quarter and eighth of an inch. Measuring the schoolroom and drawing it on the scale one inch to the foot; drawing the teacher's platform to same scale. Right, acute and obtuse angles drawn and named; so, diameter and diagonal.

### Grades V and VI.

**Object drawing** of natural and of made objects, in good outline and expressing the third dimension (that is, the foreshortening or perspective) of such plane surfaces as the square, the circle, the rectangle, the schoolroom, the floor, the table-top, the railway-track, a row of telegraph posts, and later, of such solid objects as a box, a pail, a book, etc., slightly below the eye and fair in front. Later, objects above the eye; the square surface, the rectangular, the ceiling; and objects partly above and partly below the eye but not directly facing the observer, such as the wall, the fence, a house, the window, a box, a book, the platform, trees here and there on the landscape on a snowy day.

Interest will be increased by combining objects so as to suggest actions, uses, or to produce pleasing groups. Some may be colored: thus, a bowl with apples; a tree on a hillside, a lake with a mountain background. Tree forms, such as those of the spruce, the elm, the maple, the pear, etc., should be studied.

The nature study lesson in plants, insects, birds, etc., should in all grades always comprise an exercise in careful and truthful drawing of the object or of some important part or parts. Such drawing exercises are as much a transcribing and recording of facts as a written

description would be. They compel a close attention to details and relations and are therefore to be regarded as supplementing the class work in observation. They afford, too, an excellent preparation for later systematic study of the natural sciences.

**Constructive Handicraft:** Making, at direction from the teacher, the working-drawing of a paper box; then making from this the box; a cubical box, a rectangular box, a pyramid, a triangular prism; making and decorating Christmas and Easter cards (simple, folded, and with mounts), calendars, valentines, book-covers, match scratchers, cardboard picture-frames, a wall bracket. Constructing a color scale. Designing a book cover with simple border and with title and author's name nicely lettered and correctly spaced. Reproducing with and without modification historic borders. Designing a linoleum pattern, a modern border with units of flower, seed-pod, insect, or conventional figure.

**Mathematical Drawing:** Drawing to scale, continued, the problems involving quarter or half inch to foot, to yard, etc. Use of compass and protractor. Plan, to scale, of schoolroom, with teacher's platform, position of door, of window, etc., shown.

Meaning of plan, elevation; two or three plans and elevations worked out for the paper and cardboard construction. Careful drawing with ruler and compasses, of hexagon, octagon, equilateral and right-angled triangles.

### Grades VII and VIII.

**Object drawing,** with pencil, crayola, and water-colors of objects slightly more difficult, with attention to correct perspective; to light and shade effects on near objects, such as a cup, a bowl, a bottle, a box; to the effect of distance on colors as well as on size. Principles of perspective reviewed and completed. Easy landscape sketching, to show sky-line, trees, buildings, (omitting detail and using a coarse pencil or crayola or water-color brush to produce rough effects, geometrically exact lines, outlines, etc., do not occur in nature). Grouping of objects to produce pleasing effects; massing of foliage near buildings, for beauty; plan of tree, shrub and vine planting to improve the school premises; ideal picture of the school and grounds with trees and shrubs.

**Nature-study drawing;** calling for increasing exactness in the recording of structures, details, etc. Color harmony and the color scale, continued.

**Constructive Handicraft;** in cardboard, or wood, or both, producing things that the pupils prefer to make. (Some children will do this work at home for criticism and suggestion by the teacher). Conventional units of design from flower and leaf-forms, head and tail pieces, ornamented initials; some of these applied to decoration of essay-covers, calendars, Easter-cards, etc. Working-drawing of a postage stamp-box of wood, of a wooden paper-knife with ornament-

ed. handle, of a book-case for the school-room. (These drawings must be executed with mathematical precision and exactness.)

Design a pitcher, a vase, a coal-hod, form and ornamentation being determined in view of the nature and use of the article.

**Mathematical Drawing:** A carefully executed map; plotting to scale, as in Morton's "Mathematical Drawing;" chaps. I, II, for grade VII; chaps. III, IV. for grade VIII.

### NATURE STUDY.

The purpose of nature study has been defined as "Learning those things in nature that are best worth knowing, to the end of doing those things that make life most worth living." The great benefit sought is not primarily to have the child acquire a mass of fact, but rather to lead him to understand, to love, and to utilize wisely the environment in which a benevolent Creator has placed him.

Nature Study appeals to the child's activity thru the excursions for collecting specimens or for investigation; helps to form habits of accurate observation, logical thought, and clear expression; cultivates the imagination and sense of beauty, and eliminates monotony from school life.

#### General Method.

1. Procure some simple apparatus, e. g., a glass bowl for an aquarium, an insect cage, window boxes for plants, a sand-table for study of physical geography, a net and a jar of cyanide of potassium for collecting insects, a magnifying glass, a thermometer and barometer.
2. Keep a daily calendar noting weather, moon phases, and interesting events, such as excursions, first wild flowers found, return of birds, etc.
3. Make collections of grain, seeds, minerals, shells, nests, cocoons, galls, pressed leaves, flowers, weeds, insects, etc.
4. Get pictures of native trees, birds, animals, insects, etc., and of processes of manufacture.
5. Make these collections of things or pictures the basis for lessons in drawing, color work, modelling, free hand cutting, form, number, reading and spelling, games and songs.
6. Study life-histories from living creatures, such as the toad, the moth, the fly, etc.
7. Bring out the relationship between nature and man, the benefit or injury derived from plants, animals, or insects, the influence of weather conditions on commerce, the natural resources of the country as providing food, clothing, heat, and shelter, etc.

8. Tell nature myths, stories of animal life, of different countries, of industrial life, etc.

The teacher is urged not to neglect Nature Teaching simply because she does not know the subject thoroly. Good books are numerous. School libraries are almost a necessity. The big outdoor world—the best illustrated text-book—is within reach of all.

Every hill has its history. Every brook tells a dozen stories. Every plain is a museum of wonders.

To translate these records is to become acquainted with a universe which has existed for untold ages and will exist for ages to come: to translate a book, written two thousand years ago, is merely an attempt to bring to life the thoughts of a small community of people which have no direct bearing on our struggle for existence today.

If the teacher makes an honest effort to get acquainted with natural phenomena and natural objects she will find her efforts rewarded. From the field, the factory, the mill, the blacksmith shop—from every nook of the landscape and every worker in the community—the teacher can learn something that will be useful to herself and in her teaching. Moreover, she is permitted to ask questions of more experienced teachers and educational magazines.

In the choice of materials for nature study as well as in deciding on the proper method to follow, the teacher will be aided by bearing in mind the chief aims of such a study. These are (1) to increase the interest which the young child already has in the world around him that he may appreciate and enjoy many things in nature of which he would otherwise be unaware; (2) to cultivate the habit of investigation or the power of discovering knowledge from first-hand study of things; and (3) incidentally to give useful information. Whatever materials or methods are *useful* in accomplishing these aims are good materials or methods for nature study. The teacher should try to discover the interests of the children and the things which they may readily be led to take an interest in, and she should begin with these. Merely to possess and hold a flower, to enjoy its color and its fragrance, and to tell the teacher and the class about it, may be good nature study for grade I pupils. Becoming acquainted with the common plants, birds, insects, minerals, stars, etc., to know them by name, may add to the interest in these things and be the starting point for further study.

The aim in the first five or six years is to put the child into sympathetic touch with his surroundings and to give him certain units of knowledge with which he may interpret the geography and agriculture which, later, are to be based upon this nature study.

School gardens, however small, should be maintained, and the pupils encouraged to plant trees, flowers, and vegetables in their own gardens or yards.



In the special prescriptions that follow, the teacher must not think it her duty to take up each and every item specified. The intention has been, rather, to suggest a wide range of topics and a variety of detail, in order thereby to provide something in each field of inquiry to allure the teacher. Let her but choose what appeals to her fancy, her passing interests, the interests of her pupils, or what lies within the compass of her ability to deal with.

### Special Prescriptions:

#### Grades I and II.

The work in these grades must be informal. It is enough to arouse the child's interest in, and love of the life about him; to lead him to accurate observation; to encourage him to care for some living thing (animal or plant); to stimulate his sense of wonder, his imagination, and his sense of beauty.

Hand work should accompany the lessons, such as drawing, color work, modeling, cutting out, planting of seeds, making of boxes, making of blue-prints, &c. Free conversation directed by the teacher and based on the experiences of the children is the best means of instruction. Thus, in a few minutes' talk on the food eaten at breakfast, such as cereal, bread and butter, eggs, coffee, &c., the following points might be brought out:—The farmers work to provide grain (show examples); the millers to grind it (show meal and flour); the bakers to make bread; the process of butter-making; the care of domestic animals; dependence on other countries for such things as coffee, sugar, &c.

Such a summing up as this might be read and memorized.

#### The Song of the Wheat.

"Back of the Bread is the snowy flour,  
 "Back of the flour is the mill;  
 "Back of the mill the growing wheat  
 "Nods on the breezy hill.  
 "Over the wheat is the glowing sun  
 "Ripening the heart of the grain;  
 "Above the sun is the gracious God  
 "Sending the sunlight and rain."

#### Autumn.

The most prominent element in Autumn study is Nature's preparation for winter; e. g., the storing of food by man, by animals, and by plants; migrating of birds; protection of animal and plant life; distribution of seeds, &c.

**Natural Phenomena:** Decreasing heat in sun's rays; shorter days; shadows; moon phases; stars; rain, clouds, fog, dew and wind.

Notice color in the sunsets. Direction, east and west; time,—hour day, noon, sunrise.

**Animal Life:** Domestic animals, pet animals, and common wild ones,—simple observations and stories of these.

Encourage children to tell about their pets—what they eat, what they do, how they behave. Make language lessons of this material, putting their statements on the black-board with appropriate drawings.

**Birds:** Domestic fowl, common wild birds,—simple studies in their food and habits.

**Insects, &c.:** Find common ones, and collect galls, cocoons, eggs, caterpillars, &c., for the vivarium later on. Note their food, &c.

Place caterpillars in a pasteboard candy box with a leaf of food plant and cover with a piece of glass. Watch development of caterpillar. Keep leaves moistened, or keep a shallow dish of water on the box.

**Plant Life:**—Grains: collect and name them and find uses.

Fruits: Color, taste, parts.

Vegetables: Color, taste, parts.

Trees: Study leaves, bark, general form, coloration of leaves; learn names of trees in the Neighborhood.

Seeds: Collect and note manner of distribution.

Flowers: Name common garden and wild ones; learn color; perfumes and seed.

### Winter.

The principal subjects for winter study are frost, ice, snow; the evergreen trees; the birds and animals that remain during the cold season; protection from cold; care of domestic animals; the resources and industries of the country in relation to food, clothing, homes, light and heat; for example, coal for heat and light; wood for heat, building and furniture; wool for clothing; grain, stored and imported, fruit and vegetables, for food.

**Natural Phenomena:** Short days, brilliant stars and bright moonlight; frost, noting frost pictures, ices; snow, noting snow-crystals. (show the crystals, using magnifying glass.)

**Animal Life:** Domestic animals and fowls, their food and man's care of them; wild birds and animals, means of protection from cold from increased covering of feathers and furs; fur-bearing animals; migration of birds; hibernation of animals; winter food for wild creatures, such as seeds.

**Plant Life:** Means of preserving life; bulbs, seeds, bud covers. (Visit greenhouses.)

**Grains:** Collect and name them and find uses. (Reserve for grades 7 and 8).

**Trees:** Note difference in general form, in bark and arrangement of branches. Evergreens.

**Fruit and Vegetables:** How preserved from cold. Imported fruits; learn from whence they come. Note difference from native productions.

### Spring and Summer.

The subjects of study in spring and summer center around the awakening of life and around growth and fruiting.

**Natural Phenomena:** Increase in heat; longer days; wind; rain; fog; dew; melting snow; brooks; rivers; the action of water on soil and rocks; different kinds of soil.

**Animal Life:** Awakening of hibernating life; the young of domestic animals; water-life, fish, frogs, toads, snails, &c. (collect eggs for aquarium); earth-worms; insects, emphasizing life histories; watch transformations. Birds, their songs, nests, food, and care of young. Make bird houses and drinking troughs.

**Plant Life:** Trees, flowers, seed, buds, leaves, (Keep some branches in water and watch growth of buds). Bulbs and seeds. Plant them and watch germination and action of heat and moisture and light. (See Forestry in N. S., p. 10.) Flowers, ferns, mosses, weeds; learn the names of some, and note color and other characteristics, their insect visitors, &c. Plant a garden or window boxes with flowers or vegetables and let children care for them.

### Grades III and IV.

From simple observation in Grades I and II we pass to closer examination. The essential differences in the things examined are now to be noted, and the reasoning powers awakened to finding causes. For example, the coloration of insects, &c., as a means of protection affords a field for observation. Observation, here, should be accurate but not detailed.

The children should try simple experiments, and begin to write the results of these.

Increasing emphasis should be placed on the dependence of man upon nature.

Active work should accompany the lessons: excursions, collecting, drawing, coloring, writing, &c. Teachers should indicate subjects of inquiry but should, as far as possible, refrain from telling facts which the pupils can find out for themselves.

### Autumn.

**Natural Phenomena:** Cause of decrease in sun's heat and of the shorter day (no detail of cause attempted; merely the lower and shorter path of the sun noted from week to week).

Evaporation and condensation as shown in clouds, rain, fog, dew and frost.

Reason of changes in moon; two or three constellations or star-groups recognized and named.

**Animal Life:** Domestic animals in relation to man's need, for food, clothing, transportation.

Care of animals, their food, shelter, &c.

Wild animals, their preparation for winter.

A spirit of kindness to animals should be inculcated in these lessons.

**Birds:** Migration of some; provision for wild ones that remain during winter. domestic fowls.

Note injurious and beneficial creatures: caterpillars, ants, bees, toads, grasshoppers, &c., and their preparation for cold weather. Collect galls and cocoons.

**Plant Life:** Collect seeds and note construction and means of dispersion by wind, animals, water, &c., the dandelion seed for wind, the burdock for animal and the dock for water dispersion.

**Grain :** Know different kinds and process of preparation for food.

**Fruits, nuts and vegetables:** Construction, color, taste, parts used as food, storing for winter use.

**Trees:** Reason of coloration of leaves, uses of leaves and blossoms; arrangement and protection of buds; the trees in neighborhood recognized in autumn dress.

**Flowers:** Names, colors, perfume, seeds. Begin to call attention to the most conspicuous parts of the largest and simplest flowers; pupils to see that seeds grow in pistil and pollen in stamen. Carry this on thru the grades: this is useful knowledge, especially to those who work with plants as farmers or gardeners.

### Winter.

**Natural Phenomena:** Frost, snow, ice. (simple experiments in crystalization.) The action of frost on soil and rocks and on vege-

tation. Collect minerals. Note decrease in heat and light of sun, and study artificial heat and light from wood, coal, gas, electricity, &c. Note clouds, and their colors at sunset or sunrise. Moon and stars, their appearance and their motions.

**Animal Life:** Care required for dependent animals in contrast to life of wild ones. Fur bearing animals. Birds: winter birds, their shelter, food, &c.

**Plant Life:** Trees,—note general differences in form and bark, and arrangement of buds.

**Evergreens:** Cones and leaves.

Study woods, and find uses as material for building, furniture, heating, paper making, &c. Visit carpenter shop, &c.

**Flowers:** Care of those in school or home or in greenhouse.

**Fruits and vegetables:** Visit grocery and notice those of home or foreign growth; methods of storing; transportation; find out about the countries from which they come, comparing climate with our own. Note other foods, such as honey, sugar, coffee, salt, spices, &c. Correlate their sources with geography.

### Spring and Summer.

**Natural Phenomena:** Increase in light and heat; shadows; evaporation, steam, clouds, rain, wind. Learn different kinds of soil; minerals and their uses. Visit farm, blacksmith's shop, and explore woods.

**Animal Life:** Return of birds, their food, differences in nests, in songs; their care of young; economic value.

Domestic animals and pets, and their young.

Domestic fowl and young, common wild fowl; their homes and habits.

Study water creatures, collect eggs, and watch the transformation in aquarium.

**Insects:** Study them in relation to plant life; note color; learn life history.

**Plant Life:** Grasses, ferns, mosses, mushrooms, grain; watch development, noting differences.

Plant bulbs and seeds; name parts as they grow. Collect branches of trees and study growth of leaf-buds and flowers. Note coloration as sap ascends. (Experiment with maple sap, making sugar.)

Note the opening of bud scales, that these are finally thrown off, leaving scars. Note green undeveloped leaves and undeveloped stem. What is a bud? Let the bud answer for itself. What is a bulb? Study the structure of an onion or a tulip along with a bud. Study twigs of trees, find arrangement of buds, leaf scars and lenticels in the bark.

**Germination of seeds:** After young seedlings have appeared in seed-box or garden have pupils note how these differ from the true or characteristic leaves. Where did the first leaves come from? Give the name *seed-leaves*. Then study germination of bean and corn.

Prepare garden; plant seeds and cuttings; note habits and structure of different plants.

Gather and name spring flowers. Learn the principal parts, the colors, the perfumes.

*Encourage children to have gardens or flowers at home.*

### Grades V and VI.

The work in these grades is more detailed than in the previous grades. The children observe more closely; reason more accurately; and express more definitely. They are better able to experiment and to record the results of their experiments.

They may now be taught a few simple scientific terms. Closer connections may now advantageously be made between different subjects of study, such as insects and bird-life; bird-life and the farm; surface features of the earth and the different soils; drainage and vegetation, etc.

Books of stories on natural history should be freely circulated as supplementary reading. Each child should make his own calendar and weather-record.

### Autumn.

**Natural Phenomena:** Learn causes of decrease in heat and light; notice shadows and learn to tell time on a dial. Learn eight points of the compass.

**Clouds:** Learn different kinds; thunder and lightning; uses of electricity.

Watch weather-vane and find out the prevailing winds. Try some simple experiments in evaporation and condensation. Notice the general preparation in nature for winter's rest.

**Animal Life:** How wild animals prepare for winter, (storing of food, thicker fur, &c.). Compare with domestic animals, noting dependence on man for food and shelter. Make special study of the usefulness of animals to man. In studying the horse, for example,

visit farm, blacksmith, fire hall, freight sheds, &c. where horses are employed, noticing the treatment they receive.

Reason for migration of birds; consider climatic and vegetational conditions in countries to which they go; learn names of birds. Show pictures of, collect, and learn names of common insects. Gather galls and cocoons. Make special study of one insect, the bee, for example. Show honey and comb and watch the bee's progress from flower to flower, obtaining nectar, distributing pollen, &c.

**Plant Life:** Learn common wild and garden flowers; find out their insect visitors; study processes of fertilization, and seed formation, seed-dispersal. Learn names of parts of plants and flowers.

**Trees:** Know the names of all trees in neighborhood.

Coloration of leaves, difference in shape and edges, their buds; function of leaves; collect, press and mount leaves for decoration. Nuts: structure and food-value.

**Vegetables and fruit:** Visit market and learn different kinds, values, construction, color, seeds.

**Grain:** Visit farm, watch reaping, thrashing, &c.; show meal and flour, and have pictures of process of manufacture.

Introduce the starch test. Let pupils use iodine on a number of substances—laundry starch, potato, fruit, vegetables, flour, meal, chalk, limestone, etc. and infer the presence or absence of starch.

### Winter.

**Natural Phenomena:** Light, sun, moon, stars; artificial light, from candle to electric light.

Frost, snow, ice; crystallization, storing of ice; effect of cold on vegetation, on rocks, and on soil.

Heat; from coal, wood, gas, electricity.

**Animal Life:** Winter birds, their color, food and shelter.

Scatter food and watch the different ones that come. Prepare bird-houses for Spring. Hang out on trees pieces of suet for birds. Winter life of water and land creatures, furbearing animals, fishes.

Materials obtained from animals, such as wool, leather, &c.

Show process of manufacture. Visit shoemaker, carder, spinner, weaver.

Weave small woolen rug on slate frame.

**Plant Life:** Trees, their beauty and uses. Wood, noting differences in color and grain. Visit lumber yard, carpenter, furniture store; show pictures of lumbering.

**Fruits and vegetables:** Visit market, note imported fruits, and compare with native. Tell of countries from which they come, means of preservation and transportation.

**Flowers:** Visit greenhouse, noting heat, moisture, light. Show pictures of vegetation in other countries and find out about imported foods, such as coffee, salt, spices, bananas, cocoa-nuts.

### Spring and Summer.

**Natural Phenomena:** Cause of increased heat and light; benefit of snow to earth and air; note deposit of dust on melting snow.

**Rain:** Effect on ground and on vegetation.

**Brooks and rivers:** Their relation to trees, to production of soil, and to water power in manufacturing and transportation.

**Animal Life:** Put up bird-house and troughs; note the return of the birds, their nests, songs, food; their usefulness as weed and insect destroyers.

The awakening of animal life in water, garden, and forest.

Collect frog's eggs, snails, &c. for aquarium, and study development.

Watch young animals at play; note their play as a training for future needs in procuring food, protecting themselves, etc. Note coloration as a means of protection. Learn names and habits of common insects; note those that are injurious, and experiment with means for destroying them.

Watch beneficial creatures such as earthworms, bees, toads, &c. show necessity of protection.

**Plant Life:** Wild flowers, names, parts, different means of propagation. Observe mosses, ferns, mushrooms and fungi. Prepare garden and sow seeds of flowers and vegetables, noting soil, effects of moisture, shade; parts of flowers and uses. Watch for fresh vegetables and fruits such as lettuce, strawberries; parts used as food, structure, etc. Try experiments in germination of bulbs such as the onion, of nuts, of grains. Put branches of trees and shrubs in water, and study development; study arrangement of buds, leaves, and blossoms. Note flowering of trees and watch result as fruit, nut, cone.

Show relationship of bird, insect, and plant life (Insects as a means of fertilization, and birds as destroyers of injurious creatures).



Observe weeds and methods of eradicating them. Compare evergreen trees with others, noting difference in leaves, bark, sap, etc. Get some maple sap and make sugar.

Make excursions to field, forest, water, farm, market and greenhouse, and visit as many industries as possible.

### Grades VII and VIII.

#### Autumn.

Review and study more carefully roots, stems, leaves, flowers and fruit of all available plants.

In the root-study consider adaptation. For example, a dandelion blooms earlier in spring than a clover: has the thickness of the dandelion root anything to do with this circumstance? Compare roots of water plants with those growing on well drained land: from this do you discern any purpose in draining? Where are the roots thickest when plants are grown in a flower pot? Why? Why are dandelions and couch grass hard to kill? These and many other similar questions should be studied. Notice the "tubercles" on roots of clover and explain their significance.

Stems include not only the woody, such as trees, but the herbaceous, such as buttercups. Their habits of growth with reference to light, moisture, etc., are of great importance: Compare, for example, the weak stem of a climbing plant with the stiff stem of one that does not cling. Why and how do plants climb? The work of stems should claim special attention: structure should be studied only so far as it shows adaptation to this work.

In work with roots and stems, vegetable reproduction is important. How do raspberries, strawberries, potatoes, geraniums, etc., reproduce or "spread"? • Grafting and budding of fruit-trees should also be taught here.

Leaves are best studied in spring, but should be reviewed in autumn. Their arrangement, *relative to light*, is of prime importance. The iodine test for starch should be applied to find when surplus starch is formed and when used up. Where does our laundry starch come from?

The autumn flowers are rather difficult for minute study; but every child should at least know the name and habitat of the common flowers.

**Special attention is due to weeds**, important problems being such as why some weeds are harder to kill than others; why some "spread" more rapidly than others. These inquiries will involve the subject of fruit and seed dispersal—a subject fascinating in itself and important economically.

Modification of certain parts of a plant for special work is an attractive subject. For example, a thorn is a stunted branch; so is a fruit spur. How do we know? What is the probable purpose or cause?

Observe the relation between shapes of trees and location of buds. Notice particularly lilac, pine, and fir.

The pupils of these grades should know every common forest tree of their section. Not only should they know pine, birch, and maple, but the *different kinds* of pine, birch and maple.

In the autumn, too, galls are numerous on willow and other trees: study the cause. Keep the galls over winter in pickle bottles to discover the insect that causes them.

Observe also bird migration, keeping dates of last appearance. What birds remain with us thruout the winter? Learn to identify them. Notice how insects prepare for winter.

(As far as possible the work should be based upon the farm surroundings of the pupil. Work for principles; not for facts alone.)

### Winter.

Plant life need not be wholly neglected during the winter. Such chemical experiments as heating starch and finding it composed of carbon and water; finding by the limewater test that carbon dioxide is in the air, and by the iodine test that plants contain starch are easily performed. Add to this the knowledge that air and soil contain water, and the inference is not hard to draw that plants form their starch from the carbonic acid gas of the air and water. Experiment will prove *when* this process goes on.

Furthermore, we have four or five evergreen ferns which could well be studied in winter; also, four or five club mosses and half a dozen mosses. Then there are the common rocks found by a brook-side, in a cutting, or wherever rocks and stones can be found: identify these. Notice rounded pebbles and sharp-cornered stones: account for the difference of form.

Identify such economic minerals and rocks as iron ores, gypsum, limestone, sandstone, granite, gold in quartz, and any other available ores.

Teach a lesson or two on building-stone and brick-making; in connection with this, the different kinds of lumber, their uses and comparative values.

Lessons on soil physics are important. The origin and kinds of soil should be taught, with some of their constituents. Hardness of water could be explained in connection with these. Springs and artesian wells are subjects not beyond these grades.

Take advantage of a thaw in winter to show the effect of ice on the distribution of soil. Find a large ice cake carrying mud and pebbles, that has landed on a level field. Notice the small "hill" of sand and pebbles left there when the ice melts. Then explain how, on a large scale, glaciers have changed the surface of the country. Observe deltas at the foot of a hill on the road after a heavy rain. Deal with this as a Geography lesson.

### Spring.

Study unfolding buds—flower buds and leaf buds; compare and contrast the two kinds. Where are buds located?

Compare the texture and covering of young leaves with that of older ones; why the difference?

Note the returning of the birds, the hatching of insects, awakening of snakes, development of frogs.

Follow spring operations of gardening and farming. In everything, keep before the pupil the relation of natural phenomena to human welfare. For example, the tree's activity in spring gives us a supply of maple sugar.

Instead of merely naming the parts of a flower, emphasize the use of each part. This introduces the subject *pollination*. Compare the pollination of willows and alders. (Notice insects abundant on the flowers of the former). Teach how flowers are adapted to secure cross pollination by means of structure: gamopetalous, polypetalous, regular, irregular; by spurs on the corolla, etc.; by other devices, as, opening and closing at certain times, and by the various adaptations to insect pollination.

Find in June the staminate cones of pine, fir, and spruce. Contrast position of cones of fir and spruce.

Note how flowers protect themselves against bad weather and injurious animals.

Observe plant societies. What ones grow in bogs? What by the road-side fence?

Observe day and night positions of leaves of plants such as the clover and potato.

Get acquainted with a few parasite plants, such as Indian pipe, with reasons for their strange appearance.

Towards the end of the term review the ferns studied last fall and add one or two that are not evergreen.

Encourage the pupils to bring in, not only flowers, but everything belonging to outdoor life for suitable observation.

Since fruit-growing is one of our leading industries, the pupils should become acquainted at first hand with the various fungous diseases of plants and the best methods of their control; also, with the insects that are our greatest pests. The teacher can obtain assistance on these subjects by consulting bulletins and reports published by the Department of Agriculture, Ottawa. These bulletins will suggest what diseases are most troublesome and also their control. They will describe such diseases as "black-knot," "potato-blight" and resulting rot, "apple-scab," "fire-blight" (a disease of pear and apple), etc.

**Handbooks for Teachers:** The most complete treatise on Nature Study is Comstock's "Handbook of Nature Study," pub. by Comstock Pub. Co., Ithaca, N. Y.,; price \$3.60—a delightful and instructive compendium; for Grades III-VI, Overton & Hill's "Nature Study," price 40c., pub. by American Book Co.; for Grades VII, VIII, Brittain's "Elementary Agriculture and Nature Study," price 75c. (pub. by Educational Book Co., Toronto.).

### PHYSICAL EXERCISES.

To following exercises are recommended for frequent use in three minute periods at least three times a day, at, say, five minutes to ten, at half-past eleven, and at half-past two. They are taken from the school text-book:—

- Series A, Table I: 1 d, 2, 4, 6, 8  
 Table II: 2, 3, 4  
 Table III: 1 b, 1 c, 3, 6  
 Table IV: 1 c, 5  
 Table V: 1 b, 2, 4, 8

These exercises are recommended for recreation or refreshment, and are not intended to displace the regular class exercises for *training* and *development*, which should have a much wider scope.

None of the exercises should be regarded by the teacher as mere skills to be acquired by the pupil. Nor should they be used to displace the free sports and games of the playground which, indeed, the teacher should promote, assist, and, as far as possible, supervise.

During physical exercises, windows and doors should be thrown open. Indoor exercises should be chosen from those movements which do not create dust.

The elements of squad-drill, such as column-formation, forming fours, marching, wheeling, should be practised outdoors in good weather.

Orderly marching into and out of the school should be the rule; and fire-drill should be practised at regular intervals, especially in schools of several departments or class rooms.

**HYGIENE AND TEMPERANCE.****General Prescriptions.**

In view of the omission from the High School Program of the course in physiology and hygiene, it is important that in the common school instruction in the care of the body, the laws of health, and the evil effects of using alcohol and tobacco, be made as effective as possible. To accomplish the best results it is necessary that, besides formal instruction,

- (a) The school should at all times exemplify in the person of the teacher habits of scrupulous cleanliness, of tidiness of hair and apparel, of easy movement posture, and manner;
- (b) The school authorities should provide for the regular and frequent cleaning of the rooms, their occasional disinfection, and the obviation of dust danger by the use of dustbane or oil;
- (c) The teacher should manifest a constant concern for the personal comfort of the pupils, the proper heating and ventilation of the school-room, the supply of fresh water, the cleanly habits of the pupils, their frequent refreshment by means of recesses and physical exercises, their games, their gait and posture.

In the first four grades little formal instruction is needed. Some knowledge of the human body is incidental to the "nature" work of those grades; but the teacher whose personal habits and management of the school are properly influenced by an acquaintance with hygiene principles, is measurably safe in omitting in those grades everything of the nature of *laws* of health, trusting entirely to a few *rules* of health pertaining to cleanliness, fresh air, sleep, the use and care of the teeth, posture and movement.

The teacher should know that restlessness and changefulness of interest are the normal condition of the child in waking hours, and should, in accordance with this fact, limit the duration of periods devoted to sitting still, or to any one task. She should in all classes endeavour to note the approach of fatigue, which is, in general, indicated by the failing interest of the average pupil. She should be conversant with devices for restoring interest and banishing fatigue thru change of occupation, thru free and vigorous physical exercise, and thru short intervals of unsupervised freedom. In general, it is expedient for her to have the pupils understand each new procedure adopted for their comfort, interest, and contentment. In no long time, what was merely a rule will come to be understood as a law; and, by the recognition of law as the basis of rules of health and of life, the pupil will profit not only physically but morally. A great point is, indeed, made, when the teacher has thus convinced her pupils of her genuine and intelligent interest in their physical well-being; for, having once gained their confidence and good-will, she need have little fear of committing them to any reasonable task.

The true purpose of lessons in hygiene and temperance is to enforce upon the individual the facts and principles involved. It is difficult to believe that the time of pupils is well spent in learning book-facts about the teeth and the skin, unless the teacher uses her best endeavours to promote the use of tooth-brush and tub. And so with every principle dealt with in the text-book. Right conduct in the essentials of hygiene is the real end; and the method of instruction, wherever possible, should be identical with that in nature-study.

For example, the phenomena of heart-beats, artery-pulsations, increased rapidity of pulse after vigorous exercise, flushed face, bleeding and the effects of bandaging, are easily observable by children, and should form the data for a first-hand study of the heart and the circulatory system. Similar treatment is easily applicable to the study of the teeth, the lungs, the stomach, the phenomena of fatigue, sleep, colds; of the effects of sunshine, bad air, tobacco. Rudimentary and commonplace as the child's observation of these phenomena may be, it is of the highest importance for promoting his interest, and cultivating an inquiring attitude; and little benefit will result from instruction that proceeds by any other course. The place of the text-book in each lesson is posterior, not anterior to the study we have above indicated, and its usefulness will prove to be commensurate with the effectiveness of the preceding lessons. Such lessons are "nature-lessons," and they should, as indicated in the present course of study, be permitted to supplant from time to time the usual "nature-lesson."

### Special Prescriptions.

#### First Four Years.

(To be given in First year and reviewed in Second, Third and Fourth).

**Body:** Right and left hands, feet, eyes, sides; forearm and upper arm; elbow, joint, wrist.

Correct position in standing, in sitting; injuriousness of crooked posture. Practise of orderly and self-controlled movements; motions; out-door games taught and supervised by teacher. (Good handbook: "Play", by E. Angell; Little, Brown & Co., price \$1.00).

**Cleanliness** of body, face, teeth, hands, etc., for health and for decency. Disgusting and dangerous habits, such as biting the nails, spitting, wetting the thumb in the mouth to turn the page, sucking a pencil, chewing gum from another person's mouth. Cleanliness of clothing, of handkerchief. Necessity of bathing with soap and water, and of changing the clothing at least once a week. Dirt and dust carry disease.

**Care of teeth:** Teeth to be brushed and mouth rinsed out night and morning (ascertain how many children obey this precept and endeavor to increase the number); cracking nuts with teeth and

picking teeth with pins to be avoided; neglect of "first" or milk-teeth punished by poor second teeth, mis-shapen mouth, and poor health. (A tooth-brush costs from 10c. up; precipitated chalk, 2c.)

**Care of Eyes:** Injuriousness of gazing at strong light, of reading by poor light, of rubbing the eyes with dirty fingers.

**Food:** Importance of chewing food well and of not over-eating; function of saliva; loss of saliva in chewing or smoking tobacco. Tea and coffee not good for children; alcohol injurious and dangerous; milk or milk and water the best drink for children.

**Health:** A source of comfort, of usefulness, and of proper pride. Health is the best protection against attack from disease. Health can be maintained only by eating good food and chewing it well, by going to bed early, by breathing good air, by exercising our bodies thru play and work, by keeping our bodies clean and our hearts free from guilty and ungenerous thoughts.

**Table-manners:** Eat slowly; do not drink while chewing; learn to use properly the knife, spoon, and fork, and to eat quietly, and decently. Courtesy in general as conducive to convenience and happiness.

**Caution:** Children learn by *seeing and doing* rather than by hearing.

## HYGIENE.

### Grades V and VI.

**Bones:** Injury to them from standing or sitting in crooked position; curvature of spine resulting from writing or working at too high a desk; bone-growth stunted by use of tobacco or alcohol; location of the principal large bones.

**Muscles:** How they move the bones (e. g. of the arm, hand, forearm—the children to locate these from their several contractions, and the teacher to explain the action by a diagram).

**Teeth and Stomach:** The pulpy inside of the teeth, and the hard protective enamel; saliva and the digestion. How the stomach digests food; overwork of the stomach; injury from strong or stewed tea or coffee, and from alcohol.

**The Lungs:** Air sacs and passages; how air gets to them; air and combustion of fuel; air and combustion in the lungs and blood. How to fill the lungs with air; full, deep breathing, and exercises to develop the habit and to enlarge the lungs. Fresh air and foul air and their different effects on the health: headache, flushed face, fatigue, and ill-humor from breathing bad air. How and when to air the schoolroom and the sleeping room.

**The Heart:** A muscular organ that contracts and dilates, thus pumping blood thru our arteries and receiving it back thru

the veins. Observe and count heart-beats and pulse beats; compare the count per minute. Note the effect of violent exercise on the heart-beats, on the face, the arteries and veins; note the effect of fear, of sickness, especially of fever.

**The Brain and Nerves:** How to keep them healthy—by taking good food, plenty of sleep, exercise, and by breathing good air, and by avoiding tobacco and alcohol.

**The Skin:** A protection and an eliminator of waste-products. Oil and sweat glands; pores; need of frequent bathing and change of underclothing. Habitual uncleanness offensive and disgraceful. The importance of regular habits of ridding the body of waste matter. Regular habits and intelligent obedience to laws of health, man's best medicine. The patent-medicine habit a blind and dangerous method, often resulting in permanent injury from narcotics and poisons contained; drug-taking becomes a habit like opium or alcohol.

**The Organs of Sense** and their more obvious structure. Cautions against touching the eyes with dirty fingers, against straining the eyes, against striking or pulling or picking the ear.

**Hygiene of the Home:** The nature of diseases and ways in which are "caught." Fresh air and sunlight. The house-fly as a disease-carrier; protection against flies. Closets, garbage, drains; the position of the well; relation of cooking, tastiness of food, to appetite and digestion.

Typhoid fever and tuberculosis (or consumption) are diseases which we can get rid of and should try to get rid of—how?

**First Aids,** to persons who have fainted, who have cut themselves badly or who are insensible from drowning.

**Handbook for Teachers:** "Good Health," by Frances Gulick Jewett, pub. by Ginn & Co., price 45 cents—an excellent book whose treatment of the topics may well be imitated by the teacher.

### Grades VII and VIII.

In these grades, if the text-book is placed in the hands of the pupil, it must not be used for learning from by rote. It should be used to supplement or correct observations made at first hand by the pupils under the direction of the teacher. It may occasionally be used as a reader, but the teacher must be careful to have it read slowly and understandingly, and with frequent interruption for question, verification, illustration. The general work of the class should proceed as in the lower grades, that is, either by orderly succession of topics or by suggesting 'problems' or subjects of inquiry. In either case, the work should be as much as possible of the character of a 'nature' study, pupils and teacher bringing to bear on each subject, first, their own observation, secondly, the information furnished by the book.



The topics to be treated are the same as those prescribed for grades V and VI, but the treatment should call for more exact and numerous observations and for a somewhat more complete study of structures, functions, and processes. Teachers must be careful to see that the technical language of the book is explained by translation into ordinary language.

In the school-room, one of the teacher's first duties is to attend to the comfortable and hygienic seating of the pupils, reserving the higher desks for the taller children, placing in front seats the near-sighted pupils and those of defective hearing, irrespective of the grades to which they belong. The teacher should be vigilant to detect disease, defective hearing, and sight, obstructed breathing, etc., and prompt to report such cases to parents.

### MUSIC.

Owing to the continual changing of teachers, the unmusical alternating with the musical, the development of musical knowledge, and of the ability to sing at sight is discouragingly slow. The ubiquity of the reed-organ and the piano has rendered sight-singing less essential than formerly, and has obscured its value to the eyes of those who cannot play some instrument. Teachers who cannot sing at sight cannot teach either tonic sol-fa or staff, and a mistaken notion prevails that such teachers are justified in giving only a perfunctory attention to the singing of the school. Means should be taken to correct this fallacy. Well conducted expressive singing "by ear" may exceed in value the musical exercises of some schools where sight-singing is taught. Singing, it should be made plain to the teacher, is one of the few avenues for the child's emotional expression in school, (the teacher has others); and, for the well-balanced development of the child, emotional, no less than intellectual experiences should be provided. "These conditions are satisfied in a high degree by national or folk songs, which are the expression in the idiom of the people, of their joys and sorrows, their unaffected patriotism, their zest for sport, and the simple pleasures of a country life. Such music is the early and spontaneous uprising of artistic power in a nation, and the ground on which all national music is built up; folk-songs are the true classic of a people, and their survival, so often by tradition alone, proves that their appeal is direct and lasting."

The first two considerations for the teacher are:

- (a) The proper use of the voice in singing.
- (b) The choice of suitable and worthy songs.

In dealing with the use of the voice, instructions should be emphatic, to see to it, first that children use their singing-voice or "head" register, (the use of the "head" register is easily ensured by the child's singing up the scale in the "chest" register until the voice breaks, and continuing his singing, softly and lightly, in the "head" notes which ascend from there); secondly that pupils learn each year a half-dozen or more good songs. Our recommendations in respect

of these two matters spring from the well known facts that the use of the "chest" register in singing leads to shouting and to straining of the voice, to the permanent injury of the vocal organs; and that the school songs of to-day are distinctly meaner both in music and in words than they ought to be.

Besides having a little sheaf of songs of Canadian origin, we Canadians have a proper inheritance in the ancient hymns of the Church, in the Christmas Carols, in the national and folk songs of England, Ireland, Scotland, and France; and it is a thousand pities that our children should not be learning and singing these in school and out, instead of contenting themselves with characterless songs from American so-called "School Song" books, and scraps of contemptible ballads gleaned from vaudeville. For the upper five grades of the common school there should be no great difficulty in selecting good songs; and such songs, as well as being precious in melody and in literary quality, will often associate themselves with our common religious and moral experiences, or with historical and geographical incident. Consider, for example, such Christmas songs as "It came Upon a Midnight Clear," "We Three Kings of Orient Are;" ancient hymns like "Conquering Kings their Titles Take," "The Strife is O'er, the Battle Won," "O Come, all ye Faithful;" songs associated with our past and the countries of our forefathers, such as "Flowers of the Forest," "Caller Herrin'," "Tara's Hall," "She is Far from the Land," "Rule Britannia;" national hymns, as those of France, Germany, Russia, Denmark; Canadian songs, such as the stately "O Canada," which was sung with effect at the Quebec Tercentenary, and "A Canadian Boat Song."

Either the Tonic Sol Fa or the Staff Notation may be taught. Some teachers prefer to commence with Tonic Sol Fa and to introduce the staff notation in grade IV or grade V. In Great Britain the tonic sol fa is found to be so easy and universal, that ballad and song music in the magazines is printed in this simple notation.

### Grade I.

**Material:** Rote-songs; motion songs.

**Voice Training** in clear articulation and in purity of tone. Insist on soft, light tones. Surround monotone singers with good singers and encourage them to listen to voices near. (These little people should receive daily attention.) Sing with expression.

**Ear Training:** Imitation; recognition of a few well-known melodies. Establish the scale by rote and rote-melodies. Develop sense of rhythm thru gestures and especially in the motion songs.

### Grade II.

**Material:** Same as First Grade.

**Voice Training:** Same as First Grade.

**Ear Training:** Tests in short, simple, rhythmical phrases of intervals of tonic, dominant and sub-dominant chords. Recognition of a few new well-known melodies.

**Sight Singing:** (a) Tune. Develop divided scale and intervals of dominant, tonic and sub-dominant chords, and point same on staff. (b) Time. Rhythmical gesture continued. Sing and study simple rote songs from picture notation of the same.

### Grade III.

**Material:** Chart No. 1. (New Educational Course: Ginn & Co.). Rote songs, supplied.

**Voice Training:** Same as First Grade.

**Ear Training:** Recognize melodic phrases, tonic, dominant, subdominant chords. Discrimination between two, three and four-part measure. Recognition of melodies suggested.

**Sight Singing:** (a) Tune. Elements of written music taught thru representation of rote songs. Application made of this knowledge. (b) Time. Rhythmical gesture continued. Develop simple forms of two, four and three-part measure. Sing melodies from chart as outlined.

### Grade IV.

**Material:** New First Reader. (New Educational Course).

**Voice Training:** Require strict application of principles already taught.

**Ear Training:** More difficult tests. New melodies for recognition.

**Sight Singing:** (a) Tune. Develop sharp four thru rote song. Application of principles already mastered.

(b) Time. Develop equally divided beat thru rote songs. Melodies studied from Reader, as outlined.

Teach letters of staff, different kinds of notes and rests, and names of keys.

**Musical Interpretation:** Learn meaning of expression marks found in songs studied, and practise voice-control and expression.

### Grade V.

**Material:** New Second Reader. (New Educational Course).

**Voice Training:** Exercises suggested.

**Ear Training:** Same as Fourth Grade.

**Sight Singing:** (a) Tune. Further application of sharp four. Rounds.

(b) Time. Develop dotted note. Melodies selected and outlined every month. Written work as suggested.

**Musical Interpretation:** Same as Fourth Grade.

### Grade VI.

**Material:** New Third Reader. (New Educational Course).

**Voice Training:** Exercises suggested.

**Ear Training:** Same as Fourth Grade.

**Sight Singing:** (a) Tune. Chromatic tones developed as they occur. Two-voiced work continued.

(b) Time. Fifth Grade work continued.

Melodies studied from Reader, as suggested in month's outline. Written work as suggested.

**Musical Interpretation:** Same as Fourth Grade.

### Grade VII.

**Material:** New Third Reader. (New Educational Course.)

**Voice Training:** Exercises suggested. Use great care in treatment of boys' voices. Careful assignment of parts.

**Ear Training:** Sixth Grade work continued. Recognize major and minor melodies.

**Sight Singing:** (a) Tune. Chromatic drill continued. Three-voice work developed. Minor mode.

(b) Time-reading.

Melodies studied from Reader as suggested in month's outline. Written work as suggested.

### Grade VIII.

**Material:** New Fourth Reader (New Educational Course). Seventh Grade work reviewed, if necessary. This year should be spent in studying beautiful songs, applying principles previously mastered. Special attention to musical culture in its broad sense.

Handbook of method in teaching music from the staff: Rix's "Manual of Music", pub. by Macmillan, (price \$1.00), or Newton's Handbook to the New Educational Music Course.

Handbook of Motion Songs for first four grades; "Motion Songs," by Mabel L. Pray, price 40 cts. pub. by D. C. Heath, Boston).

### ALTERNATIVE COURSE.

#### Tonic Sol fa, with Transition to Staff Notation.

##### Grade I.

*Doh, me, so*, from manual signs and blackboard modulator.

##### Grade II.

One—*doh, soh*—one, *te, ray*, from hand signs and blackboard modulator. Simple melodic phrases on these tones from blackboard, but without time forms.

##### Grade III.

Scale completed. Simple tunes from blackboard.

*Time*:—Whole pulses, whole pulse continuations and silences.

*Harmony*:—To sing three or four successive pairs of harmonizing tones from hand signs and blackboard or modulator.

##### Grade IV.

*Tune*:—Grade IV section in children's singing books (School Day Melodies, Part I). To sing while pointing on modulator, very simple tunes with plain pulses. The children, to do this work advantageously, must first memorize the tune correctly both in time and tone.

*Time*:—Half pulses. Practise on time chart.

*Harmony*:—Practise as in Grade III. Rounds and two-part singing from books.

*Ear Exercises*:—Do, me, soh, one-doh, soh-one.

##### Grade V.

*Tune*:—Grade V in singing books. Point and sing from modulator.

*Time*:—Half pulse continuations. Time chart.

*Harmony*:—Practise as in previous grades from hand, blackboard and modulator. Tunes and rounds from singing books. *Tuning exercises*.

*Ear Exercises*:—Te and ray. Groups of two or three of the tunes previously studied, as ear exercises.

*Time Ear Exercises*:—Taa, Taa-aa.

### Grade VI.

*Tune*:—Singing books silences Fe and Ta. Simple transitions on modulator.

*Time*:—Half-pulse silence.

*Harmony*:—Practise as in previous grades, and books. *Tuning exercises*.

*Ear Exercises*:—Fah and lah. Simple groups of tones.

*Time Ear Exercises*:—Taa-tai.

### Grade VII.

*Tune*:—Books. Practise in transition. Half tones of scale.

*Time*:—Quarter pulses.

*Harmony*:—Tunes. Rounds. *Tuning Exercises*.

*Ear Exercises*:—Write tones of a simple phrase from teacher's singing to laa.

*Time Ear Exercise*:—Taa aa-tai.

### Grade VIII.

*Tune*:—Minor mode begun. Simple staff exercises on scale tones.

*Time*:—Quarter pulse combinations. In staff notation—whole, half and quarter notes in 3-4, 2-4, and 4-4 time with written exercises. Whole, half and quarter rests.

*Harmony*:—Tunes and rounds. Three part singing begun.

*Ear Exercises*:—As in Grade VII, extended.

*Time Ear Exercise*:—Taa-sai, saa-tai.

**Grade IX.**

*Tune*:—Minor mode and practise from books. In staff notation, —Key signatures with letter-names of lines and spaces. Symbols for half tones, simple transitions and minor mode phases.

*Time*:—Quarter pulse silences and continuations, and thirds of a pulse. In staff notation,—Use of dot after a note or rest. 3-8 and 6-8 time. Eighth rests.

*Harmony*:—Three part singing.

*Ear Exercise*:—Phrases with half tones.

*Time Ear Exercise*:—Ta-fe-te fe, taa-te-fe, taa faa tai.

Detailed instruction in developing the points specified in the course of study will be found in "The Song Teacher's Guide," the new hand book for teachers. A valuable feature of this text book is the group of specimen lessons, which should prove particularly useful to young teachers.

"School Day Melodies," the singing book for the children, has been prepared with special reference to the requirements of the course of study in music. It contains absolutely all that is necessary for the full course in Tonic Sol Fa—the Songs, Exercises for Tuning, Time, etc., are all exactly classified and grouped according to the different grades, enabling the teacher to attain the best results without expending unnecessary labor in blackboard transcriptions. A copy of this book should be in the hands of every pupil above Grade III. Children of the primary grades may be taught a few simple songs by rote in addition to the work laid down in the course of study. The *words* of such song may be written on the blackboard, but not the *notes*, as we should avoid as far as possible, *having the children make any use of material which they have not yet been trained to understand.*

## NOVA SCOTIA PROVINCIAL EDUCATIONAL ASSOCIATION.

[*Provisional Program.*]

The Provincial Educational Association of Nova Scotia will meet in Halifax on the 27th, 28th and 29th of August, 1912.

*Tuesday 27th.*

- 9 a. m. Enrolment.
- 10 a. m. Opening address by the Superintendent of Education. Appointment of Committee on Resolutions. (Subjects not on the Program may be presented thru this Committee for discussion by the Association.)
- 11 a. m. Proposed Course of Study for Elementary Schools submitted by Dr. Soloan, Chairman of the Committee.
- 2 p. m. Discussion on the Proposed Course of Study, introduced by Principal Butler, Halifax, and Professor DeWolfe, Normal College.
- 8 a. m. Conversazione. Addresses of Welcome by Dr. Blackadder, Chairman Halifax School Board; Commissioner Harris; and Principal Sexton, Technical College, Replies by Inspector Macdonald, Principal Brunt, and Dr. Soloan. Refreshments.

*Wednesday 28th.*

- 9 a. m. How to Improve the Professional Standing of Teachers and retain them in the Profession. Discussion.
- 10.30 a.m Humanistic Culture thru English Literature.
- 11.30 a.m Meeting of the Nova Scotia Teachers' Union, Principal Creelman presiding.
- 2 p. m. Discussion on the Elementary Course of Study (continued).
- 8 p. m. Public Meeting. Speakers: His Grace Archbishop MacCarthy; President Mackenzie of Dalhousie University; Principal Cumming, Agricultural College.; Chairman Robertson, of the Royal Commission on Industrial Training and Technical Education; Rev. Mr. Cohoe, Halifax.



*Thursday 29th.*

- 9 a. m. Teachers' Salaries, Inspector MacIntosh. Discussion: Principal Brunt, Principal O'Hearn, and others.
- 10.30 a.m. Vocational Education: Chief Superintendent Carter, N. B. Discussion: Dr. J. W. MacMillan, Principal Sexton, and others.
- 2 p. m. Election of Executive Committee and of Representatives on Advisory Board.  
Report of Committee on Resolutions.  
Discussion.

Colleges, School Boards and Teachers' Institutes are invited under the School Regulations to send delegates.

The usual railway reductions may be expected.

**A. McKay,**  
*Secretary.*

Halifax, 29th April, 1912.

---

**TEACHERS' UNION OF NOVA SCOTIA.**

**Notice.**

A circular from the *Teachers' Union* was sent last winter to every teacher in the Province. Will those who receive their circular after the Inspector's visit kindly send their answer "yes" or "no" to their Inspector. We desire a complete vote. A post card costs but one cent. Write your Inspector the day you read this, if you have not already answered.

**W. A. Creelman,**

President, Teachers' Union.

10th April, 1912, Sydney, N. S.

---

**EDUCATIONAL ASSOCIATIONS AND INSTITUTIONS.**

*(Regulations.)*

**Provincial Educational Association.**

133. The Superintendent of Education shall have authority to assemble biennially or annually, if desirable, at the Normal College, or any other place which may be approved by two-thirds of the exec-

utive committee hereinafter provided for, a provincial educational association, whose object shall be to promote the efficient operation of the public school system, and the professional improvement of its members by the discussion and elucidation of educational problems.

134. The membership shall be:

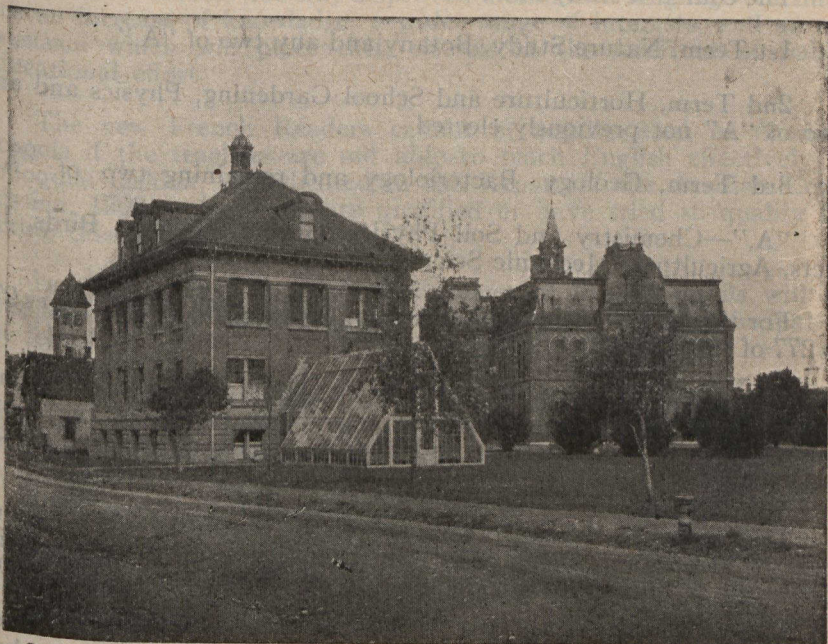
- (a) Representative members entitled to enrolment on the payment of one dollar at each annual convention; *Ex officio*, the Superintendent, the principal and professors of the Normal College, the provincial examiners, the inspectors of schools, and the presidents of the universities within the province; *Elective*, one professor from each university chosen by the faculty, one teacher for every twenty in each inspectorial division chosen by the institute (or in the event of its failure by the inspector), one delegate chosen by any school board or group of school boards employing twenty teachers; or by any learned trade, industrial society or organization of provincial scope.
- (b) Ordinary Members consisting of persons interested in any way in public education are entitled to enrolment on the payment of one dollar at each annual convention.

135. The Superintendent, the principal of the Normal College, and twelve other persons chosen at each annual convention by the ordinary members of the association, one of whom shall be from each inspectorial division, shall constitute the executive committee, which shall have control of all funds raised by the association, and shall appoint its own secretary-treasurer to receive and disburse those funds under its own direction. The executive committee shall have general management of the affairs of the association, especially in respect to the fixing of the times of meeting and the program of exercises, subject to the approval of the Superintendent.

136. The association shall appoint a secretary, and, if necessary, an assistant secretary, who shall keep a record of the proceedings of the meeting, and forward a written report of the same to the Superintendent.

137. The Superintendent shall preside at the meetings of the association and of the executive committee. At his request another member may preside. In his absence the principal of the Normal College or the senior inspector present shall take his place.

138. The Superintendent is authorized to use the Normal College building and appliances for the meeting of the association when held in Truro, and the principal and professors will aid to the extent of their power in promoting the success of such meetings.



**RURAL SCIENCE SCHOOL.**

The next session of the Rural Science School will be held in Truro from July 10th to August 9th, 1912. This school is in affiliation with the Provincial Normal and Agricultural Colleges and all the laboratory equipment and resources of these institutions are available for the work of the school. The facilities for scientific study are, therefore, exceptionally good.

The Rural Science School is, under authority of the Council of Public Instruction, the only appropriate source of Rural Science Diplomas and Certificates qualifying for additional Government grants.

The course of study extends over three sessions and leads to the Rural Science Diploma. A student, however, who attends for *one* session and passes the examinations and tests on the subjects of study for the term is eligible for an additional Government Grant of \$15 for the following school year—see Manual of School Law, 1911, page 30, Sec. 72. This means that *every* student, who attends the School for one year, may obtain the equivalent of, at least, a \$15 Scholarship. Besides, the Government will pay the *minimum* transportation cost of all Nova Scotia teachers attending the school.

Under the revised regulations (Manual of 1911, page 137), the holder of a Rural Science Diploma may obtain an additional grant of \$30 per annum, whether or not the school section furnishes a School Garden, provided other conditions are satisfactory.

The course of study has been arranged as follows:

1st Term, Nature Study, Botany and any two of "A."

2nd Term, Horticulture and School Gardening, Physics and any two of "A" not previously elected.

3rd Term, Geology, Bacteriology and remaining two of "A."

"A,"—Chemistry and Soil Physics, General Biology, Birds, Insects, Agriculture, Mechanic Science.

For the details of the Courses see regulations 263 to 280, pages 270 to 277 of the Manual of School Law, 1911.

Equivalent work done in Colleges, High Schools or Summer Schools may exempt students from attendance in any of the above classes, but the examinations and tests of the Rural Science School must be passed before any Certificate or Diploma is awarded.

Instructors in Physical Training will be furnished by the Department of Militia and Defence, so that attending students may qualify for the grade "B" certificate required of all teachers above class "D."

Tuition is *free*. Railways grant single fare on the Standard Certificate plan. An extra week of vacation may be obtained by teachers as in Regulation 145, notwithstanding the second clause of that Regulation in the Manual of 1911.

With the liberal provisions that have been made to encourage teachers in the teaching of Rural Science, it is hoped that as many as possible will embrace the opportunity offered.

For further information regarding boarding houses, etc., address M. Cumming, B. A., B. S. A., Director, Truro, N. S.

### CLASSES FOR BILINGUAL TEACHERS.

Classes in language-methods for bilingual teachers in Acadian schools will open on Tuesday, July tenth, and continue till Friday, August ninth. Applications for admission should be sent as early as possible to the principal of The Provincial Normal College, Truro.

In view of the very attractive program of work offered this summer in the department of advanced biology, elementary agriculture, nature-study, music, manual training, and physical drill, it is expected that the attendance will be large.

Our Acadian teachers, it is expected, will avail themselves as fully as possible of the opportunities offered in the above classes, carrying

back to their schools not only improved methods in language-teaching, but an increase of knowledge, a wider range of interests, and an enthusiasm which will place their schools in the forefront of public educational effort.

The new French Readers cannot be legally used in Acadian Schools if the teachers are not able to teach English effectively in colloquial fashion, as indicated in the Report of the Acadian Commission, 1902, unless they are qualified or have tried to qualify by taking this course.

In the language course, model classes of French pupils will be conducted by pupil-teachers, under the direction of the principal of the school.

Minimum travelling expenses will be paid to students who are regularly employed teachers in Acadian communities, and who speak both languages with fair fluency.

For particulars respecting the Bilingual School apply to

**David Soloan, LL. D.,**  
Principal, Normal College,  
Truro, N. S.

Or to the Instructor,

**Mr. Louis A. d'Entremont,**  
West Pubnico,  
Yarmouth, Co.

### SUMMER SCHOOL OF SCIENCE FOR THE ATLANTIC PROVINCES OF CANADA.

The twenty-sixth Annual Session of the Summer School of Science for the Atlantic Provinces of Canada, will be held at Yarmouth, N. S., July 10th to 31st, 1912. Courses will be given in the following subjects.

|                 |                                  |                      |
|-----------------|----------------------------------|----------------------|
| Agriculture     | by Prof. D. W. Hamilton, Ph.D.,  | Fredericton.         |
| Botany          | by Prof.                         |                      |
| Chemistry       | by Prof. H. E. Bigelow, Ph. D.,  | Sackville.           |
| Drawing         | by Prof. H. H. Haggerman, M.A.,  | Fredericton.         |
| Geology         | by Prof. D. S. McIntosh, M. Sc., | Halifax.             |
| Literature      | by Mr. S. A. Starrat, B. Sc.,    | Roxbury, Mass.       |
| Manual Training | Miss M. Alethea Wathen,          | Fredericton.         |
| Physics         | by Mr. T. C. McKay, Ph. D.,      | Socorro, New Mexico. |
| Physiology      | by Mr. W. S. Rich, M A.,         | Malden, Mass.        |
| Zoology         | by Prof. H. G. Perry, M. Sc.,    | Truro.               |

The courses cover the requirements in these subjects for the schools of the Atlantic Provinces. In addition to these, there will be a course in Physical Training which qualifies for the B certificate.

Through the munificence of public men, in the three Provinces, upwards of *Sixty Scholarships* of from \$10 to \$20 will be offered for competition.

Any information in reference to the School can be obtained by applying to the Secretary,

**Mr. J. D. Seaman,**

63 Bayfield Street,

Charlottetown, P. E. I.

---

**THE NATIONAL EDUCATION ASSOCIATION OF THE U. S. A.**

will be held in **Chicago**, Illinois, from the 6th to the 12th July, 1912. The National Council meets on the 6th, and the general sessions of the Association commence on the 8th and close on the 12th July.

**Irwin Sheperd,**

The Secretary, N. E. A.,

Winona,  
Minn., U. S. A.

**Local Secretary.**

Mr. George M. Spangler, Jr.,

Manager Bureau of Conventions,

Chicago Association of Commerce,

20 West Jackson Boulevard,  
Chicago, Ill.

---

**LEAGUE OF THE EMPIRE.**

**Imperial Conference of Teachers' Associations.**

July 12th to 16th (inclusive), 1912.

Caxton Hall, Westminster, London, England.

**AGENDA.**

(Draft.)

**First Session, Friday, July 12th, 11 a. m. to 1:30 p. m.**

Address of Welcome.

Training of Teachers.

- (a) Vocational training in the different Countries of the Empire. Length of training—conditions of training. (Professional and University.)
- (b) A common standard for Teachers' certificates and mutual recognition of such certificates thruout the Empire.

**Second Session, Friday, July 12th, 2:30 to 5 p. m.**

Migration of Teachers.

- (a) For advantages of travel-study and for attending courses of lectures and for opportunities for observation and practical work in the Schools of other Countries.
- (b) For purposes of conference and co-operation.
- (c) For temporary interchange of appointments in different parts of the Empire.

**(a) Third Session, Saturday, July 13th, 10 a. m. to 1 p. m.**

1. Rural Schools, their curriculum and organization.
2. The value of practical subjects, including housecraft and handicraft, in the training of the child.

**(b) Third Session, The Teaching of Greek and Latin.**

**Fourth Session, Saturday, July 13th, 2:30 to 5 p. m.**

Co-ordination in Education.

The connexion between the Elementary and the Secondary School:—

- (a) In respect to curricula.
- (b) In respect to the transfer of scholars.
- (c) In regard to the promotion of teachers.

**Fifth Session, Monday, July 15th, 10 a. m. to 1 p. m.**

Technical Education:—

- (a) In its relation to local industries.
- (b) In its relation to general scientific and trade research.

**Sixth Session, Monday, July 15th, 2:30 to 5 p. m.**

1. The teaching of Local History and Nature Study.

2. The interchange of information and specimens as between schools in different parts of the Empire.

**Seventh Session, Tuesday, July 16th, 10 a. m. to 1 p. m.**

1. The English Language and Literature.

(a) Difficulties of pure pronunciation.

(b) Advantage of the visual help of pictures and lantern slides in the teaching of English literature.

2. Physical Education.

Physical Exercises as a training for co-operation in the body politic.  
Demonstrations.

**Eighth Session, Tuesday, July 16th, 2:30 to 5 p. m.**

1. The importance of including subjects which serve to train the character and taste.

2. The place of History and Geography in Education.

Closing Address.

**EXAMINATION TIME TABLES, 1912.**

Monday, 1st July, being Dominion Day, the papers usually set for the first day will be set for Monday, 8th July.

108 (a) TIME TABLE.

**County Academy Entrance Examination, June, 1912.**

| Date.               | Time.           | Subject.                     |
|---------------------|-----------------|------------------------------|
| Thursday 27th June. | 9 to 11 a. m.   | 2. English Language.         |
|                     | 2 to 3.30 p. m. | 3. Drawing and Book-keeping. |
|                     | 3.30 to 5 p. m. | 4. Geography and History.    |
| Fri. 28th June.     | 9 to 11 a. m.   | 6. Mathematics.              |
|                     | 2 to 3.30.      | 5. General Knowledge.        |

1. **Reading** to be examined at the end of each session, or whenever found most convenient by the Principal.



(b) TIME TABLE.

Regular Provincial High School Examination, July, 1912.

| Day of Week           | Grade                    | Examinations<br>9 a. m., to 11 a. m.         | Examinations<br>11 a. m., to 1 p. m. | Examinations<br>3 p. m., to 5 p. m.                            |
|-----------------------|--------------------------|--|--------------------------------------|--|
| Tuesday<br>2nd July.  | XII.<br>XI.<br>X.<br>IX. | English (a)<br>English<br>English<br>English | Greek (b)<br>Greek<br>Greek          | French.<br>French.<br>French.<br>French.                       |
| Wedn'day<br>3rd July. | XII.<br>XI.<br>X.<br>IX. | Geometry<br>Geometry<br>Geometry<br>Drawing. | Ancient History                      | Physics.<br>General History.<br>English History.<br>Geography. |
| Thursday<br>4th July. | XII.<br>XI.<br>X.<br>IX. | Algebra<br>Algebra<br>Algebra<br>Algebra     | Latin (a)                            | Botany.<br>Physics.<br>Chemistry.<br>Science.                  |
| Friday<br>5th July.   | XII.<br>XI.<br>X.<br>IX. | Latin (b)<br>Latin<br>Latin<br>Latin.        | English (b)                          | Trigonometry.<br>Pract. Math.<br>Arithmetic.<br>Arithmetic.    |
| Monday.<br>8th July   | XII.<br>XI.<br>X.<br>IX. | German.<br>German.<br>German.                | Greek (a)                            | Chemistry.   |

(c) TIME TABLE.

M. P. Q. Examination. 6th July, 1912.

Saturday.

| Time a. m.     | Subject.                  | Time p. m.   | Subject.                 |
|----------------|---------------------------|--------------|--------------------------|
| 9.00 to 10.00  | 1. School Law and Forms.  | 2.00 to 3.00 | 4. School Management.    |
| 10.10 to 11.10 | 2. Theory and Practise.   | 3.10 to 4.10 | 5. History of Education. |
| 11.20 to 12.20 | 3. Hygiene and Temperance | 4.20 to 5.20 | 6. Pedagogy.             |

109.

## TIME TABLE.

## UNIVERSITY GRADUATE EXAMINATION,

## AT THE NORMAL COLLEGE, TRURO.

|        |               |  |
|--------|---------------|--|
| 2 July | 9 to 12 A. M. | Latin (higher, A) and Latin (lower).             |
|        | 2 to 5 P. M.  | French (higher, A) and French (lower).           |
| 3 July | 9 to 12 A. M. | English (higher, A) and English (lower).         |
|        | 2 to 5 P. M.  | Mathematics (higher, A) and Mathematics (lower). |
| 4 July | 9 to 12 A. M. | Science (higher, A) and Physics (lower).         |
|        | 2 to 5 P. M.  | Science (higher, B) and Latin (higher, B).       |
| 5 July | 9 to 12 A. M. | English (higher, B) and Mathematics (higher, B). |
|        | 2 to 5 P. M.  | Greek (higher, B) and French (higher, B).        |
| 6 July | 9 to 12 A. M. | German (higher, B) and *Chemistry (lower).       |
|        | 2 to 5 P. M.  | *Biology (lower) and *Geology (lower).           |
| 8 July | 9 to 12 A. M. | Greek (higher, A) and Greek (lower).             |
|        | 2 to 5 P. M.  | German (higher, A) and German (lower).           |

\*If these papers cannot be given out because some candidate desires to take an examination in the simultaneous paper, they will be given to candidates at an hour announced by the examiner in charge, possibly on Monday or Tuesday following. In 1912, as there are only four candidates, a contracted time table from July 2nd to 6th will be mailed to each candidate.

## STRATHCONA PHYSICAL TRAINING PRIZES.

To be competed for in *School year, 1911-1912.*

The present twelve inspectorates of the Province shall be the Provincial sub-divisions for supervision of, and competition in, Physical Training for the Strathcona prizes which shall be apportioned for 1911-1912 to each inspectorate in proportion to the annual school enrolment of the previous year.

## PHYSICAL TRAINING PRIZES.

|              |    |           |                |       |
|--------------|----|-----------|----------------|-------|
| Division No. | 1  | Inspector | Creighton..... | 70.11 |
| " "          | 2  | "         | MacIntosh..... | 42.25 |
| " "          | 3  | "         | Bruce.....     | 35.36 |
| " "          | 4  | "         | Morse.....     | 37.38 |
| " "          | 5  | "         | Robinson.....  | 39.89 |
| " "          | 6  | "         | MacDonald..... | 26.97 |
| " "          | 7  | "         | Macneil.....   | 21.92 |
| " "          | 8  | "         | MacKinnon..... | 22.28 |
| " "          | 9  | "         | Armstrong..... | 28.01 |
| " "          | 10 | "         | Craig.....     | 40.23 |
| " "          | 11 | "         | Phelan.....    | 61.96 |
| " "          | 12 | "         | Campbell.....  | 23.64 |

\$450 00

The inspector shall award the prizes for physical training within his own inspectorial division. The total amount of each prize shall be paid to the teacher who shall apply *one third*, with the approval of the inspector and trustees, to some appropriate object to be permanently displayed in the school room as a memento. The following competition sub-divisions of each inspectorial division are intimated, for the present year, 1911-1912.

No. 1. Total amount to be divided into four equal sums each for (1) Halifax City, (2) West Halifax, (3) East Halifax, and (4) Rural Halifax. First, second, and third prizes in each respectively, in the ratio of \$7.00, \$5.00 and \$3.00

No. 2. A first and second prize, respectively, to each of the following three sub-divisions of the inspectorate, sections having organized Cadet Corps, being excluded from the competition—(a) Lunenburg County East of the LaHave River, (b) Lunenburg County West of the LaHave River and (c) Queens County.

No. 3. One prize to each of the following four sub-divisions, (a) Yarmouth, (b) Argyle, (c) Barrington, and (d) Shelburne. Sections having a Cadet Corps to be excluded.

No. 4. One prize to each of the four sub-divisions of the inspectorate, (a) Annapolis East, (b) Annapolis West, (c) Digby and (d) Clare. Two second prizes, one for Annapolis Co., and one for Digby Co. Sections having Cadet Corps to be excluded from the competition.

No. 5. One prize in each of the four following sub-divisions of the inspectorate, (a) Hants East, (b) Hants West, (c) Kings East (including Kentville, Blue Mt., Lake Mills, Alton, Pine Woods, Steam Mill, Centreville and East Halls Harbor), and (d) Kings West. Sections with Cadet Corps excluded.

No. 6. Three prizes, first, second and third to each of the Districts of Antigonish and Guysboro; and two, a first and second, to the District of St. Mary.

No. 7. Two prizes to the ratio of 3 to 2 to South Inverness District, and two similar prizes to Richmond District.

No. 8. Two prizes each for (a) Inverness North, south of the Margaree River, and (b) Inverness North, north of the Margaree; (c) for Victoria Co. Sections with Cadet Corps excluded.

No. 9. Two prizes of equal value for (a) West Pictou and, (b) East Pictou. Sections with Cadet Corps excluded.

No. 10. One prize for each of the following sub-divisions (a) ungraded schools east of the I. C. R. and north of its branch, the "Short Line," (b) ungraded schools to the west of the I. C. R. and

south of the "Short Line," (c) Graded schools not in the incorporated towns. (d) A first and second prize for the schools in the incorporated towns.

No. 11. Two-thirds of the total amount to be awarded to the graded schools of the Division in five prizes in the proportion of 9, 8, 7, 6, and 5; and one-third of the total amount to be awarded to the ungraded schools of the Division in three prizes in the proportion of 7, 6, and 5.

Departments any of whose pupils belong to Cadet Corps to be excluded.

No. 12. North Colchester one prize. West Colchester one prize. South Colchester two prizes. Sections having a Cadet Corps will not be eligible for competitions.

### **Physical Training Imperative in all Schools.**

Altho Third class teachers are not required to have a certificate of qualification to give physical training in school as it should be given, they are nevertheless required to qualify as far as possible, and to give the most suitable exercises from the prescribed text, to the conditions of the school. This is one of the health precautions imperative in every school.

Every teacher of class higher than third must satisfy the Inspector that the exercises suitable to the conditions of the school are being regularly given to the pupils according to the prescribed text. Neglect or inefficiency in this respect on the report of the Inspector will render the teacher liable to a reduction of Provincial Aid to the next lower class.

To assist the Inspectors in making the allotment of Prizes for Physical Training from the Strathcona Trust, a report in the sub-joined form should be sent by each Principal (or Teacher in case of ungraded schools) to the Inspector on or before the 31st of May.

Report of Physical Training, in.....school,  
 Section No ..... District of.....for school year begin-  
 ning August 191.....

| Name of Teacher. | No. of lessons in P. T. per week. | No. of minutes per week given to Recreative exercises. | Remarks. |
|------------------|-----------------------------------|--|----------|
|                  |                                   |  |          |

.....Principal.

**Note.**—Column 2 “lesson” means the period of 20 minutes or more, devoted to teaching a Table.

Column 3, “Recreative Exercise” is the short break in each long period during which the pupils are vigorously put thru one or more familiar exercises.

**Physical Training Courses.**

Physical Training Courses for Teachers will be conducted at the Rural Science School, Truro, N. S., from 10th July to 6th August, 1912, and at the Atlantic Summer School of Science at Yarmouth, N. S. from 10th July, to 31st July, 1912.

After 1912 only such Male Teachers as are already in possession of a Grade "B" Physical Training Certificate will be permitted to attend the Cadet Instructor's Courses. Teachers contemplating applying for the latter course next year, should qualify in Physical Training this year.

### Physical Training Text Books.

In all the schools of the Province, the Physical Training will follow the "Syllabus of Physical Exercises for Schools", Canadian edition, 1911, published by the Executive Council, Strathcona Trust.

It is designed to furnish a uniform standard of training in this subject thruout the Dominion and is practically a reprint of the Syllabus authorized by the British Board of Education.

These books can be obtained from Messrs. T. C. Allen & Co., 124 Granville St. Halifax, N. S.; or from The Copp Clark Co. Ltd., Toronto, Ont.

**Changes.**—Wherever the expression "Half Right (or Left) Turn" occurs, as in Table 64 and following, Substitute "Right (or Left) in-cline."

Table 64—Group 1, b.—

"With Turning Feet—Change" is performed in four motions.

The explanatory Note should read "First the Left Foot is brought back, then the usual Right Turn is made in two motions; the Right Foot then lunges outward on the fourth motion."

### Military Training.

There will be a six weeks Course to qualify male teachers as Cadet Instructors during the Summer Vacation opening about July 10th, 1912. This Course will be held either in Halifax or at a Camp of Instruction. Any teacher wishing information as to details of the course may obtain same on application to the Organizer and Inspector of Cadet Corps, The Armouries, Halifax, N. S.

Free transportation will be granted to the place of training, and return transportation to those who succeed in obtaining a certificate.

### Applications.

As only a limited number can take the course this year, preference will be given to those teachers most likely to be of some value in the Corps of School Cadet Instructors. Application containing full name, Militia Rank if any, and name and address of the School in which the applicant is at present employed should be sent to the Superintendent of Education thru the Inspector of the Division, not later than June 6th. The Inspector will forward the application with a minute as to the

probable value of the applicant for cadet work, having regard to his work in school during the past year. Applications should reach the Education Office before June 12th when those admitted are notified.

### The Course.

The Course will include.—

- (a) The Syllabus of training for Lieutenants (Infantry).
- (b) Scouting, (Baden Powell's "Scouting for Boys").
- (c) Physical Training for Schools.

After 1912, no application for a Cadet Instructor's course will be considered unless the applicant already holds a Grade "B" Physical Training certificate.

### Corps of School Cadet Instructors.

Teachers who qualify as cadet instructors and who are actually instructing a *bona-fide* organized and gazetted Cadet Corps, will be appointed to the Corps of School Cadet Instructors with the rank of Lieutenant in the Militia. The mere fact of holding a Cadet Instructor's certificate will not, however, be considered sufficient qualification for according Militia Rank.

A lieutenant in the corps of School Cadet Instructors, after having for three years successfully instructed a cadet corps, may be permitted to attend a Military School of Instruction in order to qualify for the rank of captain, and to receive the same pay and allowances as qualified lieutenants of the Militia for similar attendance.

A lieutenant in the Corps of School Cadet Instructors may be promoted to the rank of Captain, after having been a Lieutenant in the Corps for five years, and having for successive years, satisfactorily instructed a cadet corps, provided he has passed the qualifying course required for promotion to Captain in the Active Militia and qualified at the Canadian School of Musketry."

### Uniform for Corps of School Cadet Instructors.

Jacket—Reefer or double breasted pattern of blue black cloth or serge, or ordinary civilian sack coat length; fastened in front by two rows of four buttons each, of Canadian Militia pattern.

Sleeves to be plain, with two small buttons of Canadian Militia pattern at bottom of back seam. Shoulder straps, blue cloth, with gilt metal rank badges.

Trousers—Of serge to match color of jacket; no stripe at seams

Cap—Forage, N. P.

Uniform and equipment to be provided by the officers of the corps, as is done by other officers. (H. Q. 1798-3-2.)

### Allowances to Cadet Instructors.

For the training of a Cadet Corps during the school year, subject to the certificate of a military Inspecting Officer that the Cadet Corps has been well instructed in the course of military training laid down for it, allowances may be paid to qualified Cadet Corps Instructors as follows:—

(a) To a school teacher possessing a cadet instructor's certificate, or its equivalent, as may be determined by Militia Headquarters, who is a lieutenant in the Corps of School Cadet Instructors or a member of some other corps of the Active Militia and who instructs a corps affiliated with his school:—

\$1.00 per cadet up to a maximum of 50

.75 per cadet over 50 and up to 100

.50 per cadet over 100.

(b) The instructional allowance calculated as in (a) less 10% will be paid to a school teacher not possessing a cadet instructor's certificate, or its equivalent, for instructing a Cadet Corps affiliated with his own school, if he is eligible for the appointment of cadet instructor on account of being an officer in the Active Militia or on the retired list, having at least a lieutenant's certificate; or a warrant officer or non-commissioned officer of the Active Militia possessing a sergeant's certificate from a Royal School of Military Instruction; or an exmember of the Permanent Force, or of the Imperial Army, possessing an honorable discharge certificate and having been a non-commissioned officer, or having qualified for the rank of Corporal.

(c) For instructing a Cadet Corps affiliated with a school other than his own, a school teacher qualified as in (a), will receive the instructional allowance less 10%, and a school teacher qualified as in (b) the allowance less 20%.

(d) Where no school teacher qualified as in (a) or (b) is available to instruct a Cadet Corps affiliated with an educational institution, any other instructor will receive, if qualified as in (a), the instructional allowance less 20%, if qualified as in (b) the allowances less 25%.

(e) For instructing a Cadet Corps not affiliated with an educational institution, a school teacher qualified as in (a) will receive the instructional allowance less 20%; a school teacher qualified as in (b), the allowance less 25%. An instructor not a school teacher, if qualified as in (a) will receive the instructional allowance less 25%; if qualified as in (b), the allowance less 30%.

(f) A captain in the corps of School Cadet Instructors will receive the allowance he would be entitled to as a lieutenant in the corps of School Cadet Instructors under the above regulations, plus an increase of 50%.



(g) The above allowances will be based on the enrolled strength of the corps, less absentees at the annual inspection for whom leave of absence has not been given or on whose behalf explanations satisfactory to the Inspecting Officer are not given at the time by the C. O. of the Cadet Corps concerned.

(h) In the event of an Inspecting Officer being unable to certify that the corps has been "well instructed in the course of military training laid down for it" he may recommend a special allowance for the instructor where it is evident that good work has been done, and local circumstances prevented the instruction being a complete success. In estimating this amount the Inspecting Officer should consider the number of drills performed and the number of cadets partially trained. This special allowance should not, in any case, exceed one-half the authorized allowance the instructor might have been entitled to under the above regulations.

### School of Musketry, Ottawa.

Courses in Musketry (including Maxim Gun), open to Cadet Instructors and School Teachers, will be given at the Canadian School of Musketry, Ottawa, for a period of six weeks, commencing 10th September.

School teachers who apply for permission to attend these courses must have attended a School of Military Instruction and obtained an Instructor's Certificate.

Applications to attend these courses should be made to the Superintendent of Education not later than the 1st of August. The name of the Railway Station from which a requisition for free transportation will be required should be stated.

Those authorized to take the courses will be promptly notified, and a transport warrant to cover Railway journey will be forwarded.

The actual expenses, such as cab fare, meals, etc., incurred in travelling to and from Ottawa, will be refunded by the Government to those who obtain a qualifying certificate.

### Sub-Target Gun Machines.

(1) It is the desire of the Militia Department to place sub-target gun machines in those educational institutions which may have a teacher qualified as a military instructor.

(2) The space required in which to set up a sub-target rifle machine is 61 1-2 feet from the centre of the base of the target, plus 5 or 10 feet for the recruits and instructor.

In many cases this accommodation is not available and it is suggested that these machines might be usefully employed in smaller space by,

- (a) placing the target at the prescribed distance outside the building and aiming thru a window;
- (b) by placing the target beside or behind the machine and aiming at the reflection of the target in a mirror placed on the wall at half the prescribed distance.
- (3) Forms for application for these machines may be obtained from the Organizer and Inspector, Cadet Corps, Halifax, N. S.
- (4) When sub-target gun machines are out of working order, and the instructor is not able to make the repairs, a report to this effect should be made to the Senior Ordnance Officer, Halifax, N. S., so that an expert may be sent to place the machine in working order.

MEMO. ON CADET CORPS TRAINING, BY THE MINISTER OF MILITIA.

Ottawa, January 20, 1912.

Desiring to enlist the heartfelt sympathy and co-operation of every honest and noble-minded citizen in the work of upbuilding the youth of Canada, I have the honor, respectfully to submit the following for your consideration and, let me hope, your loyal support.

Instinct directs even the lowest creature to protect, to train, and to defend its young. Every worthy citizen now recognizes it to be not only the right, but *the duty* of the manhood of the nation to be so developed that the defence of mother, sister, wife, daughter, sweetheart, home and country is fully assured.

To govern and control humanity, negatively, or by restraint, requires a vast army of policemen, constables, magistrates, judges, jurymen and lawyers, besides expensive jails, prisons, court houses and penitentiaries costing in the aggregate many times more than do all the Canadian Militia with Drill Halls, Armories, Fortifications and warlike material included.

Schools, churches and other philanthropic influences in general, *operating positively*, have accomplished much more for the upbuilding of noble manhood and womanhood than have the *negative influences*. The latter depress; the former uplift the manhood of the nation.

Educationists and others observing human development, further recognize that children trained in drill and calisthenics are improved, physically, mentally, and morally.

They learn the valuable lesson of prompt and rational obedience.

The drill and discipline give them improved bearing, carriage, culture and self-control.

The training fits them, in case of need, to defend their loved ones, their homes, their country; and not to run away leaving those near and dear to the tender mercy of ruthless invaders. Mere willingness to defend one's home and country is, by itself, a weakness. Loyalty untrained is mere lip service. To be effective the 'willing' youth must become the 'trained, willing man.'

And the lad under such training has not been found to be so easily led astray as are those not so disciplined. The criminal ranks are little recruited from the boys so instructed.

Therefore, for the physical, mental and moral upbuilding of noble boyhood and consequent noble manhood; for the more economic and efficient training of the youth

to defend loved ones, homes and country; in brief, for the production of the highest types of citizenship it is essential to have physical and military training placed within the reach of every lad in Canada. This year it is intended to make a beginning by training forty thousand Cadets.

What is learned as a boy is never forgotten as a man. The so-called military training in annual camps as a rule, has been of grown men. Everything good there learned should be known to the boy of twelve years. What is not good should never be known.

The plan of organization embraces the obtaining thru School Inspectors, and that grandest lot of self-sacrificing citizens, the school teachers of the land, returns from every section in Canada of the number of boys, from say twelve years to sixteen years, whether attending school or not, who would desire to attend the camp and be trained for one week, during the latter part of July or early in August. Estimates will then be made of the number to be called from each locality. These will be formed into squads or sections by schools; the schools of a township or similar unit will constitute a company. The Companies from each county will make up a regiment or a brigade, each under the name of its home county, town or township, and school section.

It is generally considered that, for this season, the camps should be held each in the home county, unless in special cases. The Cadets will be transported, camped, fed, and in part uniformed. They will not be paid.

Male school teachers will be welcomed in the camp and will be given the same assistance as the cadets. Their active co-operation is greatly desired.

Officers and non-commissioned of the Militia will also be welcomed under the above terms.

It is especially urged that the clergymen or officers of the several religious organizations take an interest in the work. As a beginning one from each such religious organization represented in a regiment is invited to join in the movement and come to camp with the Cadets, under similar conditions as the teachers.

The co-operation of the physical and military leaders of the Y. M. C. A. is also welcomed and will be utilized to the fullest extent.

In well regulated camps school teachers and clergymen have always been found excellent leaders in games, sports, songs, tattoos, and other upbuilding entertainment. Their influence on the conduct and character of the lads is regarded as essential.

The sale or use of liquor and tobacco in any form in Cadet camps, will not be permitted. It is believed that few, if any, of the respectable lads of Canada, between the ages of twelve and sixteen years, can be found inclined to the use of such things. Even in the ordinary military camps, which will be held as usual at different periods from the Cadet camps the use of such commodities is rapidly disappearing. Such must never appear in a Cadet Camp.

Drill books will be issued to the Cadets, before camp, so that each may study up the various movements and become instructors. Each is expected to perform the act of drilling, of giving instructions, as well as of being drilled, of receiving instructions.

It is hoped that in a very few years, every lad in Canada may be proficient in drill and calisthenics, and be a perfect rifle shot.

To this end Cadet rifles and ammunition will be furnished for each camp.

The antithesis of Militarism is the training of the sons of electors of the country. Once every man understands the use of arms and all work in concert, all danger of the usurping of power by a class of professional soldiers disappears, while the defence of mother, homes and country is assured.

The Officers in each Division and District will furnish all necessary data to those inquiring.

It is confidently hoped that there will be a spirit of honest emulation, of friendly rivalry found in every camp. It is also specially requested that parents and friends in general may seek to make their boys contented and happy by visiting the camps and giving them any comforts available.

In conclusion please permit me to specially request and urge your cordial co-operation and active assistance in this vast and important movement.

SAM. HUGHES.

## TWO CLASSES OF TRAINING IN CANADA.

### THE POSITIVE VERSUS THE NEGATIVE TRAINING.

#### THE UPBUILDING VERSUS THE DEMORALIZING.

**Notes on the Relative cost of Criminal Statistics, and Liquors and Tobaccos, on the one hand, compared with the cost of the Militia Force for Canada, on the other; including a statement showing the Military expenditure of the principal countries of the world.**

In the upbuilding or positive, among other causes, may be classed Schools, Churches, and the Militia, including Permanent Corps, Active Militia, Cadets, Boy Scouts, and Rifle Associations.

In the demoralizing or negative causes, among other things, may be classed the intemperate use of liquors and tobaccos.

#### Canada's Negative Training is made up as follows.

| Year 1909.                   | Male.  | Female. | Total. |
|------------------------------|--------|---------|--------|
| Indictable convictions ..... | 10,098 | 1,356   | 11,449 |
| Summary convictions .....    | 72,764 | 5,739   | 78,503 |
| Totals .....                 | 82,857 | 7,095   | 89,952 |

#### These were disposed of as follows:—

|                                      |        |
|--------------------------------------|--------|
| Sentenced to penitentiary .....      | 1,121  |
| Sentenced to gaol or fine .....      | 73,335 |
| Sentenced to reformatory .....       | 300    |
| Sentenced to death .....             | 18     |
| Sentenced to other convictions ..... | 15,178 |
|                                      | 899,95 |

#### Penitentiaries:—

|   |                  |
|---|------------------|
| Beginning of year 1909 there were ..... | 1,476 prisoners. |
| Added during year .....                 | 894 prisoners.   |
| Released .....                          | 2,370            |
| In at end of year .....                 | 605              |
|   | 1,765            |

The cost of this Negative Army has been shown as follows:—

Police of Canada are more numerous than Canada's Military Permanent corps.

The General Administration of Justice in Canada cost in 1909:—

|                             |             |
|-----------------------------|-------------|
| Dominion government .....   | \$2,600,000 |
| Provincial government ..... | 3,100,000   |
| Municipal government .....  | 2,500,000   |
|                             | \$8,200,000 |

|  |                           |              |
|--|---------------------------|--------------|
| Average .....  | \$1 17 per head.          |              |
| Militia and Defence.....                               | 1 15 per head for 1912-13 |              |
| Police, etc., in cities, additional.....               | \$3,000,000               |              |
| Buildings annually.....                                | 1,000,000                 | \$12,200,000 |
| Average.....   | \$1 75 per head.          |              |
| Lawyers' and witness' fees, prisoners' fines, etc..... |                           | 20,000,000   |
| Total cost of Justice.....                             |                           | \$32,200,000 |

|                          |                           |
|--------------------------|---------------------------|
| Average.....             | \$4 57 per head.          |
| Militia and Defence..... | 1 15 per head for 1912-13 |

These costs do not include shame, humiliation, disgrace, broken hearts and wrecked homes and lives.

It has been further estimated that the cost of producing these costs yearly may be better comprehended by the following:—

In 1909—

|                              |             |             |
|------------------------------|-------------|-------------|
| Customs duty on tobacco..... | \$1,025,640 |             |
| Excise duty on tobacco.....  | 7,254,337   |             |
| Total tobacco duty.....      |             | \$8,279,977 |

|                          |                           |
|--------------------------|---------------------------|
| Average.....             | \$1 18 per head.          |
| Militia and Defence..... | 1 15 per head for 1912-13 |

|                              |             |              |
|------------------------------|-------------|--------------|
| Customs duty on liquors..... | \$6,737,460 |              |
| Excise duty on liquors.....  | 9,495,746   |              |
| Total liquor duty.....       |             | \$16,233,206 |

|                          |                           |
|--------------------------|---------------------------|
| Average.....             | \$2 31 per head.          |
| Militia and Defence..... | 1 15 per head for 1912-13 |

|                                      |  |              |
|--------------------------------------|--|--------------|
| Total duty, tobacco and liquors..... |  | \$24,513,183 |
|--------------------------------------|--|--------------|

|              |                  |
|--------------|------------------|
| Average..... | \$3 50 per head. |
|--------------|------------------|

The above is merely for duty alone.

The wholesale cost is much more; while the retail sale price is very many times greater.

From carefully prepared reports based on personal research as well as from data by the Women's Christian Temperance Union, the following figures are submitted:—

|  |                 |
|--|-----------------|
| Total net cost of liquors consumed in Canada, 1909.....  | \$73,515,757 00 |
| Total net cost of tobaccos consumed in Canada, 1909..... | 21,687,500 00   |
| Total, liquors and tobaccos.....                         | \$95,203,257 00 |

|                          |                           |
|--------------------------|---------------------------|
| Average.....             | \$13 60 per head.         |
| Militia and Defence..... | 1 15 per head for 1912-13 |

|                                    |                 |
|------------------------------------|-----------------|
| Add Administration of Justice..... | \$32,200,000 00 |
|------------------------------------|-----------------|

|                                  |                  |
|----------------------------------|------------------|
| Total Cost of Negative Army..... | \$127,413,257 00 |
|----------------------------------|------------------|

|                          |                           |
|--------------------------|---------------------------|
| Average.....             | \$18 20 per head.         |
| Militia and Defence..... | 1 15 per head for 1912-13 |

**Summary—**

In 1909 in Canada the cost of liquors, tobaccos, and Justice amounted to ..... \$127, 413, 257 00  
Or, per head ..... 18 20

The whole Permanent Corps, Active Militia, Instructors, teachers of Drill and Physical Culture, Cadets and Boy Scouts, including Drill Halls, Armories, Rifles, Cannon, Fortifications, Saddlery, etc., will amount to, approximately, for 1912-13 ..... 8, 312, 850 00  
Or, per head ..... 1 15

Liquors and tobaccos alone, 1909 ..... \$13 60 per head  
Militia and Defence, 1912-13 ..... 1 15 per head.

Liquors alone, 1909 ..... \$10 50 per head  
Militia and Defence, 1912-13 ..... 1 15 per head.

Tobacco alone, 1909 ..... \$3 10 per head  
Militia and Defence, 1912-13 ..... 1 15 per head.

**Duty on Liquors and Tobaccos alone—**

1909 ..... \$3 50 per head  
Cost of all Militia Service, 1912-13 ..... 1 15 per head.

Duty on tobaccos alone, 1909 ..... \$1 18 per head  
Cost of Militia and Defence, 1912-13 ..... 1 15 per head.

Duty on liquors alone, 1909 ..... \$2 31 per head  
Cost of Militia and Defence, 1912-13 ..... 1 15 per head.

Canada's Positive Militia Training includes Permanent Corps; Active Militia; Civilian Rifle Associations; Cadets and Boy Scouts, besides the proposed Officers' University Corps.

Number in 1911:—Permanent Corps ..... 3, 019  
Active Militia, Officers, N. C. O's & Men, Establishment ..... 60, 181  
Authorized Cadet Corps—500—Number of Cadets ..... 20, 000  
Civilian Rifle Associations—466—Membership ..... 26, 609  
Boy Scouts ..... 20, 000  
Besides, Schools not regularly enrolled or inspected as Cadets ..... 40, 000  
Add— Cadets to be drilled in 1912 .....  
Total ..... 169, 809

**The cost includes—**

Building and repairs of Drill Sheds and Armories.  
Annual Drill—Active Militia.  
Cadet Corps—Instructors.  
Clothing, etc.  
Contingencies.  
Customs Dues.  
Library.  
Dominion Arsenal.  
Engineer Services.  
Rifle Associations.  
Regimental Bands.  
Headquarters, Divisional and District Staffs.  
Maintenance of Military Properties.  
Military Buildings and works.  
Ordnance Lands, Arms and Equipment.  
Permanent Force.

- Printing, Stationery.
- Royal Military College.
- Wages.
- Schools of Instruction.
- Survey.
- Transportation and Freight.
- Warlike Stores.
- Pensions.
- Duty.
- Monuments to Battlefields.
- Stores generally.
- Teachers.
- Rifle Ranges.

Many of these costs were formerly charged to *Public Works*. Others are properly chargeable to *Capital*, the estimate being about one dollar to Capital and two to Consolidated Revenue.

National Education—the making of *Good Citizens* belongs not alone to *Provinces*.

The above Militia and Defence Services cost Canada per head:—

|                  |                 |
|------------------|-----------------|
| In 1909-10 ..... | \$0.88          |
| In 1910-11 ..... | 0.99            |
| In 1911-12 ..... | 1.04 estimated. |
| In 1912-13 ..... | 1.15 estimated. |

But—

This Army:—

Upbuilds Manhood.

Defends Homes and loved ones.

Supplies Teachers and Instructors all over Canada for Cadet Corps, Boy Scouts, Physical Training, Training School Teachers, Schools of Military Instruction and at times for *Police*.

Upbuilds youth,—mentally.  
morally.  
physically.

Instils spirit of obedience, discipline, patriotism, veneration and love for principle; preserves spirit of Liberty and Independence, and keeps old flag flying to the breeze, and trains the boy to be an asset of the nation.

This Cost gives Drill Sheds and Armories for young men to have attractive places for instruction; for Cadet and Boy Scout drill; for public, patriotic, commercial and business meetings.

| Country.                 | Army.       | Navy.       | Total       | Popula-<br>tion. | Cost per<br>Capita.                                   |
|--------------------------|-------------|-------------|-------------|------------------|---|
|                          | \$          | \$          | \$          | \$               | \$  |
| Great Britain—1910-11..  | 132,544,324 | 174,780,090 | 307,324,414 | 45,469,564       | Army 2 91<br>Navy 3 64<br><u>6 75</u>                 |
| France—1910-11.....      | 169,894,917 | 78,162,102  | 248,057,019 | 39,376,000       | Army 4 81<br>Navy 1 65<br><u>6 16</u>                 |
| Germany—1910-11....      | 196,791,976 | 107,669,929 | 304,461,905 | 64,903,423       | Army 3 08<br>Navy 1 65<br><u>4 68</u>                 |
| Italy—1910-11.....       | 60,604,451  | 33,931,324  | 96,535,775  | 34,565,198       | Army 1 75<br>Navy 1 04<br><u>2 79</u>                 |
| United States—1910-11..  | 155,911,705 | 123,173,716 | 279,085,421 | 91,972,266       | Army 1 69<br>Navy 1 34<br>Pens'ns 1 69<br><u>4 72</u> |
| Australia—1910-11.....   |             |             | *13,214,300 | 4,374,138        | 3 09  |
| New Zealand—1910-11..... |             |             | †2,434,250  | 888,578          | 2 74  |
| Canada—1912-13.....      | 8,312,850   | 3,091,500   | 11,404,350  | 7,204,527        | Militia 1 16<br>Navy 0 48<br><u>1 58</u>              |

\*Estimates for Defence 1910-11 (Commencement of new scheme of Defence, 1911).

†Defence 1910. Includes \$200,000, payment to British Admiralty.



CANDIDATES WHO OBTAINED GRADE "B" PHYSICAL TRAINING CERTIFICATES, AND THE OFFICIAL NUMBER OF EACH CERTIFICATE.

**At Convent of the Sacred Heart,  
Halifax, N. S., 25th November, 1911**

- 5015—Mary Talbot O'Loane.
- 5016—Mary Angelita McDermott.
- 5017—Mary Blanche Wallace.
- 5018—Mary Scanlan.
- 5019—Josephine Naud.

**At Mount St. Vincent, 13th Decem-  
ber, 1911.**

- 5021—Margaret M. Gillis.
- 5100—Margaret Crispo.
- 5101—Ella Fay.
- 5102—Marie Untersee.
- 5103—Carrie Baldwin.
- 5104—Mary Cass.
- 5105—Lettie Devereaux.
- 5106—Sarah McIsaac.
- 5107—Mary Driscoll.
- 5108—Anna Sullivan.
- 5109—Catherine McGonagle.
- 5110—Irene Kelly.
- 5111—Mary Lyons.
- 5112—Marie McGilvary.
- 5113—Susie N. Cox.
- 5114—Annie Susan Macnamara.
- 5115—Ethel Morris.
- 5116—Catherine Brown.
- 5117—Frances Corbin.
- 5118—Florence May McNeil.
- 5119—Marie Josephine Kelly.
- 5120—Mary Theresa Baker.
- 5121—Agnes Camilla Kelley.
- 5122—Katherine Mulcahy.
- 5123—Mary Anne Murphy.
- 5124—Hannah Kickham.
- 5125—Marian Cecilia Daly.
- 5126—Ethel Mary Quinn.
- 5127—Helen Dorsey.
- 5128—Julia Imelda Murphy.
- 5129—Margaret Josephine Hagerty.
- 5130—Mary Emma Melanson.
- 5131—Mary Eva White.
- 5132—Florence Hanlon.
- 5133—Grace Elizabeth Brett.
- 5134—Agnes Hildegard Kelly.
- 5135—Catherine M. Farrell.
- 5136—Marie Walton.
- 5137—Marie White.
- 5138—Regina Sandelman.

- 5139—Dorritt Whitehorne.
- 5140—Mary Crosby.
- 5141—Lillian Flanagan.
- 5142—Greta Ogle.
- 5143—Kathleen O'Leary.
- 5144—Mary Kellaher.
- 5145—Grace Mahoney.
- 5146—Frances Mahan.
- 5147—Kathleen Ashe.
- 5148—Florence Kiervin.
- 5149—Grace Balcom.
- 5150—Doris McGrath.
- 5151—Agnis Foley.
- 5152—Carmen Rafecas.

**At Truro, January 25th, 1912.**

- 5153—Mary Florence Macdonald.
- 5154—Catherine Mary Thibadeau.
- 5155—Mary May Melanson.
- 5156—Annie Margaret McLachlan.
- 5157—Clara Elizabeth Avery.
- 5158—William John Cameron.
- 5159—Mary Ann Roach.
- 5160—Marguerite Ann Pottier.
- 5161—Phoebe Myrtle McLellan.
- 5162—Annie Elizabeth Reid.
- 5163—Mamie Currie.
- 5164—Pauline Mary Saulnier.
- 5165—Mabel Ann Poirier.
- 5166—Irene Honora Boutin.
- 5167—Celestine Mary Amirault.
- 5168—Michael LeFort.
- 5169—Bertha Louise Moore.
- 5170—Mrs. Lizzie Landers Messinger.
- 5171—Lila Bernice Illsley.
- 5172—Loretta Macpherson.
- 5173—Laura Ellen Smith.
- 5174—Eva Isabelle Smith.
- 5175—Annie Olive Isenor.
- 5176—Etta Marie Brownell.
- 5177—Cora Viola James.
- 5178—Winnie Laura Snow.
- 5179—Annie May Redmond.
- 5180—Olive Aymar Rice.
- 5181—Annie MacVicar.
- 5182—Robert John MacInnis.

**At Fredericton, N. B., 29th January,  
1912.**

- 5296—Thyrza Hazel Dysart.

## PATRIOTIC PROGRAMS.

For October, November, December, 1911, January, February, March, April and May, 1912.

Issued by the Imperial Order Daughters of the Empire, with the Approval of the Minister of Education of Ontario for use in Schools on the last Friday of each month.

## EMPIRE BUILDERS—(Continued).

## OCTOBER.

## EDWARD VII.

"Circled by steel and fire,  
Guarded by sword and lance  
From frenzy and vengeance dire,  
The kings of the earth advance.  
But haply their fears might cease  
If they looked on his pall above,  
Who walked on his way in peace,  
Secure in the whole world's love."

1. Why is the Sovereign the one universally uniting element of the British Empire?
2. Tell how King Edward's wonderful powers of conciliation and his friendly personal relations with all the rulers of Europe secured to him the title of Edward the Peace-Maker.
3. Tell how His late Majesty's activity in promoting charities, art, science, national sport and public enterprise has been a stimulus to the social advancement of the world.

## READINGS.

- "Life of King Edward VII." . . . . . Hopkins.  
"Public Life of Prince and Princess of Wales." . . . . . Rutledge.

## NOVEMBER.

## RT. HON. SIR JOHN A. MACDONALD.

Sing me the song of her fertile prairies,  
League upon league of her golden grain;  
Comfort housed in the smiling homestead—  
Plenty throned on the lumbering wain."

1. Describe Sir John A. Macdonald's work as one of the chief fathers of Confederation. Name at least three others.
2. What great railway was built when he was Premier, and how did it help the natural development and unity of Canada?
3. Explain the significance in Canadian affairs of the statement by Sir John in 1891: "A British subject I was born, a British subject I will die."

## READINGS.

- "Life of Sir John Macdonald" . . . . . Pope.  
"The Story of the Dominion" . . . . . Hopkins.

DECEMBER.

THE EARL OF BEACONSFIELD.

"When our Imperial legend shall have fired  
The lip of sage and poet, and when these  
Shall to an undispersing audience, sound  
No sceptred name so winningly august  
As thine, my Queen Victoria the Beloved."

1. Why was Benjamin Disraeli, Earl of Beaconsfield, considered a great leader in British politics?
2. What was the effect in India of Queen Victoria assuming the title of Empress of India during his Premiership?
3. Tell how the Earl of Beaconsfield returned from the Congress of Berlin bringing peace and honor to England, and how he secured the Suez Canal for Great Britain.

READINGS.

"Life of Lord Beaconsfield" - - - - - Kebbel.  
"The Earl of Beaconsfield" - - - - - Monypenny.

JANUARY.

THE EARL OF CROMER.

"The onward foot of Knowledge, slow, sublime,  
Has traversed her and set her children free,  
And peaceful commerce heals the wounds of Time,  
And the long history of blood and pain  
Comes nevermore again."

1. What was the condition of Egypt and the Soudan at the beginning of the British occupation of that region, and what assistance did the British troops receive from the Canadian voyageurs in 1884?
2. Give some account of the marvellous development of Egypt's material resources and the well-being of her people under British rule.
3. Why is Lord Cromer known as the "Father of Modern Egypt"?

READINGS.

"Lord Cromer in Egypt" - - - - - -Gorst  
"Modern Egypt" - - - - - -Cromer

FEBRUARY

LORD STRATHCONA AND MOUNT ROYAL

"For the strong young North hath sent us forth to battlefields far away,  
And the trail that ends where Empire trends is the trail we ride to-day.  
But proudly toss the head aloft, nor think of the foe to-morrow,  
For he who bars Strathcona's Horse drinks deep of the cup of sorrow."

1. Give a brief sketch of Lord Strathcona's early years in Canada.
2. Tell the salient facts of his association with the Hudson Bay Company and the Canadian Pacific Railway.
3. Give reasons why he should be called "Canada's leading philanthropist."

READINGS

Canadian "Citizenship" - - - - - -Millar  
"Life and Work of Sir John Thompson" - - - - - Hopkins

## MARCH

RT. HON. RICHARD JOHN SEDDON

"The wandering mariner, whose eye explores  
The wealthiest isles, the most enchanting shores,  
Views not a realm so beautiful and fair  
Nor breathes the spirit of a purer air.

1. Compare the climates and the seasons of Australia and New Zealand with those of Canada.
2. Give a little sketch of Mr. Seddon's career from digger's hut to Privy Council.
3. How did he work for the consolidation of the British Empire?

## READINGS

"Britain Overseas"

"The Empire and the Century"

Parrott  
Goldman

## APRIL

RT. HON. LOUIS BOTHA

"The summons has come with roll of drum and bugles ringing shrill,  
Startling the prairie antelope and the grizzly of the hill;  
'Tis the voice of the Empire calling and the children gather fast  
From every land where the cross-bar floats out from the quivering mast."

1. Our kith and kin fought and died in South Africa. Should not the reconstruction of this country appeal to Canadians?
2. Tell of the part Botha took in the South African war, and how he afterwards proclaimed the whole-hearted adhesion of the Transvaal to the British Empire.
3. How has he worked under British rule for peace and unity regardless of racial differences?

## READINGS

"The Transvaal from within"

"Our Empire Story"

Fitzpatrick  
Marshall

## MAY

ADMIRAL LORD CHARLES BERESFORD

"Yo ho; then give me a right good craft and crew  
And I'll contented be;  
For there's no tack in the whole wide world  
Like a life on the rolling sea."

1. Tell briefly how the discipline, skill and courage of the Royal Navy protect the trade and the communications of the widely extended British Empire.
2. Give a brief account of how Lord Charles Beresford rose from a cadetship to the supreme command of the greatest naval force that ever sailed the seas.
3. Tell of the part that H. M. S. *Condor* played under the command of Lord Charles Beresford at the bombardment of Alexandria.

## READINGS

"The Romance of the Mighty Deep"

"Brassey's Naval Annual"

Gibbord  
Brassey

Prepared by Miss Nanno C. Hughes,  
Hon.-Sec'y. Education Committee.  
I. O. D. E.

(To be handed promptly on its receipt by the Secretary of every School Board to each Teacher employed within the School Section.)

## LOCAL "NATURE" OBSERVATIONS.

(To be sent in to the Inspector with the Returns in February and July.)

This sheet is provided for the purpose of aiding teachers to interest their pupils in observing the times of the regular procession of natural phenomena each season. First, it may help the teacher in doing some of the "Nature" lesson work of the Course of Study. Secondly, it may aid in procuring valuable information for the locality and province. Two copies are provided for each teacher who wishes to conduct such observations, one to be preserved as the property of the section for reference from year to year; the other to be sent in with the Return to the Inspector, who will transmit it to the Superintendent for examination and compilation.

What is desired is to have recorded in these forms, the dates of the first leafing, flowering and fruiting of plants and trees; the first appearance in the locality of birds migrating north in spring or south in autumn, etc. While the objects specified here are given so as to enable comparison to be made between the different sections of the Province, it is very desirable that other local phenomena of a similar kind be recorded. Every locality has a *flora, fauna, climate*, etc., more or less distinctly its own; and the more common trees, shrubs, plants, crops, etc., are those which will be most valuable from a local point of view in comparing the characteristics of a series of seasons.

Teachers will find it one of the most convenient means for the stimulation of pupils in observing all natural phenomena when going to and from the school, and some pupils radiate as far as two miles from the school room. The "nature study" under these conditions would thus be mainly undertaken at the most convenient time, without encroaching on school time; while on the other hand it will tend to break up the monotony of school travel, fill an idle and wearisome hour with interest, and be one of the most valuable forms of educational discipline. The eyes of a whole school daily passing over a whole school section will let very little escape notice, especially if the first observer of each annually recurring phenomenon receives credit as the first observer of it for the year. The observations will be accurate, as the facts must be demonstrated by the most undoubted evidence, such as the bringing of the specimens to the school when possible or necessary.

To all observers the following most important, most essential principles of recording are emphasized: Better *no date, NO RECORD*, than a *WRONG ONE* or a *DOUBTFUL ONE*. Sports out of season due to very local conditions not common to at least a small field, should not be recorded except parenthetically. The date to be recorded for the purposes of compilation with those of other localities should be the *first* of the *many* of its kind following immediately after it. For instance, a butterfly emerging from its chrysalis in a sheltered cranny by a southern window in January would not be an indication of the general climate, but of the peculiarly heated nook in which the chrysalis was sheltered; nor would a flower in a semi-artificial, warm shelter, give the date required. When these sports out of season occur, they might also be recorded, but within a parenthesis to indicate the peculiarity of some of the conditions affecting their early appearance.

These schedules should be sent in to the Inspector with the school returns in July and February, containing the observations made during the Spring (January to June) and the Fall (June to December respectively).

The new register has a page for a duplicate of such records.

Remember to fill in carefully and distinctly the date, locality, and other blanks at the head of the schedule on the next page; for if either the date or the locality or the name of the responsible compiler should be omitted the whole paper is worthless and cannot be bound up for preservation in the volume of The Phenological Observations.

By the aid of the table given at the top of pages 3 and 4, the date, such as the 24th of May for instance, can be readily and accurately converted into the *annual date*, "the 144th day of the year," by adding the day of the month given to the annual date of the last day of the preceding month (April in this case), thus:  $24 + 120 = 144$ . The annual date can be briefly recorded, and it is the only kind of dating which can be conveniently averaged in phenological studies. When the compiler is quite certain that he or she can make the conversion without error, the day of the year instead of the day of the month will be preferred in recording the dates.

PHENOLOGICAL OBSERVATIONS, CANADA.  
(1911 SCHEDULE.)

(For the months July to December, 19 ; or the months January to June 19 .)  
Province . . . . . County . . . . . District . . . . .  
Locality or School Section . . . . . No . . . . .

[The estimated length and breadth of the locality within which the following observations were made . . . . . X . . . . . miles. Estimated distance from the sea coast . . . . . miles. Estimated altitude above the sea level . . . . . feet.  
Slope or general exposure of the region . . . . .  
General character of the soil and surface . . . . .  
Proportion of forest and its character . . . . .  
Does the region include lowlands or intervalles? . . . . . and if so name the main river or stream . . . . . Or is it all substantially highlands? . . . . .  
Any other peculiarity tending to affect vegetation? . . . . .

The most central Post Office of the locality or region . . . . .

NAME AND ADDRESS OF THE TEACHER OR OTHER COMPILER OF THE  
OBSERVATIONS RESPONSIBLE FOR THEIR ACCURACY  
.....  
.....

When First  
Seen  
  
When  
Becoming  
Common

(WILD PLANTS, ETC.—NOMENCLATURE as in "Spotton" or "Gray's Manual").

1. Alder (*Alnus incana*), catkins shedding pollen . . . . .
2. Aspen (*Populus tremuloides*), " . . . . .
3. Mayflower (*Epigæa repens*), flowering . . . . .
4. Field Horsetail (*Equisetum arvense*), shedding spores . . . . .
5. Blood-root (*Sanguinaria Canadensis*), flowering . . . . .
6. White Violet (*Viola blanda*), flowering . . . . .
7. Blue Violet (*Viola palmata, cucullata*), flowering . . . . .
8. Hepatica (*H. triloba*, etc.), flowering . . . . .
9. Red Maple (*Acer rubrum*), flower shedding pollen . . . . .
10. Strawberry (*Fragaria Virginiana*), flowering . . . . .
11. " " " fruit ripe . . . . .
12. Dandelion (*Taraxacum officinale*), flowering . . . . .
13. Adder's Tongue Lily (*Erythronium Am.*), flowering . . . . .
14. Gold Thread (*Coptis trifolia*), flowering . . . . .
15. Spring Beauty (*Claytonia Caroliniana*), flowering . . . . .
16. Ground Ivy (*Nepeta Glechoma*), flowering . . . . .
17. Indian Pear (*Amelanchier Canadensis*), flowering . . . . .
18. " " " fruit ripe . . . . .
19. Wild Red Cherry (*Prunus Pennsylvania*), flowering . . . . .
20. " " " fruit ripe . . . . .
21. Blueberry (*Vaccinium Can. and Penn.*), flowering . . . . .
22. " " " fruit ripe . . . . .
23. Tall Buttercup (*Ranunculus acris*), flowering . . . . .
24. Creeping Buttercup (*R. repens*) flowering . . . . .
25. Painted Trillium (*T. erythrocarpum*), flowering . . . . .
26. Rhodora (*Rhododendron Rhodora*), flowering . . . . .
27. Pigeon Berry (*Cornus Canadensis*) florets opening . . . . .

PHENOLOGICAL OBSERVATIONS—(Continued).

| Day of year corresponding to the last day of each month.           |   |       |     |       |     | When First Seen | When Becoming Common |      |
|--|---|-------|-----|-------|-----|-----------------|----------------------|------|
| Jan.   | 31  | April | 120 | July  | 212 |                 |                      | Oct. |
| Feb.   | 59  | May   | 151 | Aug.  | 243 | Nov.            | 334                  |      |
| March  | 90  | June  | 181 | Sept. | 273 | Dec.            | 365                  |      |
| [For LEAP years increase each number except that for January by 1] |   |       |     |       |     |                 |                      |      |
| 28.  | Pigeon Berry ( <i>Cornus Canadensis</i> ), fruit ripe   |       |     |       |     |                 |                      |      |
| 29.  | Star Flower ( <i>Trientalis Americana</i> ), flowering  |       |     |       |     |                 |                      |      |
| 30.  | Clintonia ( <i>Clintonia borealis</i> ), flowering  |       |     |       |     |                 |                      |      |
| 31.  | Marsh Calla ( <i>Calla palustris</i> ), flowering   |       |     |       |     |                 |                      |      |
| 32.  | Lady's Slipper ( <i>Cypripedium acaule</i> ), flowering   |       |     |       |     |                 |                      |      |
| 33.  | Blue-eyed Grass ( <i>Sisyrinchium ang.</i> ), flowering   |       |     |       |     |                 |                      |      |
| 34.  | Twinflower ( <i>Linnæa borealis</i> ), "  |       |     |       |     |                 |                      |      |
| 35.  | Pale Laurel ( <i>Kalmia glauca</i> ), flowering   |       |     |       |     |                 |                      |      |
| 36.  | Lambkill ( <i>Kalmia angustifolia</i> ), "  |       |     |       |     |                 |                      |      |
| 37.  | English Hawthorn ( <i>Cratægus oxyacantha</i> ), flowering                                      |       |     |       |     |                 |                      |      |
| 38.  | Scarlet fruited Thorn ( <i>Cratægus coccinea</i> ), "   |       |     |       |     |                 |                      |      |
| 39.  | Blue Flag ( <i>Iris versicolor</i> ), flowering   |       |     |       |     |                 |                      |      |
| 40.  | Ox-eye Daisy ( <i>Chrysanthemum Leucanthemum</i> ), flowering                                   |       |     |       |     |                 |                      |      |
| 41.  | Yellow Pond Lily ( <i>Nuphar advena</i> ), flowering  |       |     |       |     |                 |                      |      |
| 42.  | Raspberry ( <i>Rubus strigosus</i> ), flowering   |       |     |       |     |                 |                      |      |
| 43.  | " " fruit ripe  |       |     |       |     |                 |                      |      |
| 44.  | Yellow Rattle ( <i>Rhinanthus Crista-galli</i> ), flowering                                     |       |     |       |     |                 |                      |      |
| 45.  | High Blackberry ( <i>Rubus villosus</i> ), flowering  |       |     |       |     |                 |                      |      |
| 46.  | " " fruit ripe  |       |     |       |     |                 |                      |      |
| 47.  | Pitcher Plant ( <i>Sarracenia purpurea</i> ), flowering   |       |     |       |     |                 |                      |      |
| 48.  | Heal-All ( <i>Brunella vulgaris</i> ), "  |       |     |       |     |                 |                      |      |
| 49.  | Common Wild Rose ( <i>Rosa lucida</i> ), "  |       |     |       |     |                 |                      |      |
| 50.  | Fall Dandelion ( <i>Leontodon autumnale</i> ), "  |       |     |       |     |                 |                      |      |
| 51.  | Butter-and-Eggs ( <i>Linaria vulgaris</i> ), "  |       |     |       |     |                 |                      |      |
| 52.  | Expanding leaves in spring made trees appear green—(a) first tree, (b) leafing trees generally. |       |     |       |     |                 |                      |      |
| (CULTIVATED PLANTS, ETC.)  |   |       |     |       |     |                 |                      |      |
| 53.  | Red Currant ( <i>Ribes rubrum</i> ), flowering  |       |     |       |     |                 |                      |      |
| 54.  | " " fruit ripe  |       |     |       |     |                 |                      |      |
| 55.  | Black Currant ( <i>Ribes nigrum</i> ), flowering  |       |     |       |     |                 |                      |      |
| 56.  | " " fruit ripe  |       |     |       |     |                 |                      |      |
| 57.  | Cherry ( <i>Prunus Cerasus</i> ), flowering   |       |     |       |     |                 |                      |      |
| 58.  | " " fruit ripe  |       |     |       |     |                 |                      |      |
| 49.  | Plum ( <i>Prunus domestica</i> ), flowering   |       |     |       |     |                 |                      |      |
| 60.  | Apple ( <i>Pyrus Malus</i> ), flowering   |       |     |       |     |                 |                      |      |
| 61.  | Lilac ( <i>Syringa vulgaris</i> ), flowering  |       |     |       |     |                 |                      |      |
| 62.  | White Clover ( <i>Trifolium repens</i> ), flowering   |       |     |       |     |                 |                      |      |
| 63.  | Red Clover ( <i>Trifolium pratense</i> ), "   |       |     |       |     |                 |                      |      |
| 64.  | Timothy ( <i>Phleum pratense</i> ), "   |       |     |       |     |                 |                      |      |
| 65.  | Potato ( <i>Solanum tuberosum</i> ), "  |       |     |       |     |                 |                      |      |
| (FARMING OPERATIONS, ETC.)   |   |       |     |       |     |                 |                      |      |
| 66.  | Plowing begun   |       |     |       |     |                 |                      |      |
| 67.  | Sowing  |       |     |       |     |                 |                      |      |
| 68.  | Planting of Potatoes begun  |       |     |       |     |                 |                      |      |

PHENOLOGICAL OBSERVATIONS—(Continued).

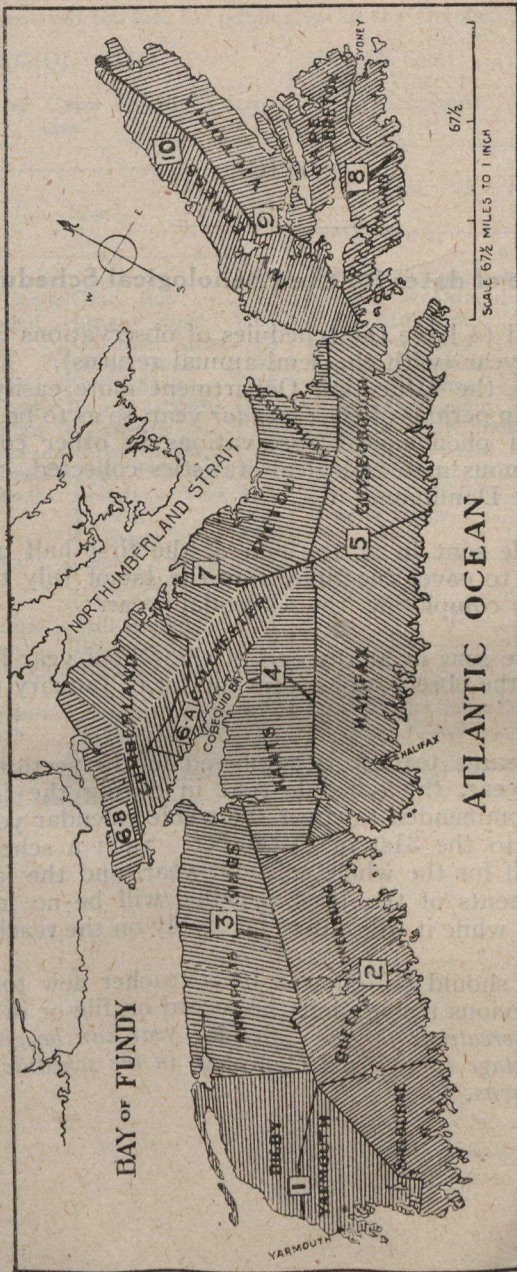
|  |     |     |
|--|-----|-----|
| 69. Shearing of Sheep .....                                      |     |     |
| 70. Hay Cutting .....  |     |     |
| 71. Grain Cutting .....  |     |     |
| 72. Potato Digging .....   |     |     |
| (METEOROLOGICAL PHENOMENA.)                                      |     |     |
| 73. Opening of (a) Rivers, (b) Lakes without currents .....      | (a) | (b) |
| 74. Last Snow (a) to whiten ground, (b) to fly in air .....      |     |     |
| 75. Last Spring Frost (a) "hard" (b) "hoar" .....                |     |     |
| 76. Water in Streams, Rivers, &c., (a) highest, (b) lowest ..... |     |     |
| 77. First Autumn Frosts, (a) "hoar" (b) "hard" .....             |     |     |
| 78. First Snow (a) to fly in air, (b) to whiten ground .....     |     |     |
| 79. Closing of (a) Lakes without currents, (b) Rivers .....      |     |     |
| 80. Number of Thunder Storms (with dates of each) .....          |     |     |
| Jan....., Feb....., Mar....., Apr....., May.....                 |     |     |
| June.....  |     |     |
| July....., Aug.....  |     |     |
| Sept....., Oct....., Nov....., Dec.....                          |     |     |

|  |            |           |           |  |                                  |                                 |
|--|------------|-----------|-----------|--|----------------------------------|---------------------------------|
| Day of year corresponding to the last day of each month.           |            |           |           |  | Going North or coming in Spring. | Going South or leaving in Fall. |
| Jan. 31.   | April 120. | July 212. | Oct. 304. |  |                                  |                                 |
| Feb 49.  | May 151.   | Aug. 243. | Nov. 334. |  |                                  |                                 |
| March 90.  | June 181.  | Sept 273. | Dec. 365. |  |                                  |                                 |
| [For LEAP years increase each number except that for January by 1] |            |           |           |  |                                  |                                 |

|  |  |  |
|--|--|--|
| (MIGRATION OF BIRDS, ETC.)                                     |  |  |
| 81. Wild Duck migrating .....                                  |  |  |
| 82. Wild Geese migrating .....                                 |  |  |
| 83. Song Sparrow ( <i>Melospiza fasciata</i> ) .....           |  |  |
| 84. American Robin ( <i>Turdus migratorius</i> ) .....         |  |  |
| 85. Slate coloured Snow Bird ( <i>Junco hiemalis</i> ) .....   |  |  |
| 86. Spotted Sand Piper ( <i>Actitis macularia</i> ) .....      |  |  |
| 87. Meadow Lark ( <i>Sturnella magna</i> ) .....               |  |  |
| 88. Kingfisher ( <i>Ceryle Alcyon</i> ) .....                  |  |  |
| 89. Yellow Crowned Warbler ( <i>Dendroeca coronata</i> ) ..... |  |  |
| 90. Summer Yellow Bird ( <i>Dendroeca aestiva</i> ) .....      |  |  |
| 91. White Throated Sparrow ( <i>Zonotrichia alba</i> ) .....   |  |  |
| 92. Humming Bird ( <i>Trochilus Colubris</i> ) .....           |  |  |
| 93. King Bird ( <i>Tyrannus Carolinensis</i> ) .....           |  |  |
| 94. Bobolink ( <i>Dolchonyx oryzivorous</i> ) .....            |  |  |
| 95. American Gold Finch ( <i>Spinus tristis</i> ) .....        |  |  |
| 96. American Redstart ( <i>Setophaga ruticilla</i> ) .....     |  |  |
| 97. Cedar Waxwing ( <i>Ampelis cedrorum</i> ) .....            |  |  |
| 98. Night Hawk ( <i>Chordeiles Virginianus</i> ) .....         |  |  |
| 99. Piping of Frogs .....                                      |  |  |
| 100. Appearance of Snakes .....                                |  |  |

|   |  |  |
|---|--|--|
| (OTHER OBSERVATIONS OR REMARKS.)  |  |  |
| 101. <i>Senecio Jacobaea</i> (St. James Ragwort); Is it found within the school section?<br>If so, to what extent? etc. |  |  |
| 102. The Brown Tail Moth, etc.  |  |  |





THE TEN PHENOLOGICAL REGIONS OF NOVA SCOTIA.

## NOTICE.

**Change of dates for the Phenological Schedules.**

It is decided to have the schedules of observations henceforward sent in twice a year (with the semi-annual returns). This arrangement will enable the Education Department more easily to compile the information in periods of the *Calendar* year, so as to be more readily comparable with phenological observations in other countries, and with the voluminous meteorological statistics collected, compiled and published by the Dominion.

The schedule sent in at the end of the first half of the school year is intended to cover the time from the 1st of July to the end of December—thus completing the *Calendar* year.

The schedule sent in at the end of the school year in July is intended to cover the observations from the 1st of January to the end of June.

Where the same teacher is employed in the section during the *whole* calendar year, the schedule sent in during the first week of February, is recommended to cover the whole calendar year, from the 1st of January to the 31st of December. Such a schedule will be complete in itself for the whole calendar year, and the fact of its repeating the contents of the June schedule will be no inconvenience to the compilers, while it will reflect favorably on the teacher.

This course should be followed by a teacher new to the section, provided the previous teacher left the record on file or in the register. *Whenever the observations for the Calendar year can be given complete, there is an advantage in giving it Complete in the schedule sent in with the February returns.*

PHENOLOGICAL SCHEDULES.

[Received too late for publication in the October *Journal*.]

REGION VIII.

**Richmond and Cape Breton Counties.**

VIII. (a) *Coast.*

|                     |                           |     |
|---------------------|---------------------------|-----|
| Cecelia J. M. Doyle | Glace Bay . . . . .       | 91  |
| John A Campbell     | Lingan Road . . . . .     | 68  |
| Edith Morgan        | Gardiner Mines . . . . .  | 68  |
| Sarah McLeod        | Block House . . . . .     | 85  |
| Jessie P. Smith     | S. P. Morien . . . . .    | 113 |
| Margaret A Coady    | Round Island . . . . .    | 141 |
| Kath. MacMillan     | Coxheath . . . . .        | 97  |
| Barbara E Cameron   | Edwardsville . . . . .    | 81  |
| Jno K. MacKenzie    | Point Edward . . . . .    | 100 |
| Eliza'h Macdonald   | Leitche's Creek . . . . . | 161 |
| N. E. Young         | Florence . . . . .        | 26  |
|                     | L. Bras d'Or . . . . .    | 97  |
| Eliza M Leonard     | George's River . . . . .  | 74  |
| Ella M. Munn        | Long Isl. Main . . . . .  | 67  |
|                     | Grove's Point . . . . .   | 180 |
| Mary T Arsenault    | Mill Creek . . . . .      | 83  |
| Katie E Phillips    | Brickyard . . . . .       | 104 |
| Katherine MacLean   | Big Lorraine . . . . .    | 33  |
| D. J. Currie        | Ocean View . . . . .      | 77  |
| Lottie M Morrison   | Gabarus Bay . . . . .     | 130 |
| Christena Smith     | Brack's Brook . . . . .   | 84  |
| Jennie McNeil       | Big Pond . . . . .        | 65  |
| Mamie Currie        | E. Bay N. Side . . . . .  | 93  |
| Christie V MacLean  | Big Beach . . . . .       | 57  |

|                |                        |    |
|----------------|------------------------|----|
| Mary A. Scott  | Shenacadie . . . . .   | 55 |
| Bridgie Watt   | Beaver Cove . . . . .  | 54 |
| Mary Nicholson | Barachois Har. . . . . | 34 |

VIII. (b) *Low Inland.*

|                   |                           |     |
|-------------------|---------------------------|-----|
| Jemima R Cameron  | Hillside . . . . .        | 61  |
| Norman McDonald   | Front Lake . . . . .      | 25  |
| Kath. Morrison    | Caribou Marsh . . . . .   | 52  |
| Katherine Gillis  | Meadow Road . . . . .     | 18  |
| Teresa McKenzie   | Sydney Forks . . . . .    | 61  |
| M. M. McInnes     | Ball's Creek . . . . .    | 132 |
| Mary MacDonald    | Rear Ball's C'k. . . . .  | 82  |
| Sadie M MacKinnon | Trout Brook . . . . .     | 102 |
| Sarah MacDonald   | French Road . . . . .     | 54  |
| Mary E McIntyre   | Grand Mira . . . . .      | 44  |
| Margaret E Gillis | Victoria Bridge . . . . . | 87  |
| Rose A Gillis     | Grand Mira N. . . . .     | 71  |

VIII. (c) *High Inland.*

|                  |                         |     |
|------------------|-------------------------|-----|
| James G. Old     | Victoria . . . . .      | 88  |
| Flora C Matheson | New Boston . . . . .    | 202 |
| Mary A. Roach    | McAdam's Lake . . . . . | 93  |

### SIMPLIFIED SPELLING.

In adopting the spelling "thru" instead of the medieval form "through" we have the concurrence of the most distinguished lexicographers of the English-speaking world, altho the word is not yet found in the old dictionaries which give only the present and past general usage. In addition to the leading language authorities of the English, Scotch and American Universities, like Sir J. H. Murray and Bradley of Oxford, Skeat of Cambridge, Sir Wm. Ramsay of London, Sir James Donaldson of St. Andrews, Michael Sadler of Leeds, Grandgent of Harvard, Brander Matthews of Columbia, Lounsbury of Yale, David Starr Jordan of Leland Stanford, Bright of Johns Hopkins, Andrew White of Cornell and Tucker of Melbourne, legal authorities like the Right Hon. Sir Frederick Pollock, Baronet; the late Chief Justice Brewer of the United States, Sir Robert Stout of New Zealand, business men like Carnegie and Roosevelt—in addition to such men, a daily increasing host of literary, educational and business leaders are supporting the movement which the Journal of Education is pleased to aid in a manner causing the least inconvenience possible, thus helping to carry out the unanimous recommendation of the Imperial Official Education Conference of 1911, London, England.

#### The First Movement

in spelling reform in Nova Scotia was started in 1880 by Dr. David Allison, Ex-President of Mount Allison University, who was then Superintendent of Education for Nova Scotia, by inviting the Principal of the Pictou Academy to write a paper on the subject for the Provincial Educational Association which met in Truro. Dr. Allison also supplied the essayist with literature up to date on the subject.

*The first paper* to advocate the subject was the Dalhousie College Gazette under the editorship of Victor Frazee, B. A., who had the advantage of being a Pitman phonographic writer, and who had the honor of graduating with a phonetic spelling which then had no such authority back of it as is now wielded by the Simplified Spelling Board and the Simplified Spelling Society.

#### Tennyson and Browning,

as well as the other poets, helped the movement along in many ways, even by using the preterite in "t" instead of "ed" in many words thus pronounced. As Browning's Centenary is being celebrated on the 12th of May we quote an example from him *literatim*—"The Flight of the Duchess," *Canto 15, lines 135 and 136*:

"Tho' each part were never so weak  
Yet vainly thro' the world should ye seek."

The apostrophe is used in all such cases to explain to the reader that the writer knows that "ugh" is omitted—only for that purpose and nothing more.

### Thru.

The functionless "ugh" is already very generally elided from "though" and its compounds in the Nova Scotian press in accordance with the recommendations of the S. S. B. and the S. S. S.

The elision of "ugh" from "through" leaves it "thro," a simplification which many have favored. But it has at least three serious defects. First, it suggests a wrong pronunciation. Second, it throws out the original and characteristic vowel "u" which, from the original Anglo Saxon and all thru old and middle English, was *the* vowel used. Third, it adopts the "o" which was probably introduced by a crude and unknown spelling reformer after 1400, A.D. The Anglo Saxon regular form was "thurh." In the Canterbury Tales of Chaucer who died in the year 1400, the regular form is "thurgh," probably pronounced somewhat like the German form of the same word as it is spelt today, "durch." If there was ever any good reason for the introduction of the "o" four or five hundred years ago, there is a better one now for throwing it out together with the now functionless "gh."

The "o" probably came in when the pure Latin words "honor," "labor" and their class, were thru the influence of the Normans spelled "honour" and "labour," so as to sound "honor" and "laboor." "Thurgh" and its metathetical form "through," may then have become "thourgh," and "through" with the medieval spelling reformer.

The form "thru" is, preferable to "throu," or "throo." (1) on account of being shorter, (2) on account of the existence of the "u" alone originally for 1500 years, and (3) the "u" sound after "r" is now the practical phonetic equivalent of our "ou" or "oo."

As an example of the good, the very esthetic, appearance of this form, we quote *literatim* from a beautiful short poem in the New York Independent of the 15th February last, by Professor Archibald MacMechan of Dalhousie University, the third stanza of "*The Queen Passes.*"

"The Queen is young, and the queen is fair;  
Like meshes of Gold is her floating hair;  
Her cheek is a rose, her eye is blue—  
It pierceth a poor knave thru and thru."

### Program.

Until the beginning of the nineteenth century program was the form universally used like anagram, diagram, monogram and telegram. Then Frenchified writers commenced using the foreign form, except such stalwart literary authorities as Scott, Carlyle, Hamilton and others. The popular, "one-man" dictionaries made to sell pandered to the whim of society, so that the use of the better and English form was temporarily submerged, until the great Oxford Dictionary reached "Prog.," and threw its authority in favor of the original and English form "program."

Many of our newspapers, ladies' colleges, and writers who desire to follow approved English spelling still follow the English crowd instead of the English scholars. Some English newspapers are so attached to the orthography of the date of their founding, that they have now a spelling of their own—one of the many varieties of old English spelling. We still find some newspapers under the impression that it is English, using the French "programme," the American "enrollment," etc. This is one reason why we have to tolerate in our examination system certain spellings. While any spelling with good authority should be tolerated, all should encourage the adoption of the simpler authorized forms, everything else being equal.

### The Official Imperial Education Conference, London, 1911.

(From the *N. S. Education Report for 1911*.)

The subject on the Agenda paper suggested by Nova Scotia, was deemed to be one pre-eminently appropriate to an Imperial conference, and was under consideration from Friday to Monday, 1st May, when the Conference came to a resolution on the subject. The most distinguished educational officials in Great Britain and thruout the Empire took an active part in the discussion; and it was the English Board of Education itself which introduced a special linguistic authority to open up the subject—His Majesty's Inspector of Secondary Schools, Dr. E. R. Edwards. The official report of the Conference sums up the references to this subject in paragraphs 23 and 24, page 18, as follows:

23. The Conference also discussed the attitude of Departments of Education to the more important movements in favour of the simplification, improvement, and uniformity of English spelling, an item on the Agenda Paper suggested by the Nova Scotia Government. The subject was opened by a paper by Dr. E. R. Edwards, one of the Secondary School Inspectors of the Board of Education, on "English Spelling and Spelling Reform," and a paper by Dr. Mackay (Nova Scotia) on the question whether Education Departments should tolerate any reformed spelling. These papers, together with a *résumé* of a speech by Dr. Viljoen (Union of South Africa) are printed in Part II of this Report (see pages 207-228).

24. At the conclusion of the discussion on the simplification of English spelling the Conference unanimously adopted the following resolutions:—

"(xi) That this Conference is of opinion that the simplification of spelling is a matter of urgent importance in all parts of the Empire, calling for such practical steps in every country as may appear most conducive to the ultimate attainment of the end in view—the creation, in connection with the subject, of an enlightened public opinion and the direction of it to the maintenance, in its purity and simplicity among all English-speaking peoples, of the common English tongue.

"(xii) That the foregoing resolution be appended, with an explanatory note, to the printed copies of the papers on the subject read to the Conference on Friday last by Dr. E. R. Edwards, H. M. I., and Dr. Mackay, and be included in the Report of the Conference."

Calendars of the Provincial Normal College of Nova Scotia were on the tables before the members of the Conference as a sample of the most extreme simplifications recommended at that date by the Sim-

plified Spelling Board which contains the great dictionary editors of Great Britain and America, and leading University language scholars thruout the Empire. More or less of these simplifications are being introduced gradually into publications thruout various portions of the English speaking world. This movement differs from the evolution hitherto affecting the spelling of English, only in its following the recommendations of the highest authorative body of experts on the subject in existence at present. The evolution is likely therefore to be more uniform in direction and therefore more rapid. The Education Department of Nova Scotia, and the Civil Service of Canada so far as Nova Scotia is concerned, will not sanction the penalization of candidates using these scholarly emendations of the old orthography in the government examinations.

### A New English Movement

has been started since the Conference. The Simplified Spelling Society whose President is Professor Gilbert Murray of Oxford, the leading classical magnate of England; whose vice-presidents include, Sir James A. H. Murray, Editor-in-Chief of the Great Oxford dictionary; Skeat of Cambridge; Rector Carnegie of Aberdeen; Principal Donaldson of St. Andrews; Michael Sadler, Vice-Chancellor of Leeds, the highest general educational authority in England; Sir William Ramsay of the London University; the Right Honorable Sir Frederick Pollock, baronet, of high legal lore; Ambassador Bryce at Washington; and Bright of Johns Hopkins; on whose Executive is Dr. Heath, Director of Special Inquiries and Reports of the English Board of Education; the forceful Professor Walter Rippmann, and the brilliant William Archer—this great English Society cannot wait on the slow process of gradual simplification. For English is in the meantime handicapped in the race for universality. Millions in Asia, Africa, Europe and the Americas, and even in Canada, are prevented by its irregular spelling from acquiring the language. And even the loss of time and effort in the correct mastery of the language by English speaking children of the world is a grosser tax and greater injury than all the known obnoxious trusts in the catalogues of the nations combined.

A phonetic system introduced at once, it is maintained, would be the best solution of the problem. But the new letters necessary would frighten the public and bother the printers, for the modern typesetting machines would have to be scrapped.

It was decided therefore to make an *approximately* phonetic system without using any new letters. New vowel and consonant sounds had, therefore, to be made up of combinations of two letters, each separate letter or combination to have always its own sound and no other. So utterly irregular is our present system that while the new system looks all right for a very few words, it makes the other words extremely strange, and tends to lengthen instead of shorten them. Yet a foreigner can learn to read English thus spelled in an hour. And children can learn to read and spell in one month more than they can now in a year. But it often looks intensely comical

at first sight for dignified English. It is claimed, however, that after reading one good substantial book, its orthography would grow to be as beautiful as Italian, and the old English spelling would be seen to be the scandal to English scholarship and economics which it really is. It is a "reformed" rather than a "Simplified Spelling," and will be capable of easy conversion into a pure phonetic system eventually. But it is too radical for us at the present stage.

### **The English Board of Education**

has already begun to act upon the unanimous recommendation of the Conference, by sending circular information to the Education departments of the Empire, with lists of texts on English language and phonetics, to enable those dealing with the problem to obtain the soundest scholarly information possible.

---

### **The Simplified Spelling Board.**

*Head Office:* No. 1, Madison Avenue, New York, U. S. A.

*Simplified Spelling Bulletin:* Issued quarterly, 5 cents a copy, 10 cents a year.

*Editor:* Henry Gallup Paine.

Communications may be addressed to the *Secretary* or the *Editor* at the Head Office.

---

### **The Simplified Spelling Society.**

*Head Office:* 44 Great Russell Street, London, W. C., England.

*"The Pioneer of Simplified Spelling":* Issued monthly except, for two months of the year. Free to members. Annual subscription for Associate Members, *one* shilling; for full members, *five* shillings.

*Editor's address:* 45 Ladbrooke Grove, London, W., England.

Leaflets and other explanatory information will be gladly sent by the *Secretary* at the Head Office to any one inquiring.



## EVERYBODY ABLE TO SPELL.

[From *The Argosy*, University of Mount Allison, April, 1909].

By W. M. T.

The recent spelling contest has once more drawn our attention to some of the vagaries of our language. Such a contest probably no other people than those who speak English have ever used to while away the time or to provide funds for a needy society. And the English have been able to enjoy this pastime only since spelling became stereotyped and conventional within the last hundred years. In Middle English spelling was phonetic. Each scribe spelled as he pleased and not always in the same way. Chaucer, as Artemus Ward said, may have been a great poet but he didn't know how to spell. Long after Chaucer, people had not settled down to the hard and fast method which has come to seem to so many the only proper one. For example, Mr. Tovey's recent edition of the poet Gray's Letters shows how far from careful and exact according to our standards such a scholar as Gray was, not only in the matter of grammar and capitals, but in the forms of his words. In reality, it is only for a little over a hundred years that we have had a generally accepted method of spelling to which all who would not be regarded as uncultivated, must conform. That it would come to this one might have foretold. Each generation had no doubt had its own likes and dislikes in the matter of vocabulary and accent, had stamped certain things with approval as marks of culture, and avoided certain others as suggesting the rustic or the boor. The wonder is that some generation did not earlier take the next step and lay stress on spelling, as the nineteenth century did. To lay this stress on spelling may be illogical and foolish, but it will require all our philosophy not to do so. If we, in a letter, find such words as *seperate*, *differant*, *lo* for too, *truely* and *untill*, scattered thru it, we almost inevitably are prejudiced against the writer. And yet we remind ourselves that spelling is no test of intellect. Some very dull and prosaic people spell faultlessly. Some people with most nimble and ingenious intellects cannot write their witty and striking ideas accurately. A man may speak with the tongues of men and angels and not be able to spell. This would almost suggest that the speller is, as the poet, born not made, and that no one should be judged harshly because he cannot spell, any more than because he cannot write odes or roundelays.

Towards this position our generation, which has little patience with tradition and custom, seems to be coming. Its motto is "prove all things." In the course of the proving or testing a good many fetishes have shown themselves to be false gods. The fetish of spelling is now held up to scorn as being a mere Mumbojumbo and not a genuine deity.

\* \* \* \* \*

The Simplified Spelling Board of New York, in its bulletins, gives three reasons for a reform of "the anomalies and perversities of English spelling." First, English, while fitted by its simple gram-

mar and large vocabulary to become an international language. is hampered by its intricate and disordered spelling which makes it a puzzle and a mystery to foreigners. Secondly, our spelling is now a burden on the children in our schools. Thru the time and effort which it demands, our children are kept from one to two years behind the school children of Germany, and many of them are condemned to alleged "illiteracy" all their days. And further, the printing and writing of the useless letters "which encumber our spelling, waste every year millions of dollars, and time and effort worth millions more." The Board does not propose any sudden or violent change. It first issued a list of the most common three hundred words now spelled in two ways, and counselled the choosing of the simpler form. For example, this would result in our writing, *plow*, *altho*, *blest*, *stept*, *fiber*, *center*, *catalog*, *f* for *ph* as *sulfate*, *fantom*, and *or* uniformly for *our*, as *ardor*, *color*, *vigor*, just as we already write *author*, *actor*, *creator*, which were formerly written with *our*. A second list of words was issued in January, 1908. This comprised seventy-five amended spellings and some groups of words of particular forms. By the amended spelling we should get such words as *alfabet*, *autograf*, *gost*, *dum*, *lim*, *lam*, *hight*, *tung*, *siv*, *eg*, *iland*, *ile*, *foren*, *det*. In changing groups of words those in *ile* are simplified to *il*, as already in *April*, *civil* and others. This results in *docil*, *fragil*, *hostil*, *fertil*, *juvenil*, and a number of similar forms. In like manner *ine* becomes *in*, as already in *origin* and *cabin*. We should then write *genuin*, *engin*, *masculin*, *famin*, etc. Similarly, *ite* becomes *it* as now in *credit*, *merit*. Examples of this would be *definit*, *infinit*, *granit*. Lastly *ve* becomes *v*, now an unknown ending for words in English, and consequently harder for us to become accustomed to. This would give us *activ*, *captiv*, *superlativ* and thirty or forty others. A year later, in January of the present year, a third list appeared. By this, words written with *ea*, pronounced as short *e*, are to be written with the *e*. We should then have *bred*, *ded*, *hed*, (like the present *red*, *led*), *welth*, *endevor*, *def*, *trechery*, and so on. Words having *ed* pronounced as *d*, as in so many past tenses and participles, are to be written with *d*, e. g., *armd*, *doomd*, *pleasd*, *feard*, *scornd*, and scores of others used, for example, in that form by Milton. The ending *ice* pronounced as *is*, is to be written in the latter way, as in *accomplis*, *offis*, *justis*, *cornis*, *precipis*.

These are sufficient examples to give an idea of the changes proposed. These changes become, as may be observed, more radical with the successive lists. They give a strange appearance to many familiar words, but time and use will overcome that. They certainly make English easier to pronounce. A foreigner could read these various words with accuracy, whereas in their original form many would give him trouble. However, the natural inertia and conservatism found among all classes, and therefore among type-setters, is on the side of holding to present custom. Even among a people accustomed to have the government dictate as a father to his children, and say in regard to all sorts of things "thou shalt" or "thou shalt not," spelling reform had a hard struggle. In Germany about 1880 Herr Von Puttkamer, the Prussian Minister of Education, laid down what forms certain German words should henceforth have in the teaching in the Prussian schools. The changes were not at all radical and yet

there was a great outcry, due perhaps in part to Herr Von Puttkamer's personal unpopularity. Finally the state of affairs was, that the government which established the changes in the schools, prohibited its own officials from using them. Yet the innovations made their way by means of the schools, and in 1903 was issued a further revised system which all bodies under government control in Germany, Austria and Switzerland are bound to use. In this country governments are apt to be more careful to reflect public opinion in their legislation. A government which became meddlesome would soon no longer be in a position to meddle. Progress here will, then, necessarily be slower. Yet no weight as an objection attaches to the popular appeal to history and etymology, for practically all scholars and linguistic students are on the side of reform. Some papers such as "The Independent" will train people's eyes by slow degrees. Little by little a hold may be gained in the schools, and when a generation comes up, familiar from the school with the new forms, the revolution is accomplished.

\* \* \* \* \*

[The above is an admirable sketch of the Evolution of the list of 3300 words, illustrated in the Calendar of the Normal College of Nova Scotia. It is evidently from the pen of one of the ablest of our Canadian Professors of English].

148. EMPIRE DAY.

(a) The establishment of this day followed a recommendation of the Dominion Educational Association at its third triennial convention which met in Halifax. The Council of Public Instruction of Nova Scotia adopted the recommendation shortly after, on the 18th of August, 1898, appointing as "Empire Day" the school day preceding the holiday commemorating the anniversary of the birthday of Queen Victoria, under whose reign the Empire so widely and harmoniously developed. This was the first institution of Empire Day by any Education Department.

**Historical Note.**—The June number of the *Educational Review*, 1890, contained a special lesson for the schools of Nova Scotia, New Brunswick and Prince Edward Island, on the evolution, composition, history, significance, and use of the flag. In 1893, the Ontario Minister of Education, issued still fuller instructions for patriotic display in the schools of that province. On the 2nd of December, 1897, Mrs. Clementina Fessenden of Hamilton, Ontario, addressed a committee of the local school board on the subject of a patriotic day. Subsequently this and other school boards adopted her suggestion that the Education Department of Ontario be asked to set apart one day each year as a patriotic day. The Hon. G. W. Ross, then Minister of Education, arranged, after correspondence with the Superintendent in Nova Scotia, then president of the Dominion Educational Association, that it should be proposed to the D. E. A., to recommend that a day should be fixed immediately before Victoria Day, the 24th May, which is a statutory holiday in all Canadian schools, and that it should be called "Empire Day." The President in his opening address, on the 2nd of August, 1898, in the Academy of Music, Halifax, presented the proposal, and read the absent Hon. Minister's plea. The convention accordingly before its close, on the 5th August, recommended "Empire Day" to the several education departments of the Dominion. It was promptly adopted by that of Nova Scotia as indicated above, with the following instructions to the public schools:

- (b) The object of the day is the development of the Empire idea with power, by a more dramatic and impressive demonstration than would be possible in the routine method of teaching necessarily characteristic of the most of the work of the school. No set method is prescribed. Local orators may be utilized in short and appropriate addresses to the pupils and their parents. Teachers and pupils should take part in as effective and in as varied manners as possible from year to year. As a rule it is preferable to have it an exercise open to the public of the locality in the afternoon, the forenoon being devoted to phases best treated in the school room. It is one of the days when the school flag should be flying. [The British Red Ensign (having the Union Jack in its upper quarter) was the flag originally used in Nova Scotia, and can always be appropriately flown. But in 1910 it was finally decided that the *Union Jack* should be considered the appropriate flag for public schools in the province as it had been so accepted thruout the Empire.]
- (c) The exercises should not be directed to develop boastfulness of the greatness of the Empire. They should be a study of the causes why it became great, and how it may continue to be great; of the history of the rise, growth and alliance of its different peoples, of the evolution of the elastic system of self-government, and of the development of that spirit of Empire unity which is a new thing in history as the Empire's extent is in geography. And most important of all, the exercises should be an inspiration to stimulate all to seek how they may further re-inforce the good tendencies and bind the distant members of the Empire more closely together in the bonds of reciprocal helpfulness as well as of sentimental love.
- (d) As in the case of Arbor Day, all worthy teachers are expected to file a report on the exercises of the day, no matter how brief, with the inspector of his or her division.

## 222.—COUNTY ACADEMY ENTRANCE EXAMINATION.

The regular mode of admission into county academies shall be by an entrance examination in the last week of the school term in June, mainly on the subjects of Grade VIII. There shall be six subjects of examination as follows, the questions being sent out from the education office:—(1) *Reading*—to be tested by the examiners on the Grade VIII reading (*second series* for 1913). *Music*: Candidates known from individual or class exercises, or from reliable certificates, to be able to sing, especially when they have a practical acquaintance with any system of musical notation, may receive an extra mark as a bonus under this head at the option of the examiner, providing the *Reading* is passable. (2) *Language*. (3) *Drawing and Bookkeeping*. (4) *Geography and History*—specially the Geography of Asia, Africa, Oceania, in detail, with a review of Canada and *History of Canada*.

(Hay or Calkin). (5) *General Knowledge*: including (a) The five families, Crowfoot, Rose, Heath, Violet and Lily; with the important native trees and the common weeds and insects injurious to agriculture. (b) The common rocks and minerals of Nova Scotia (c) A few of the common birds. (d) *Health Readers*. (*Mechanics or Domestic or Rural Science*, or *Music* as in Regulations). 6. *Mathematics*.

For a pass, 60% will henceforward be required on the English and Arithmetic. Dictation of memorized literature and correct writing of a list of commonly misspelled words, will be required.

### 223.—HIGH SCHOOL PROMOTIONS.

(1) Description by drawing as well as by writing may be required in any question, and should always be used when brevity or clearness may be gained.

(2) Generally the "High School Pass" in all grades shall be an average of 50% with no mark below 30% on a group of six *subjects* for grades IX, X and XI; and a group of nine papers for grade XII.

(3) Generally the "Teachers' Pass" shall be an average of 60% on a group of six *subjects* in grades IX, X and XI, and on a group of nine papers for grade XII, with no subject below 40%. 50% however must be made on *English* in each grade for a "Teachers' Pass."

(4) Candidates may write on more than the *six* subjects or *nine* papers indicated in (2) and (3). In such cases the "pass" shall be determined by the group including the *highest* six subjects or the *highest* nine papers, as the case may be. A "pass" requires the fulfilment of all conditions specified in special regulations which refer to it elsewhere, as well as the general regulations above.

(5) Two hours shall be given at examination for each paper which shall contain eight questions.

(6) When a candidate wishes to raise a "High School Pass" to a "Teachers' Pass," he shall be required to make an average of at least 60% on each subject not previously up to this standard. That is, a "Teachers' Pass" by partial examinations will require at least sixty per cent. on every subject. This can be necessary only when a candidate is not writing for a higher grade, and therefore all such supplementaries can be taken on the papers of the regular examination.

(7) The "High School Pass" admits to the corresponding class in the Provincial Normal College, whose faculty can raise it to the "Teachers' Pass" on evidence of improved scholarship, without which the Normal diploma cannot be awarded.

(8) Candidates for Grade XII certificates (High School Pass) who fail on account of being too low in not more than two subjects, but who have made the High School average pass on the other subjects,

and 60% on English, shall have the privilege of completing the pass at a subsequent examination by making at least 50% on each of the nine papers not previously up to this standard.

(9) Candidates for Grade XII certificates (Teachers' Pass) who fail on account of being too low in not more than two subjects, but who have made a high school average pass on the other subjects shall have the privilege of completing the pass at a subsequent examination by making at least 65% on English, and 60% on each of the nine papers not previously up to this standard.

(10) From one to three points may be added by the examiner for specially good writing. Bad writers have no right to be admitted to an examination except on certificate of physical defects, and if examined, the papers are subject to a deduction of marks. One point shall be deducted for every misspelled word.

(11) The High School subjects to be taught in a rural, or incompletely graded high school, shall be determined by the school board in agreement with the principal, with an appeal to the Inspector and from him to the Council, in case of disagreement or dissatisfaction.

(12) Any subject deemed to be of importance in any community, may be put on the program of a school by the school board with the consent of the Education Department.

(13) No school is advised to undertake the work of Grade XII with less than a staff of four regularly employed high school teachers.

(14) A candidate who has taken Latin in Grade IX, may take the IX French paper instead of the regular one in Grade X, and the X French paper in Grade XI, provided a 60 or 50 per cent. mark is made respectively for a Teachers' or a High School pass in each case. But the substitution of a lower grade work for that of a higher will be allowed under no other conditions than specified above. The candidate should state this fact in his final examination statement so as to allow of its verification.

(15) Teachers are required to make themselves acquainted with the probable future requirements of pupils by consultation with them and their parents or guardians, before advising in the selection of the optional subjects. Those who are likely to attend the universities, etc., should select the subjects required for matriculation in them. The same policy will apply to the teaching profession and other vocations.

["The Advisory Board recommends that every high school pupil should take at least one foreign language during each year of the high school course; and where more than one foreign language is taken, the Board recommends that one of these languages be Latin. The Board considers that a knowledge of Latin and another foreign language by all teachers is highly desirable."]

## 224. HIGH SCHOOL PROGRAM.

## GRADE IX.

(English and any *five* other subjects imperative.)

1. **English**:—

(a) **Literature**:—*High School Prose Book*, Part I. (ed. by O. J. Stevenson, pub. by Morang, Toronto, \$0.15). Matthew Arnold's *Sohrab and Rustum*; Goldsmith's *Deserted Village* and Whittier's *Snow-Bound* as contained in "Longer Narrative Poems" (Ed. by J. Jeffries, Morang, Toronto, \$0.15); with critical study, word analysis, prosody and recitations. English Composition as in *Sykes*, to page 101, or an equivalent in the hands of the teacher, with essays, abstracts and general correspondence so as to develop the power of fluent and correct expression in writing.

(b) As in **Grammar**:—(except notes and appendix) with easy exercises in parsing and analysis.

2. **Latin**:—As in *Collar and Daniell's First Latin Book*, to end of chapter L., or any equivalent grammar, with easy translation and composition exercises. [The *Roman* (phonetic) pronunciation of Latin to be used in all grades].

3. **French**:—Bertenshaw's *Grammar*, Part I., and *First Reader* to page 56.

4. **Geography**:—Physical and Astronomical, General Geography of continents and British Empire in detail as in *Calkin*.

5. **Arithmetic**:—As in the *Academic* to page 63.

6. **Algebra**:—As in *Hall and Knight's Elementary* to end of Chapter XVI.

7. **Drawing**:—

(a) As in *Morton's Mechanical Drawing*, with the construction of the figures in *Euclid*, Book I.

(b) *High School Drawing Course*, No. I, with model and object drawing and *Manual Training* No. 2.

8. **Science**: Botany—(5 Q.). *Beginners' Botany* by L. H. Bailey and the study of the Wild Plants of the Phenological Observations, with *Pteris*, *Aspidium*, *Asplenium*, *Onoclea*, and *Osmunda*.

Physics—(3 Q.). As in *Primer* or equivalent (winter months). Text to be used only as an aid to the study of the subject.

## GRADE X.

(English and any other *five* subjects imperative).

1. **English**:—

(a) Same subjects as in previous grade, but more advanced scholarship required. Composition as in *Sykes*, or an equivalent in the hands of the teacher, with special attention to the development of readiness and accuracy in written narrative, description, exposition and general correspondence. For outside reading and theme writing: *Hughes' Tom Brown's School Days*, (Macmillan, Toronto, \$0.25).

(b) As in **Grammar**:—Text book complete.

2. **Latin**:—As in *Collar and Daniell's First Latin Book* complete, and "*Caesar's Invasion of Britain*," by Welch and Duffield.

3. **Greek**:—As in *White's First Greek Book*, lessons 1 to end of XL.

Or **French**:—*Bertenshaw's Grammar*, Part 11, and *Souvestre's "Le Chevrier de Lorraine."*

Or **German**:—As in *Joynes Meissner's Grammar*, first 25 exercises, with *Buchheim's Modern German Reader*, Part I., first division only.

4. **History**:—Review of British History as in "Outlines" of British History; and oral lessons by teacher based on *Bourinot's "How Canada is Governed"* or "*Canadian Civics*"\* (three questions).

5. **Chemistry**:—Inorganic, as in *Waddell*.

6. **Arithmetic**:—Text book complete.

7. **Algebra**:—As in *Hall & Knight's Elementary* to end of Chapter XXVII.

8. **Geometry**:—*Hall & Stevens' School Geometry* Part 1.

\*To be published in 1912.

## GRADE XI.

(English and any other *five* subjects imperative.)

1. **English**:—*Shakespeare's As You Like It* (Longman's, \$0.25). *Macaulay's Essay on Johnson* (edited by Buehler, \$0.25). History of English Literature as in *Meiklejohn*. For outside reading and theme writing: *Scott's Ivanhoe* (Longmans, \$0.25).



2. **Latin**:—Grammar and easy composition partly based on prose author read.

(a) *Caesar's De Bell, Gall.*, Book 1. (b) *Vergil's Aeneid*, Book

1, with grammatical and critical questions. (c) *First Exercise in Latin Prose Composition* by E. A. Wells (Geo. Bell & Sons, London).

3. **Greek**:—Grammar and easy composition based partly on author read; and *White's First Greek Book* to end of Chapter LIX. *Xenophon's Anabasis*, Book I, with grammatical and critical questions.

Or **French**:—*Berthon's Specimens of Modern French Prose* omitting IV, VI, X; and *A Travers le Canada* (Quatrième Livre de Lecture—*Nelson & Son*, or *Mackinlay*).

*Fraser and Squair's Grammar*, sections 227 to 344, with the corresponding exercises, pages 343 to 371; or a thoro review of *Berntshaw's Grammar*, parts I and II, with exercises complete.

Or **German**:—As in *Joynes-Meissner* to lesson 44, with *Buchheim's Modern Reader*, Part I, complete. Review of Grade X German.

4. **History**:—General History, as in *Swinton*.

5. **Physics**:—The Chapters on either (a) *Light and Sound* or (b) *Electricity*, to be taken with the rest of the text, alternative questions to be given on (a) and (b), as in *Gage's Physical Science*.

6. **Practical Mathematics**:—To be known as *Trigonometry and Mensuration*. As in *Murray's Essentials of Trigonometry and Mensuration*, excepting Chapter XI.

7. **Algebra**:—As in *Hall & Knight's Elementary Algebra* to end of Chapter XI., except Chapter XXIX to end of XXIXd.

8. **Geometry**:—*Hall & Stevens' School Geometry*, Parts II, III and IV, omitting pages 207 to 219.

## GRADE XII.

(Leaving Examination.)

[Nine papers out of fifteen on the following twelve subjects constitute a full course. The following subjects are imperative:—English, two foreign languages, one mathematical and one scientific subject; except that those who take both Latin and Greek may omit the scientific subject, and those who make an average of 70 (Teacher's Pass) or 60 (H. S. pass) on English, may omit foreign languages].

1. **English** (Two Papers); (a) *Lounsbury's English Language*, or *Bradley's The Making of English*. History of English Literature

as in Gwynn's *Masters of English Literature* (Macmillan Company, Toronto).

- (b) Shakespeare's *Merchant of Venice*, (Longmans, \$0.25); Palgrave's *Golden Treasury*, Book II complete, (edited by Bates, Longmans \$0.25); and Emerson's *Essays* (selected, edited by Holmes, Macmillan, \$0.25).

With the following books for outside reading and theme writing:—*Longer Narrative Poems* (edited by Jeffries, Morang, \$0.15). Holmes' *Autocrat of the Breakfast Table* (Every man's Library), and Thackeray's *English Humorists* (edited by Bennet, Longmans, paper 0/3, cloth 0/6).

2. **Latin.** (Two papers); (a) Bennett's *Latin Grammar* or equivalent; Bradley's *Arnold's Latin Prose Composition* to end of exercise XXII; Sight Translation.

- (b) Caesar's *De Bell. Gall.* II, III and IV, Vergil's *Aeneid*, Books II and III.

3. **Greek.** (Two papers); (a) *White's "First Greek Book,"* completed and reviewed. Sight Translation; *Easy Composition* partly based on the prose author read.

- (b) *Xenophon's Anabasis*, Books II, III and IV.

4. **French:**—Sandeau's *Sacs et Parchemins* (edited by Pellissier, Macmillan, Toronto, \$0.90); Corneille's *Polyeucte* (Edited by Braunscholtz, Pitt Press Series 2/—); Angier & Sandeau's *Le Gendre de M. Poirier* (edited by Preston, Blackie & Son, —/8); with questions upon grammar and composition as in Fraser and Squair's *Grammar*, sections 345 to 461, with the *Composition* exercises from page 371 to page 394.

5. **German:**—Buchheim's *Modern German Reader*, Part II to end of selection 10, second division; and Schiller's *Wilhelm Tell*, Acts I, II, III, and IV (edited by Carruth, Macmillan, \$0.60). *Grammar and Composition* as in Joynes-Meissner.

6. **Algebra:**—As in *Hall and Knight's Senior Matriculation Algebra*, (Macmillan, \$0.90). (A reprint of the first 19 chapters of the old and larger text.)

7. **Geometry:**—*Hall and Stevens' School Geometry*, the whole book—six parts.

8. **Trigonometry:**—(a) *Plane* as in *Murray's Plane and Spherical*. (b) *Spherical* as in *Murray's Plane and Spherical*, Chapters I, II, III, and IV.

9. **Physics:**—As in Goodspeed's Gage's *Principles of Physics*.

10. **Botany**:—As in Bergen and Davis' *Principles of Botany*.
11. **Chemistry**:—As in Smith's "General Chemistry for Colleges."
12. **History**: Myer's Ancient History (revised edition), Parts I, II and III.

225. **Form of Application for Provincial High School Examination.**

At.....STATION.

.....*Inspector of Schools:*

.....*May, 191....*

I, ....., a duly licensed teacher of Class ....., do hereby certify that the candidates whose names are given below from No. 1 to No.....inclusive, will, to the best of my knowledge, have completed, before the date of next examination, the prescribed course of study up to and including the grade for which each applies; and furthermore, according to my judgment, both the *reading and writing* of each candidate are up to the standard desirable to be maintained for promotion in the high schools of the province.

I also forward herewith on behalf of these candidates..... dollars, being the amount of fees required under sub-section (b) of Regulation 95, "Provincial Examination of High School Students," as specified in the list below.

Candidates intending to take the M. P. Q., examination (fee \$2.00—third rank free—payable to the deputy examiner at examination) are indicated by the letters M. P. Q., in the column headed "remarks" below.

Signed.....

*Principal.....School.....Co.*

If a candidate has a physical defect preventing good reading or writing, application may be made if qualified by, and accompanied with, a particular and authentic description of the case for the consideration of the Education Department.

232. **TEXT BOOKS FOR PUBLIC SCHOOLS.**

In performing the duty of selecting and prescribing text books for the Public Schools, the Council of Public Instruction has availed itself as fully as possible of the knowledge and experience of those who are engaged in the practical work of education. The sole aim of

recent modifications has been to secure at a reasonable cost, a series of texts *adapted for use in schools*. Change in authorized books is in *itself* a very undesirable thing.

Instructors and teachers are reminded—

(1) That the course of study for common schools encourages an economical expenditure for the text books by providing a system of oral instruction for junior classes. Too many teachers try to satisfy themselves in respect to their more youthful pupils by placing in their hands text books not needed in any case, and worse than useless when unaccompanied by proper oral exposition. A text book should not be required for a child until he is prepared to use it intelligently.

(2) That the regulation which makes it illegal and improper for a teacher to introduce unauthorized texts, by no means hinders him from giving his pupils the benefit of other treatises to whose explanations he may attach importance. The progressive teacher will always have such aids within reach, and will so use them as to impart variety and interest to his instructions.

(3) Under section 81 (*e*) of the Education Act, school sections can vote money for the purchase of prescribed school books; and school trustees are free to arrange to obtain them at wholesale rates from publishers, or with the regular trade discounts from booksellers, and to arrange to distribute them at *cost*, at *reduced price*, or *free*, to all pupils of their schools, or to pupils who cannot afford to buy them.

(4) For the full information of school boards the regular (*a*) *retail price*, and (*b*) *dozen lot cash price* of each is given according to the trade usages followed by the leading book dealers Halifax. The following list gives merely in a general way the price of the book when bought (*a*) singly and (*b*) in small lots. The terms in detail can be obtained exactly from the dealer.

Price of Books for Common School Grades.

|  | One Cpy | Per Doz'n |
|--|---------|-----------|
| Acadian Reader No. 1, Part 1, Part 1 (Nelson, Edinburgh)               | \$ 0.07 | .51       |
| Acadian Reader, No. 1, Part 2 (Nelson, Edinburgh)                      | .07     | .51       |
| Acadian Reader No. 1, Complete (Nelson, Edinburgh)                     | .20     | .15       |
| Acadian Reader No. 2, Complete (Nelson, Edinburgh)                     | .30     | .22½      |
| Acadian Reader No. 3, Complete (Nelson, Edinburgh)                     | .35     | .26½      |
| Acadian Reader No. 4, Complete (Nelson, Edinburgh)                     | .40     | .30       |
| Nova Scotia Reader No. 1 (Morang, Toronto)                             | .15     | .12       |
| Nova Scotia Reader No. 2 (Morang, Toronto)                             | .20     | .16       |
| Nova Scotia Reader No. 3 (Morang, Toronto)                             | .25     | .20       |
| Nova Scotia Reader No. 4 (Nelson, Edinburgh)                           | .25     | .18½      |
| Nova Scotia Reader No. 5 (Nelson, Edinburgh)                           | .30     | .22½      |
| Nova Scotia Reader No. 6 (Nelson, Edinburgh)                           | .30     | .22½      |
| Reading for VII and VIII [Series 1, 2, 3] Mackinlay and Allen, Boards. | .19     | 15.2      |
| Lessons in English [Grammar and Composition] Boards                    | .23     | 18.4      |
| History of Canada (Calkin's Brief) Mackinlay                           | .25     | .18½      |
| History of Canada [Hay's, (Copp, Clark)]                               | .20     | .17       |
| Geography [Calkin's Junior, (Mackinlay)]                               | .60     | .45       |
| Royal Crown Copy Books (Mackinlay)                                     | .03     | .02½      |
| Augsburg's Drawing Books (Ed. Co., Boston), or                         | † .12   | .09 6     |
| Ontario Drawing Books (Can. Pub. Co., Toronto)                         | † .05   | .04½      |
| Ontario School Hygiene (Copp, Clark, Toronto)                          | * .20   | * .16     |
| Ontario P. S. Arithmetic (Simpson, Toronto)                            | * .15   | .12       |

Price of Books for High School Grades.

|   |       |       |
|---|-------|-------|
| Nova Scotia English Grammar (Mackinlay) Boards            | .23   | 18.4  |
| Outlines of British History (Mackinlay)                   | .35   | .28   |
| Canadian Civics [N. S. Edition] (Copp, Clark, Toronto) †† | * .35 | * .28 |
| Geography [Calkin's Advanced] (Mackinlay)                 | .90   | .72   |
| Morton's Mechanical Drawing (Allen)                       | .40   | .32   |
| Collar & Daniel's Latin Book (Ginn & Co., U. S. A.)       | 1.00  | .80   |
| White's First Greek Book (Ginn & Co., U. S. A.)           | 1.25  | 1.00  |
| Waddell's Chemistry (MacMillan)                           | * .80 | * .64 |
| Bailey's Botany for Beginners (MacMillan)                 | .50   | .42½  |
| Hall & Knight's Algebra (MacMillan)                       | .75   | .56½  |
| Hall & Stevens' School Geometry, I-VI (MacMillan)         | * .75 | * .60 |
| Academic Arithmetic (Allen)                               | .30   | .24   |

\*Price at Toronto.

†May be changed next year.

|| Price at Toronto per fifty.

†† To be published in 1912 to take the place of Bourinot's "How Canada is Governed" at \$1.00.

Most of the other books used in the high school grades have their retail prices specified in the high school program and the wholesale prices are generally in the same ratio as indicated above.

All the books used at present, such as Allen's Arithmetic and Health Readers, may be legally used the following year, or even for two years, where it may be found convenient to utilize the old books.

Books at Wholesale Prices.

(5) The school law of Nova Scotia enables school sections to assess themselves for their school books, and obtain them at wholesale prices. This is being done in many sections of the province, some of which supply the books free to the pupils. They can equally well be sold at cost; so that a school section which once voted the money could have it recouped annually, and thus without any more cost continue to supply books at wholesale cost forever.

The school trustees are the proper parties to take charge of the supply of books; for they are in continual and close touch with the school. They can allow those who desire to own their books to have them at wholesale prices; and the deserving indigent can be supplied free. There can be both oversight and economy under the management of the local trustees.



# JOURNAL OF EDUCATION.

APRIL, 1912.

## OFFICIAL NOTICES.

The full number of legal teaching days in the half school year ended 2nd February was 103; and in the half school year to the end of June next it is also 103 days. School year 206 teaching days.

### *Summer Calendar, 1912.*

- |       |     |  |
|-------|-----|--|
| April | 15. | Fourth Quarter of the School term begins.  |
| May   | 1.  | University Post-Graduate Examination Applications.   |
| May   | 3.  | Arbor Day.   |
| May   | 23. | Empire Day.  |
| May   | 24  | Victoria Day (Holiday) H. S. Exam. Applications.   |
| June  | 6.  | Applications for admission Halifax Military School.  |
| June  | 24. | Applications for admission, Rural Science School, Truro.   |
| June  | 24. | Regular Annual meetings of School Sections.  |
| June  | 27. | Provincial Normal College closes, Truro.   |
| June  | 27. | County Academy Entrance Examination begins.  |
| June  | 28. | Last authorized teaching day of school year.   |
| July  | 1.  | Dominion Day.  |
| July  | 2.  | Provincial Examination begins.   |
| July  | 6.  | Last day for Annual School Returns to be received.   |
| July  | 10. | Openings of Summer Schools at Halifax, Truro and Yarmouth, (Respectively, the Military, Rural Science and Summer Schools). |
| Aug.  | 1.  | Next School year begins.   |
| Aug.  | 26. | Regular opening of Public Schools, First Quarter.  |
| Aug.  | 27. | Provincial Educational Association opens.  |
| Sept. | 2.  | Labor Day (Holiday).   |
| Sept. | 19. | Normal College opens at Truro.   |
| Oct.  |     | Dominion Thanksgiving Day.   |
| Nov.  | 11. | Second Quarter of School Term begins.  |

DATES OF MEETINGS OF BOARDS OF DISTRICT SCHOOL COMMISSIONERS.

- \*Halifax, Rural—Tuesday, May 14th.  
 †Halifax, East—Friday, May 10th.  
 †Halifax, West—Wednesday, June 12.  
 ††Lunenburg—Wednesday, May 8th.  
 †Chester—Friday, June 6th.  
 †Queens, North—Thursday, May 9th.  
 †Queens, South—Thursday, May 16th.  
 †Shelburne—Friday, May 17th.  
 †Barrington—Friday, May 10th.  
 †Yarmouth—Tuesday, June 4th.  
 †Argyle—Thursday, June 6th.  
 †Annapolis, East—Tuesday, April 30th.  
 †Annapolis, West—Monday, April 29th.  
 †Digby—Saturday, May 4th.  
 †Clare—Thursday, April 25th.  
 †Kings—Tuesday, May 14th.  
 †Hants, West—Friday, May 17th.  
 †Hants, East—Wednesday, May 1st.  
 †Antigonish—Wednesday, May 22nd.  
 †Guysboro—Wednesday, May 15th.  
 \*\*St. Mary—Wednesday, May 29th.  
 †Cape Breton—Tuesday, May 21st.  
 †Victoria—Tuesday, June 11th.  
 ††Inverness, North—Tuesday, May 28th.  
 †††Inverness, South—Tuesday, June 4th.  
 †††Richmond—Wednesday, July 10th.  
 ††Pictou, West—Monday, May 20th.  
 †Pictou, East—Tuesday, May 21st.  
 †Parrsboro—Wednesday, April, 24th.  
 †Cumberland—Tuesday, May 28th.  
 †Colchester, South—Saturday, May 4th.  
 †Colchester, West—Friday, May 3rd.  
 †Colchester, North—Tuesday, May 7th.
- \*At Middle Musquodoboit. †Sheet Harbor. ††Bridgewater.  
 ††Kennetcook. \*\*Sherbrook. †††Margaree Forks. \*\*\*Port Hood.  
 \*\*\*Port Hood. ††† Arichat.

## DISTRICT SCHOOL COMMISSIONERS.

(Appointed 25th April, 1911).

**Parrsboro**—J. Newton Pugsley.

(Appointed 8th May, 1911).

**Richmond**—Alex. McCuish, St. Peters.  
D. H. Campbell, Arichat.  
Rev. P. Robitaile, River Bourgeois.

(Appointed 24th May, 1911).

**Pictou, East**—Rev. J. J. McKinnon, Bailey's Brook.

(Appointed 25th May, 1911).

**Richmond**—Rev. W. A. Huband, Arichat.  
**Inverness, South**—Rev. Peter Rankin, Creigmish.

(Appointed 5th January, 1912).

**Inverness, South**—Rev. Robt. McEwen, Port Hood.  
Rev. Ronald H. MacDougall, Brook Village.

(Appointed 27th February, 1912).

**Inverness, North**—Rev. A. H. Cormier, Grand Etang.

(Appointed 27th March, 1912).

**Halifax, Rural**—Rev. D. S. Fraser, Little River.  
Rev. H. McIntosh, Middle Musquodoboit.  
Rev. David Coburn, Upper Musquodoboit.

(Appointed 4th May, 1912.)

**Hants, East**:—A. J. Reid, Milford.  
Chas. D. McKenzie, South Rawdon.  
Bert Roy, Maitland.  
Hennegar White, Noel Road.  
Dr. M. A. O'Brien, Noel.  
Wm. Sterlung, Sterling's Brook.  
Hugh Fraser, Elmsdale.**Hants, West**:—Chas. E. Wilson, Upper Falmouth.  
David Withrow, Avondale.  
Andrew L. Harris, Brooklyn.  
Josiah Armstrong, Kempt.  
Alonzo Armstrong, Cheverie.  
S. F. Schurman, Hantsport.



- Queens, North:—Asaph Frank, Pleasant River.  
 Zoeth Minard, Harmony.
- Pictou, West:—Rev. G. D. MacIntosh, River John.
- Pictou, East:—Rev. A. Maclean Sinclair, Hopewell.
- Cape Breton:—Rev. J. W. Smith, Leitches Creek.

---

**Sections Placed on the Second Schedule.**

15th April, 1911.

Inverness, South—Church No. 67.

18th July, 1911.

Queens, North—New Grafton, No. 6.

28th July, 1911.

Cape Breton—Blockhouse, No. 14.

27th Feb., 1912.

Colchester, South—North River, No. 13.

4th May, 1912.

Cumberland—Lower River Hebert, No. 47.

Pictou, East—Glengarry, No. 6.

Pictou, West—Lower Green Hill, No. 45.

---

*The new Arithmetic (Ontario)*, when it is introduced should not be placed in the hands of pupils before grade III and not necessarily even then. Teachers should select from the text book those parts suitable for each grade as outlined in the Manual of School Law for 1911. The same principle will apply to the old Arithmetic where it may continue to be used next year.

*Music in the Public Schools*, published by Ginn & Co., Boston, recommended to the attention of teachers by the Advisory Board. A series of Song Readers belonging to the same course for pupils, if condensed into one of two books, with the introduction of Canadian Songs, is spoken of as a *desideratum* for our schools.

*School Supervision*. It is recommended by the Advisory Board that the best interests and the regular progress of schools in our larger towns, as well as the economic employment of teachers, require the supervision of Principals in accordance with a scale which should approximately be as follows: For towns with schools of 10 to 15 departments one day of the week; 15 to 29 departments, two days, 20 to 30, three days; 30 to 40, four days; and above 40 the whole week.

### Special Statistics for 1912.

The blank columns 148, 149 and 150 in the *Register* and *Annual Return* are to be filled in as follows this year:

148. No. of pupils in common school grades learning French.
149. No. of pupils in high school grades taking *one* foreign language only.
150. No. in high school taking *two* or more foreign languages.

[In the new *Registers* these three columns will become 150a, 150b, 150c.] No supplementary statistics required this year.

### The New Register for 1912.

Teachers should notice that the statistics in the new *Register* assumed to come into use August, 1912, have been changed between columns 90 and 150, in order to obtain statistics on medical inspection, defectives, incorrigibles, etc., which are now of importance. To make the change as convenient as possible all the other columns have their numbers unchanged. Great care should be taken to have every answer as accurate as possible. The principal of the schools of the section is held responsible for the accuracy of the different items and their totals from the section, as well as the subordinate teacher who may be the original in error.

### School Engagements.

Teachers will be careful to observe the following regulations which are found to be necessary to enable Inspectors to have the schools filled. No item of information required should be omitted; otherwise the briefer the notice the better.

35 (1) Every teacher, assistant or substitute *as soon as engaged to teach in any school*, shall mail or otherwise directly send a written notice to the inspector of the division intimating the *engagement*, the *class* of license held, its *year* and *number*, the *name and address* of the secretary, and the *name* of the school section where last engaged. This shall be followed by a notice of the opening of school mailed not later than the day following the said opening day of the teacher's service.

(2) If any school should be closed temporarily on an authorized teaching day, it shall be reported promptly by mail to the inspector, in advance whenever possible, with the reason. Should this be neglected, the loss of the day cannot be made up by teaching on the substitute days otherwise allowed by regulation.

(3) These intimations shall be kept on file in the inspector's office, to regulate his movements and his efforts in providing teachers for vacant schools; and any delay on the part of teachers in giving these notices shall render them liable to the loss of Provincial Aid.

36 A teacher intending to compete (1) for superior classification as an Academic, class "A", or a rural science teacher, or (2) for a school library grant, or (3) for an inspector's certificate for promotion, or (4) for any other special consideration provided for in the school laws, shall give due information thereof to the inspector in writing as early as possible, but not later than the last day of September.

**Regulation 26.**

The sectional rate roll shall be made out and posted by the trustees on or before the last day of September, and shall be collected as promptly as possible so as to provide for the quarterly payment of salaries and other accounts due.

**EMPIRE DAY CONTRIBUTIONS FROM THE SCHOOLS.**

**For the 1758 Parliamentary Tower, Halifax, 1912.**

|   |                 |
|---|-----------------|
| Cape Breton County Schools, Inspector Phalen.....         | \$103.58        |
| Cumberland County Schools, Inspector Craig.....           | 84.42           |
| Colchester County Schools, Inspector Campbell.....        | 59.54           |
| Lunenburg and Queens Schools, Inspector MacIntosh.....    | 51.10           |
| Halifax City and County Schools, Inspector Creighton....  | 42.28           |
| Hants and Kings Schools, Inspector Robinson.....          | 24.43           |
| Inverness North and Victoria Schools, Inspector MacKinnon | 22.91           |
| Antigonish and Guysboro Schools, Inspector Madconald....  | 22.62           |
| Pictou County Schools, Inspector Armstrong.....           | 16.71           |
| Annapolis and Digby Schools, Inspector Morse.....         | 16.10           |
| Shelburne and Yarmouth Schools, Inspector Bruce.....      | 14.25           |
| Inverness South and Richmond Schools, Inspector Macneil   | 13.47           |
| <b>Total, April, 1912.....</b>                            | <b>\$471.41</b> |

The Tower will be dedicated on the 14th of August next, by His Royal Highness the Duke of Connaught, Governor-General of Canada. The patriotic teachers and pupils represented in the above contributions can feel they will be welcome whenever they come to see *their* tower. Such people are the salt of the Empire, altho the thousands who did not remember to give a cent may develop into citizens who will have pleasure in sharing the cost of our common responsibilities and our common glory.

**Prizes Offered for Patriotic Poems.**

The Executive of the Halifax Canadian Club offer two prizes of sixty and forty dollars, and invite Nova Scotian writers, whether resident or non-resident, to submit poems not to exceed three hundred words, suggested by the completion of the Parliamentary Memorial Tower at Halifax and its dedication by Field Marshall His Royal Highness the Duke of Connaught, K. P., Governor-General of Canada.

The poems, signed by a nom de plume, and accompanied by the author's name in a sealed envelope, must be in the hands of the Honorary Secretary by the fifteenth of July next, and will be examined by a competent committee whose decision will be finally submitted to the Professor of English Literature in the University of Toronto. The two successful poems will become the property of the Halifax Canadian Club; the others, if so desired, will be returned to the authors.

**Teachers Holding Academic License.***Residing in the Province of Nova Scotia.*

[The asterisk denotes those not at present employed as teachers.]

**Annapolis.**

|                     |       |                   |
|---------------------|-------|-------------------|
| O. McNutt Martin    | ..... | Annapolis Royal.  |
| Lenfest Ruggles     | ..... | Middleton.        |
| *Samuel C. Shaffner | ..... | Granville Ferry.  |
| *Joseph W. Tanch    | ..... | Granville Centre. |
| Elbert J. Whitman   | ..... | New Albany.       |

**Antigonish.**

|  |       |               |
|--|-------|---------------|
| Moses. M. Coady                              | ..... | Antigonish.   |
| Mary L. Fraser (Sister St. Thomas des Anges) | ..... | Antigonish.   |
| John W. McLeod                               | ..... | Antigonish.   |
| *Anna E. McLeod                              | ..... | Loch Katrine. |
| Hugh McPherson                               | ..... | Antigonish.   |
| James J. Tompkins                            | ..... | Antigonish.   |

**Cape Breton.**

|                      |       |               |
|----------------------|-------|---------------|
| John T. Archibald    | ..... | Sydney.       |
| James Bingay         | ..... | Glace Bay.    |
| Wm. A. Creelman      | ..... | Sydney.       |
| Milton D. Davidson   | ..... | North Sydney. |
| Agnes A. Dodds       | ..... | Sydney.       |
| Russell Ellis        | ..... | Sydney.       |
| Wm. E. Haverstock    | ..... | Sydney Mines. |
| Florence M. Keating  | ..... | Glace Bay.    |
| Mary I. MacRae       | ..... | Sydney.       |
| Duncan M. Matheson   | ..... | Glace Bay.    |
| Gertrude O. H. Smith | ..... | Glace Bay.    |
| *F. I. Stewart       | ..... | Sydney.       |
| J. Logan Trask       | ..... | Sydney.       |

**Colchester.**

|                      |       |        |
|----------------------|-------|--------|
| *Eugene A. Archibald | ..... | Truro. |
| E. G. Archibald      | ..... | Truro. |
| D. G. Davis          | ..... | Truro. |
| L. A. DeWolfe        | ..... | Truro. |
| *Florence Donovan    | ..... | Truro. |
| H. E. England        | ..... | Truro. |
| T. M. Hibbert        | ..... | Truro. |
| Amy Mosher           | ..... | Truro. |
| N. A. Osborne        | ..... | Truro. |
| *Grace Patterson     | ..... | Truro. |
| L. A. Richardson     | ..... | Truro. |
| Percy Shaw           | ..... | Truro. |

**Cumberland.**

|                        |             |
|------------------------|-------------|
| Mayhew C. Foster ..... | Parrsboro.  |
| E. J. Lay .....        | Amherst.    |
| F. G. Morehouse .....  | Springhill. |
| Elizabeth Smith .....  | Amherst.    |

**Digby.**

|                       |        |
|-----------------------|--------|
| Mabel Patterson ..... | Digby. |
|-----------------------|--------|

**Guysboro.**

|                       |           |
|-----------------------|-----------|
| Mary A. Rudolph ..... | Guysboro. |
|-----------------------|-----------|

**Halifax City.**

|                        |          |
|------------------------|----------|
| H. M. Bayer .....      | Halifax. |
| H. H. Blois .....      | Halifax. |
| D. D. Boyd .....       | Halifax. |
| H. D. Brunt .....      | Halifax. |
| G. K. Butler .....     | Halifax. |
| E. Cummings .....      | Halifax. |
| Sr. Evaristus .....    | Halifax. |
| Madam Fitzgerald ..... | Halifax. |
| G. M. Huggins .....    | Halifax. |
| J. W. Logan .....      | Halifax. |
| G. R. Marshall .....   | Halifax. |
| D. J. Matheson .....   | Halifax. |
| A. McKay .....         | Halifax. |
| K. MacKintosh .....    | Halifax. |
| E. Murray .....        | Halifax. |
| S. A. Morton .....     | Halifax. |
| P. O'Hearn .....       | Halifax. |
| Sr. Rosaire .....      | Halifax. |
| J. H. Trefry .....     | Halifax. |

**Halifax County.**

|                       |            |
|-----------------------|------------|
| W. C. Stapleton ..... | Dartmouth. |
|-----------------------|------------|

**Hants County.**

|                     |            |
|---------------------|------------|
| Geo. W. Dill .....  | Hantsport. |
| John A. Smith ..... | Windsor.   |

**Inverness County**

|                    |            |
|--------------------|------------|
| Ida Thompson ..... | Port Hood. |
|--------------------|------------|

**Kings County**

|                          |            |
|--------------------------|------------|
| Jessie B. Campbell ..... | Berwick.   |
| Robie W. Ford .....      | Wolfville. |
| Bertha M. Oxner .....    | Kentville. |
| P. I. Swanson .....      | Kentville. |
| Winnifred Webster .....  | Kentville. |

**Lunenburg**

|                       |              |
|-----------------------|--------------|
| Minnie Hewitt.....    | Lunenburg.   |
| R. T. Mack.....       | Bridgewater. |
| B. McKittrick.....    | Lunenburg.   |
| Jeannette McLeod..... | Mahone Bay.  |

**Pictou**

|                            |              |
|----------------------------|--------------|
| Robert E. Inglis.....      | Pictou.      |
| John Crerar Macdonald..... | Pictou.      |
| Annie McKay.....           | Pictou.      |
| Robert Maclellan.....      | Pictou.      |
| John T. McLeod.....        | New Glasgow. |
| *Henry F. Munro.....       | Pictou.      |
| Howard H. Mussells.....    | Pictou.      |

**Queens**

|                        |            |
|------------------------|------------|
| Christina Coulter..... | Milton.    |
| Jennie Mullins.....    | Liverpool. |
| R. F. Morton.....      | Liverpool. |

**Richmond**

|                          |             |
|--------------------------|-------------|
| Margaret L. Maxwell..... | St. Peters. |
|--------------------------|-------------|

**Shelburne**


|                   |            |
|-------------------|------------|
| Angus McLeod..... | Shelburne. |
|-------------------|------------|

**Victoria**

|                           |          |
|---------------------------|----------|
| Christena O. MacLean..... | Baddeck. |
|---------------------------|----------|

**Yarmouth**

|                         |           |
|-------------------------|-----------|
| Norna B. Bingay.....    | Yarmouth. |
| Geo. D. Blackadar.....  | Yarmouth. |
| Albinus W. Horner.....  | Yarmouth. |
| W. F. Kempton.....      | Yarmouth. |
| Margaret W. McGray..... | Yarmouth. |
| *Beatrice Tooker.....   | Yarmouth. |
| Harry J. Wyman.....     | Yarmouth. |

 The Superintendent of Education desires to make a complete and accurate list of Academic teachers to be published for purposes of record in the *October Journal*. He will be glad, therefore, to have the *full and correct* form of every name above (full Christian names, not initials); and any names omitted. He will omit the names of any who intimate their withdrawal from the profession.

### An Act to amend Chapter 2 of the Acts of 1911, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, that Section 127 of the Education Act be repealed, and the following substituted:—

127. Teachers who have taught in the public schools of Nova Scotia for thirty-five years, or who have attained the age of sixty years after thirty years of service, shall be entitled to retire with an annuity equal to the provincial aid granted to teachers of their respective classes of license; provided, however, that teachers of the Academic Class shall receive an annuity equal to *double* the average annual provincial aid they were regularly entitled to draw during the last ten years of their service; but every Academic Teacher who has served as Inspector of Schools shall be entitled to receive as an additional annuity after retirement twenty dollars for each year of Inspectorial service; *and everyone who has also been for at least fifteen years the principal of the schools of the section and in receipt of an average salary of at least One Thousand Dollars during the last five years of his or her service, shall receive an additional annuity of Eighty Dollars, but no teacher's annuity under this Act shall exceed Six Hundred Dollars.*

#### University Graduate Examination.

Reg. 230 (b) is amended by adding the sentence, "**An average of forty per cent. will be accepted as a teacher's pass on Grade XII, and of thirty per cent. as a teacher's pass on Grade XI, provided English does not fall below the pass mark.**"

### NOTES AND COMMENTS.

Owing mainly to the lateness of the session of the Legislature, the *Journal* could not be issued in April.

The attention of teachers is directed specially to the Report of the Committee on the Common School Course of study which forms a volume which when finally discussed and revised will become a very important hand book for teachers, and one of the texts for teachers examinations. Arrangements are being made to have "separates" at cost price for those considering or discussing the subject at the Provincial Educational Association.

The Association will meet in Halifax during the last week of August; and may meet in the Technical College if the attendance is not too large. The program printed on page 128 is only provisional, and suggestions for its amendment will be gladly received by the Secretary from any interested.

A teachers' institute was held at Middleton before Easter by Inspector Morse.

Inspector Craig is to hold an Institute at Amherst before Victoria day.

## TEACHERS' SALARIES.

The only solution of the difficulty of obtaining effective teachers is a question of salary. We give below, therefore, the average salary of each class of teacher and the maximum salary given at present. If trustees would in no case offer a salary lower than the average, and when possible greater than the maximum, we would soon have the finest schools in the world; for we have both good stock and good trainers, and our best products would be retained for own schools.

| Class.   | Sex | Average Salary | Highest Salary. |
|----------|-----|----------------|-----------------|
| Academic | M   | \$1,054        | \$1,800         |
| Academic | F   | 652            | 1,100           |
| First    | M   | 569            | 1,300           |
| First    | F   | 360            | 900             |
| Second   | M   | 336            | 800             |
| Second   | F   | 285            | 700             |
| Third    | M   | 235            | 400             |
| Third    | F   | 207            | 300             |

The following comment from page XXIX of the last Education Report explains why the Legislature has just passed the Act printed on page 191 preceding, which places Academic teachers among the most favored of the learned professions.

Academic teachers under the present outlook may well be considered as the standard type of the teaching profession. For this reason and on account of their being the teachers giving character to the high school work and to the general scholarship of all our teachers, the Government can well afford to encourage their permanent occupation of the profession, by the largest Provincial Aid, and the most liberal offer of a retiring annuity at the end of a long service. It is the only class of teacher which has to make a serious preparation for the life work of teaching. The class "A" teacher needs only the general scholarship of our high school grade XII. The Academic teacher at that stage, is only ready to enter on his University course of four years, so that his work of preparation for the duties of a public teacher, is far beyond the other classes.

Only one candidate at date has passed the University Graduate Testing examination. Four have applied for examination—mostly for *partials*—at the next examination in July at Truro, the only station for this examination.

### Patriotic Landmark.

President Macgillivray of the Halifax Canadian Club sends the following appreciative note to the Superintendent of Education in reference to Nova Scotia's greatest Patriotic Landmark, as the *Journal* goes to press:

The public school Inspectors of the Province upon whose initiative the school children were permitted to have some part in the erection of the Memorial Tower at Halifax will be



pleased to learn that the children's contribution reached the substantial sum of \$471.41, and that the Tower is now about completed and will be dedicated on 14th August next by His Royal Highness the Governor General of Canada.

This will also be a source of satisfaction to the teachers who placed the matter before the pupils, and thus point a useful lesson in patriotism, as well as draw attention afresh to a chapter in the history of Nova Scotia of which every boy and girl may well be proud.

It is hoped that many, if not all of the Inspectors and Teachers will, during the summer, be able to visit the Memorial, and we are quite sure that nothing would give the officials in Halifax more pleasure than to learn that from time to time, boys and girls from different places in the Province, when in Halifax, should go out to the North West Arm and climb the Tower to its very top, feeling a just sense of pride in the fact that they helped to build it.

#### Educational Opinion in Nova Scotia.

On page 174 preceding a recommendation from the Advisory Board is appended to Regulation 223 (15). Foreign languages can be taught in schools with a sufficiently large staff, (1) without the loss of time necessary for effective teaching in English and the other subjects, and (2) without injury to the character of the English taught. No time spent on foreign languages should be an excuse for neglecting accurate drill in the effective use of our own language. Where these conditions are fulfilled the teaching of foreign languages while useful to many will be injurious to none.

In this connexion it is as necessary to bear in mind also the recommendations of the four greatest of our practical educationists and leaders in their respective departments of our educational system. On page 221 of the Education Report for 1911, Principal F. H. Sexton, Director of Technical Education, speaking of the technical science courses made optional in the common and high school grades, says:

Another advantage of these classes was the tendency to keep the boys in the public school in the grades higher than VII by giving them work that had an evident quality of preparing them for intelligent wage earners in the skilled ranks. It is a notable thing in colliery districts that boys approaching the age of 14 years lose interest in school work and tend to go to work in the pits as soon as they are allowed by law. It was actually evident that the boys who were given the elementary technical instruction continued up even into grade IX, in increasing numbers. In Westville where the work was most enthusiastically carried out by Mr. J. G. McKenzie, coal mining instructor for Pictou Co., there was a larger number of boys in grade XI at the opening of school in 1911 than ever before. That this was not due merely to an increasing number of pupils in grade VIII is evinced by the following letter to the Department of Technical Education from Mr. F. I. Lent, principal of the Westville schools, Oct. 7, 1911:

"In regard to the increased attendance in grade IX, I may safely say that it is due, almost entirely, to the introduction of drawing in the schools, by the Technical School instructor.

The boys of the Westville Schools are very much interested in the drawing and elementary science, and I believe that the attendance of boys in grade IX which is double that of last year, is in a large measure due to the lively interest taken in this work."

On page 141 of the same report, Mr. Melville Cumming, B. A., B. S. A., Principal of the College of Agriculture, says:

The facts stated in the previous paragraph evidence the effects that industrial education is bound to produce along the various lines of activity. Unfortunately, however, for Nova Scotia, some eminent educationists have felt that industrial education did not develop sufficient culture and, as a result, a type of education is being insisted upon for our public schools by some of these men, which is aimed more at turning out University scholars than men who can build up the prosperity of our country. Now, no men seem to appreciate the improvement in material conditions which is gradually coming about in the province more than these men of scholarship. In fact, they have given our institution their approval and have encouraged us in every way by their praise. When, however, we have said that our own work was greatly hampered by the lack of training along our special lines in the common schools; and when, moreover, we have pointed out that only a small percentage of those who attended the common schools ever go to any higher institution of learning; and have, therefore, pled for more industrial education in the common schools; they have called a halt. We, ourselves, think that this is too serious a matter to be dealt with superficially, and that it ought to receive far greater consideration than it has yet received from educationists in the province.

No one takes more pride than we do in the reputation that Nova Scotia has gained for scholarship; but, on the other hand, no one regrets any more the corresponding lack of material prosperity which has made it imperative that the great majority of these men of scholarship should leave our country and make their living in those parts of the world where there is more industrial activity. The time is ripe for Nova Scotians, no matter to what class they belong, to unite and to agree upon a system of education, which will have a greater effect upon the material development of the country. Personally, we appreciate the opportunity we have along these lines in the College of Agriculture and we only wish that every teacher, whether in the industrial schools or the common schools or the university, could have an equal opportunity of effecting an improvement in the material development of the province.

It is for these reasons that we would urge upon the educational authorities a further consideration of these matters pertaining to the industrial education of the youth of the Province of Nova Scotia.

And on page 123 of the Report, Dr. David Soloan, Principal of the Provincial Normal College, makes an appeal which modern educationists all over the world as well as the intelligent public of Nova Scotia will support. He says:

In a former report I referred at some length to the deficient preparation in science of candidates for diploma. In some cases there are glaring deficiencies in mathematics. In other cases, it is in physics, or in chemistry, or physiology, or botany, sometimes not even the most rudimentary principles or even the terminology of these branches being familiar to the candidate for diploma and license. This outcome is what must naturally be expected when the present choice of subjects is permitted to high-school students. The genuine study of natural science calls for first-hand observation, some originating power, and resourcefulness, and a dependence upon other mental functions than those of memory and deduction. It will never be a popular study in schools where the teacher lacks training in the investigation of material phenomena. It is not as popular a choice among applicants for high-school certificates as its importance warrants. For the equipment of a teacher it is essential. Its omission from the curriculum of candidates for a teachers' certificate

is a challenge to the spirit and the circumstances of the age in which we live; a defiance of the conclusions reached by educational investigators and educational authorities in the most progressive countries of the world. The revival of agriculture in Nova Scotia demands that a purposive study of the phenomena of earth, air, and plant and animal life be made one of the chief issues in our rural and village schools. Any neglect of science in our high schools, especially its omission by candidates for license, is sure to result in a transfer of indifference to the common school grades.

The injurious effect of this indifference is noticeable at once in both the Agricultural and the Normal colleges. In the former institution, where a proportion of the students is drawn from village and rural schools, the teaching staff is called upon to conduct classes in the rudiments of science for boys who should have mastered these in the home-school. Young men who come to the winter short-courses are estopped from profiting as they should by the lectures—popular as these are made—owing to unfamiliarity with the terminology of elementary agriculture and biology. In the Normal College, on the other hand, we are obliged, as remarked above, to devote a disproportionate time to science instruction. We must endeavor to be strong especially in those departments where the public schools are weak. Consequently, in this institution we follow a curriculum which in ideal conditions must be regarded as ill-balanced. This state of affairs cannot quickly be corrected.

The public, we believe, is coming to realize that the permanent corrective to the defects of elementary education is not to be found in cultivating merely the formal facilities of language and the ability to cipher. The fruit-growers of Nova Scotia, at any rate, have already expressed themselves as desirous of modifying the content of school studies in favor of that nature-study which lies at the basis of successful horticulture and which provides in the common school a distinctly vocational element inherent in a study admittedly fascinating and cultural. The presence of this branch in the course of study, will, however, never effect any considerable purpose unless a serious and protracted preparation of teachers to administer it is afforded in the high school as well as the common school grades. The same may be said of it in relation to those elements of science whose intelligent comprehension is imperative for skilled handicraft and housewifery. There should be no abandonment of the inductive study of the natural sciences in the high school grades; at any rate, by those students who propose to enter the calling of the teacher. In short, I would repeat with what emphasis I can my former recommendation to make one science subject in each grade of the high school imperative for those seeking a teacher's pass certificate.

On page 154, Mr. Alexander McKay, M. A., for many years the highly appreciated and honored supervisor of the schools of the City of Halifax, the grand old man of the Nova Scotian teaching profession, says:

In Halifax the Provincial Government has established an excellent system of vocational instruction in the Technical College and in the Technical Evening schools which are so deservedly popular.

The results will be still better when the public schools become organically related to them and when the work of the common schools will be as in Germany, to some extent a preparation for those continuation schools.

While in other countries educational systems are being gradually adapted to our modern civilization it seems strange that, among some Nova Scotians, there seems to be an ultra-conservatism, that would emphasize the teaching of the ancient languages in order that a few theological students and others might not be handicapped in their traditional studies. In fact, it was in one or two instances recommended that Latin be made compulsory on all high school students. This means that, for a presumptive advantage to a small minority entering special professions, over 2000 boys and 3500 girls, who are not now taking Latin, would be compelled to do so. For those who cannot go to college, school life is now too short to enable them to acquire that knowledge and practical command of their physical, industrial, and social environment necessary for fair success in life and for social efficiency.

"It is too late in the day of educational progress to load the dice in favor of classical as against the modern element of our secondary school curriculum."

The dead languages have little productive value outside the professions and often little more than a conventional value within them. The demand for compulsory Latin and Greek certainly does not come from the great mass of industrial and tax-paying patrons of our school and colleges. To a considerable extent it comes, directly or indirectly, from those engaged in teaching them.

For the teaching of the traditional subjects, and for the preparation of students for college, we have now in the Academy a superior class of teachers. The Academy is central for a majority of those who can afford a college education, tho, perhaps, not large enough to accommodate all the pupils without overcrowding in some of the classes.

But we need in another locality another type of high school that will "especially promote the discovery and development of each pupil's dominant interests and powers; and further, it should seek to render these interests and powers subservient to life's serious purposes, to self-support and to social service." Bloomfield school would be an admirable center for such an institution, and we might expect Principal Brunt who has just returned from a year's study of the German schools to be an ideal director.

## IN ENGLAND, UP-TO-DATE.

### Syllabus of the Preliminary Examination for the Elementary School Teachers' Certificate In England for 1913.

(7)—(a) Candidates who pass Part I. are not required to apply for permission to attend Part II. A Form conveying the Board's permission will be sent in due course.

(b) Candidates who have passed Part I. of the Preliminary Examination for the Certificate in 1907 or any later year and are therefore qualified for admission to Part II. without taking Part I., must, like all other candidates, comply with the requirements of Regulations (5) and (6). A Form conveying the Board's permission to attend Part II. will then be sent in due course.

(8)—(a) In Part I. all candidates will be examined in Reading, Composition, Penmanship, Arithmetic, Drawing, and Theory of Music. Girls will also be examined in Needlework.

(b) In the case of Internal candidates a Certificate of Proficiency in Reading, given by the Head Master or Mistress of their Secondary School or Pupil-Teacher Centre, will be accepted in place of a test by the Inspector in that subject.

External candidates will be examined in Reading by the Inspector as a rule at some time during the four weeks preceding the written examination. Due notice will be given of this test.

(c) In Part II. all candidates will be examined in English Language and Literature, History, and Geography. Candidates must also take one or more of the following Optional Subjects:—Elementary Mathematics, Elementary Science, Latin, Greek, French, German, Welsh, Hebrew. Not more than two Languages may be taken.

(9)—(a) All candidates who (i) satisfy the requirements as to Reading, (ii) obtain a satisfactory aggregate of marks in Part I. as a whole, and (iii) reach a certain standard in Arithmetic and Composition, will be considered to have passed Part I.

(b) All candidates who obtain a satisfactory aggregate of marks in Part I. will be considered to have passed Part II. and the Examination as a whole. The marks for one Optional Subject only are included in this aggregate and a candidate cannot gain additional marks by taking a second Optional Subject. If a candidate takes more than one Optional Subject, the marks for the one in which he does best are included in the aggregate.

**Syllabus of the Certificate Examination of the Board of Education for Teachers in Elementary Schools, England, for the year 1913.**

5.—(a) Before a candidate can be recognised as a Certificated Teacher, he must satisfy the Board as to his age and physical capacity in the manner prescribed by the Elementary School Teachers Superannuation Rules, 1899.

(b) A Registrar's Certificate of Birth must accompany the candidate's application for admission to the Examination.

(c) All candidates who pass the Examination must be medically examined by one of the Medical Officers nominated by the Board for the purpose. Instructions will be sent to each successful candidate, together with a list of the Medical Officers. Candidates will be required to select one of the doctors on the list and to arrange for their examination by the one selected between the date of the issue of the results and the 30th April 1914. The list contains the names of some Women Doctors. The fee for the examination, which is 10s. 6d., must be paid by the candidate. The doctor will forward the report of the examination direct to the Board.

6.—The following subjects are included in the Examination:—

- |         |  |                       |
|---------|--|-----------------------|
| Section | A.— Reading and Practical Teaching.                                      |                       |
|         |  | GROUP I.              |
| Section | B.— Principles of Teaching.  | }                     |
| "       | C.— Music.   |                       |
| "       | D.— Drawing.   |                       |
| "       | E.— Needlework (for Women Only).   |                       |
|         |  |                       |
| Section | F.— English Language, Literature, and Composition.                       | }                     |
| "       | G.— History and Geographaphy.  |                       |
|         |  | GROUP III.            |
| Section | H.— Elementary Mathematics (including Arithmetic).                       | }                     |
| "       | I.— Elementary Science.  |                       |
|         |  | GROUP IV. (Optional). |
| Section | J.— A Language other than English approved for the purpose by the Board. |                       |
| Section | K.— A Language other than English approved for the purpose by the Board. |                       |
| Section | L.— Hygiene and Physical Training (see Regulation 10).                   |                       |

7. Candidates who have been employed in Public Elementary Schools, Certified Efficient Schools, or Certified Schools for Blind, Deaf, Defective, or Epileptic Children in some recognised capacity for not less than one year during the two years immediately preceding the Examination, or who have been students in Training Colleges and have failed in their Final Examination, and in either case have not been reported on unfavourably by His Majesty's Inspector in Reading and Practical Teaching, will not be tested in these subjects. Such candidates will be considered to have complied with the requirements of Section A. Other Candidates will be tested in Reading and Teaching by the Inspector; the necessary instructions will be sent to them when they are admitted to the Examination.

8. All candidates who comply with the requirements of Section A and obtain satisfactory aggregates of marks in each of the Groups I., II., and III., and in these three Groups combined, will be considered to have passed the Examination.

9. Candidates will be informed individually of the result of their examination. As soon as possible after the Examination, a general Result List will be published, in which the names of candidates who have passed the Examination will be arranged in alphabetical order without classification. Appropriate marks will be placed in the Result List against the names of candidates who obtain distinction in Section B, C, D, F, G, H, I, J, K, or L, and also against the names of candidates who pass in Section J, K, or L. without obtaining distinction.

10.—(a) No candidate will be eligible for examination by the Board in Hygiene and Physical Training unless he is shown to the satisfaction of the Board to have attended an approved Course of Physical Training at some time during the period between August 1st, 1911, and November 30th, 1913. The following conditions must be satisfied in the case of any Course which is proposed for approval for this purpose:—

- (1) The Course must be conducted by a teacher fully qualified to interpret the principles of the Swedish system of Physical Exercises as set out in the Board's Syllabus.
- (2) The Course must include not less than 40 hours' instruction, and must (unless alternative arrangements are specially approved by the Board) extend over a period of not less than six months.
- (3) Application for the recognition of the Course for the purpose of this Regulation must be made to the Board not later than 1st January, 1913. In making the application it should be stated whether recognition of the Course is also desired under the Regulations for Technical Schools, &c.

(b) Candidates will be tested partly by a written examination in Hygiene and the Theory of Physical Exercises, which will be held with the main part of the examination in December, and partly by a practical test in Physical Exercises, which will be conducted by an Inspector of the Board at the Class in which the candidate is receiving instruction.

# Journal of Education.

Published at Halifax, Nova Scotia, 11th May, 1912.

## CONTENTS.

|  | Page. |
|--|-------|
| Journal of Education—its status.....                                       | 2     |
| Educational Officials.....   | 3     |
| Provincial Aid, February, 1912.....  | 6     |
| Common School Courses of Study (Committee's Report).....                   | 29    |
| Educational Aims and Values.....   | 29    |
| The Program of Studies.....  | 33    |
| Method, in Teaching.....   | 39    |
| Memorizing.....  | 44    |
| Reasoning.....   | 46    |
| Class-Conduct.....   | 48    |
| Teacher and Pupil.....   | 48    |
| General and Special Prescriptions.....                                     | 50    |
| Reading.....   | 50    |
| English Language, Reading, Spelling, Composition, etc.....                 | 55    |
| Writing.....   | 69    |
| Arithmetic.....  | 72    |
| Geography.....   | 80    |
| History.....   | 89    |
| Drawing and Constructive Exercises.....                                    | 96    |
| Nature Study.....  | 103   |
| Physical Exercises.....  | 116   |
| Hygiene and Temperance.....  | 117   |
| Music.....   | 121   |
| Alternative (Tonic-sol-fa) courses.....                                    | 125   |
| Nova Scotia Provincial Educational Association.....                        | 128   |
| Teachers' Union of Nova Scotia—Notice.....                                 | 129   |
| Regulations, Educational Association.....                                  | 130   |
| Rural Science School, Truro.....   | 131   |
| Bilingual School, Truro.....   | 132   |
| Summer School of Science, Yarmouth.....                                    | 133   |
| National Education Association of U. S. A., Chicago.....                   | 134   |
| Imperial Conference, Teachers Associations, London.....                    | 135   |
| Examination Time Tables.....   | 136   |
| Strathcona Physical Training Prizes.....                                   | 138   |
| Physical Training Courses.....   | 141   |
| Military Training.....   | 142   |
| Memo. by Minister of Militia.....  | 146   |
| Upbuilding <i>Versus</i> Demoralizing Training.....                        | 148   |
| Physical Training Candidates, Grade B.....                                 | 153   |
| Patriotic Programs (Daughters of the Empire).....                          | 154   |
| Local "Nature" Observations.....   | 157   |
| Simplified Spelling.....   | 164   |
| Everybody Able to Spell.....   | 169   |
| Empire Day regulations.....  | 171   |
| County Academy Entrance.....   | 172   |
| High School Promotions.....  | 173   |
| Grade IX.....  | 175   |
| Grade X and XI.....  | 176   |
| Grade XII.....   | 176   |
| Text Books.....  | 182   |
| Official Notices.....  | 191   |
| Notes and Comments.....  | 192   |
| Educational Opinion.....   | 193   |
| Syllabus of Examination for Common School Teachers, England, for 1913..... | 196   |

(To be handed promptly on its receipt by the Secretary of every School Board to each Teacher employed within the School Section.)

## LOCAL "NATURE" OBSERVATIONS.

(To be sent in to the Inspector with the Returns in February and July.)

This sheet is provided for the purpose of aiding teachers to interest their pupils in observing the times of the regular procession of natural phenomena each season. First, it may help the teacher in doing some of the "Nature" lesson work of the Course of Study. Secondly, it may aid in procuring valuable information for the locality and province. Two copies are provided for each teacher who wishes to conduct such observations, one to be preserved as the property of the section for reference from year to year; the other to be sent in with the Return to the Inspector, who will transmit it to the Superintendent for examination and compilation.

What is desired is to have recorded in these forms, the dates of the first leafing, flowering and fruiting of plants and trees; the first appearance in the locality of birds migrating north in spring or south in autumn, etc. While the objects specified here are given so as to enable comparison to be made between the different sections of the Province, it is very desirable that other local phenomena of a similar kind be recorded. Every locality has a *flora, fauna, climate*, etc., more or less distinctly its own; and the more common trees, shrubs, plants, crops, etc., are those which will be most valuable from a local point of view in comparing the characteristics of a series of seasons.

Teachers will find it one of the most convenient means for the stimulation of pupils in observing all natural phenomena when going to and from the school, and some pupils radiate as far as two miles from the school room. The "nature study" under these conditions would thus be mainly undertaken at the most convenient time, without encroaching on school time; while on the other hand it will tend to break up the monotony of school travel, fill an idle and wearisome hour with interest, and be one of the most valuable forms of educational discipline. The eyes of a whole school daily passing over each school section will let very little escape notice, especially if the first observer of each annually recurring phenomenon receives credit as the first observer of it for the year. The observations will be accurate, as the facts must be demonstrated by the most undoubted evidence, such as the bringing of the specimens to the school when possible or necessary.

To all observers the following most important, most essential principles of recording are emphasized: Better *no date*, NO RECORD, than a WRONG ONE or a DOUBTFUL ONE. Sports out of season due to very local conditions not common to at least a small field, should not be recorded except parenthetically. The date to be recorded for the purpose of compilation with those of other localities should be the *first* of the *many* of its kind following immediately after it. For instance, a butterfly emerging from its chrysalis in a sheltered cranny by a southern window in January would not be an indication of the general climate, but of the peculiarly heated nook in which the chrysalis was sheltered; nor would a flower in a semi-artificial, warm shelter, give the date required. When these sports out of season occur, they might also be recorded, but within a parenthesis to indicate the peculiarity of some of the conditions affecting their early appearance.

These schedules should be sent in to the Inspector with the school returns in July and February, containing the observations made during the Spring (January to June) and the Fall (June to December respectively).

The new register has a page for a duplicate of such records. Remember to fill in carefully and distinctly the date, locality, and other blanks at the head of the schedule on the next page; for if either the date or the locality or the name of the responsible compiler should be omitted the whole paper is worthless and cannot be bound up for preservation in the volume of The Phenological Observations.

By the aid of the table given at the top of pages 3 and 4, the date, such as the 24th of May for instance, can be readily and accurately converted into the *annual date*, "the 144th day of the year," by adding the day of the month given to the annual date of the last day of the preceding month (April in this case), thus:  $24 + 120 = 144$ . The annual date can be briefly recorded, and it is the only kind of dating which can be conveniently averaged in phenological studies. When the compiler is quite certain that he or she can make the conversion without error, the day of the year instead of the day of the month will be preferred in recording the dates.



PHENOLOGICAL OBSERVATIONS, CANADA.  
(1911 SCHEDULE.)

(For the months July to December, 19 ; or the months January to June 19 .)

Province.....County.....District.....No.....  
 Locality or School Section.....

[The estimated length and breadth of the locality within which the following observations were made.....X.....miles. Estimated distance from the sea coast.....miles. Estimated altitude above the sea level.....feet.  
 Slope or general exposure of the region.....  
 General character of the soil and surface.....  
 Proportion of forest and its character.....  
 Does the region include lowlands or intervalles?.....and if so name the main river or stream.....Or is it all substantially highlands?  
 Any other peculiarity tending to affect vegetation?.....

The most central Post Office of the locality or region.....

NAME AND ADDRESS OF THE TEACHER OR OTHER COMPILER OF THE  
OBSERVATIONS RESPONSIBLE FOR THEIR ACCURACY

When First  
Seen

When  
Becoming  
Common

(WILD PLANTS, ETC.—NOMENCLATURE AS IN "Spotton" or  
"Gray's Manual").

1. Alder (*Alnus incana*), catkins shedding pollen.....
2. Aspen (*Populus tremuloides*), ".....
3. Mayflower (*Epigaea repens*), flowering.....
4. Field Horsetail (*Equisetum arvense*), shedding spores.....
5. Blood-root (*Sanguinaria Canadensis*), flowering.....
6. White Violet (*Viola blanda*), flowering.....
7. Blue Violet (*Viola palmata*, *cucullata*), flowering.....
8. Hepatica (*H. triloba*, etc.), flowering.....
9. Red Maple (*Acer rubrum*), flower shedding pollen.....
10. Strawberry (*Fragaria Virginiana*), flowering.....
11. " " " fruit ripe.....
12. Dandelion (*Taraxacum officinale*), flowering.....
13. Adder's Tongue Lily (*Erythronium Am.*), flowering.....
14. Gold Thread (*Coptis trifolia*), flowering.....
15. Spring Beauty (*Claytonia Caroliniana*), flowering.....
16. Ground Ivy (*Nepeta Glechoma*), flowering.....
17. Indian Pear (*Amelanchier Canadensis*), flowering.....
18. " " " fruit ripe.....
19. Wild Red Cherry (*Prunus Pennsylvanica*), flowering.....
20. " " " fruit ripe.....
21. Blueberry (*Vaccinium Can. and Penn.*), flowering.....
22. " " " fruit ripe.....
23. Tall Buttercup (*Ranunculus acris*), flowering.....
24. Creeping Buttercup (*R. repens*) flowering.....
25. Painted Trillium (*T. erythrocarpum*), flowering.....
26. Rhodora (*Rhododendron Rhodora*), flowering.....
27. Pigeon Berry (*Cornus Canadensis*) florets opening.....

PHENOLOGICAL OBSERVATIONS—(Continued).

| Day of year corresponding to the last day of each month.  | When First Seen | When Becoming Common |
|---|-----------------|----------------------|
| Jan. 31 April 120 July 212 Oct. 304   |                 |                      |
| Feb. 59 May 151 Aug. 243 Nov. 334   |                 |                      |
| March 90 June 181 Sept. 273 Dec. 365  |                 |                      |
| [For LEAP years increase each number except that for January by 1]                                  |                 |                      |
| 28. Pigeon Berry ( <i>Cornus Canadensis</i> ), fruit ripe . . . . .                                 |                 |                      |
| 29. Star Flower ( <i>Trientalis Americana</i> ), flowering . . . . .                                |                 |                      |
| 30. Clintonia ( <i>Clintonia borealis</i> ), flowering . . . . .                                    |                 |                      |
| 31. Marsh Calla ( <i>Calla palustris</i> ), flowering . . . . .                                     |                 |                      |
| 32. Lady's Slipper ( <i>Cypripedium acaule</i> ), flowering . . . . .                               |                 |                      |
| 33. Blue-eyed Grass ( <i>Sisyrinchium ang.</i> ), flowering . . . . .                               |                 |                      |
| 34. Twinflower ( <i>Linnæa borealis</i> ), " . . . . .  |                 |                      |
| 35. Pale Laurel ( <i>Kalmia glauca</i> ), flowering . . . . .                                       |                 |                      |
| 36. Lambkill ( <i>Kalmia angustifolia</i> ), " . . . . .  |                 |                      |
| 37. English Hawthorn ( <i>Cratægus oxyacantha</i> ), flowering . . . . .                            |                 |                      |
| 38. Scarlet fruited Thorn ( <i>Cratægus coccinea</i> ), " . . . . .                                 |                 |                      |
| 39. Blue Flag ( <i>Iris versicolor</i> ), flowering . . . . .                                       |                 |                      |
| 40. Ox-eye Daisy ( <i>Chrysanthemum Leucanthemum</i> ), flowering . . . . .                         |                 |                      |
| 41. Yellow Pond Lily ( <i>Nuphar advena</i> ), flowering . . . . .                                  |                 |                      |
| 42. Raspberry ( <i>Rubus strigosus</i> ), flowering . . . . .                                       |                 |                      |
| 43. " " " fruit ripe . . . . .  |                 |                      |
| 44. Yellow Rattle ( <i>Rhinanthus Crista-galli</i> ), flowering . . . . .                           |                 |                      |
| 45. High Blackberry ( <i>Rubus villosus</i> ), flowering . . . . .                                  |                 |                      |
| 46. " " " fruit ripe . . . . .  |                 |                      |
| 47. Pitcher Plant ( <i>Sarracenia purpurea</i> ), flowering . . . . .                               |                 |                      |
| 48. Heal-All ( <i>Brunella vulgaris</i> ), " . . . . .  |                 |                      |
| 49. Common Wild Rose ( <i>Rosa lucida</i> ), " . . . . .  |                 |                      |
| 50. Fall Dandelion ( <i>Leontodon autumnale</i> ), " . . . . .                                      |                 |                      |
| 51. Butter-and-Eggs ( <i>Linaria vulgaris</i> ), " . . . . .  |                 |                      |
| 52. Expanding leaves in spring made trees appear green—(a) first tree, (b) leafing trees generally. |                 |                      |
| (CULTIVATED PLANTS, ETC.)   |                 |                      |
| 53. Red Currant ( <i>Ribes rubrum</i> ), flowering . . . . .  |                 |                      |
| 54. " " " fruit ripe . . . . .  |                 |                      |
| 55. Black Currant ( <i>Ribes nigrum</i> ), flowering . . . . .                                      |                 |                      |
| 56. " " " fruit ripe . . . . .  |                 |                      |
| 57. Cherry ( <i>Prunus Cerasus</i> ), flowering . . . . .   |                 |                      |
| 58. " " " fruit ripe . . . . .  |                 |                      |
| 59. Plum ( <i>Prunus domestica</i> ), flowering . . . . .   |                 |                      |
| 60. Apple ( <i>Pyrus Malus</i> ), flowering . . . . .   |                 |                      |
| 61. Lilac ( <i>Syringa vulgaris</i> ), flowering . . . . .  |                 |                      |
| 62. White Clover ( <i>Trifolium repens</i> ), flowering . . . . .                                   |                 |                      |
| 63. Red Clover ( <i>Trifolium pratense</i> ), " . . . . .   |                 |                      |
| 64. Timothy ( <i>Phleum pratense</i> ), " . . . . .   |                 |                      |
| 65. Potato ( <i>Solanum tuberosum</i> ), " . . . . .  |                 |                      |
| (FARMING OPERATIONS, ETC.)  |                 |                      |
| 66. Plowing begun . . . . .   |                 |                      |
| 67. Sowing " . . . . .  |                 |                      |
| 68. Planting of Potatoes begun . . . . .  |                 |                      |

PHENOLOGICAL OBSERVATIONS—(Continued).

|  |     |     |
|--|-----|-----|
| 69. Shearing of Sheep .....                                      |     |     |
| 70. Hay Cutting .....  |     |     |
| 71. Grain Cutting .....  |     |     |
| 72. Potato Digging .....   |     |     |
| (METEOROLOGICAL PHENOMENA.)                                      |     |     |
| 73. Opening of (a) Rivers, (b) Lakes without currents .....      | (a) | (b) |
| 74. Last Snow (a) to whiten ground, (b) to fly in air .....      |     |     |
| 75. Last Spring Frost (a) "hard" (b) "hoar" .....                |     |     |
| 76. Water in Streams, Rivers, &c., (a) highest, (b) lowest ..... |     |     |
| 77. First Autumn Frosts, (a) "hoar" (b) "hard" .....             |     |     |
| 78. First Snow (a) to fly in air, (b) to whiten ground .....     |     |     |
| 79. Closing of (a) Lakes without currents, (b) Rivers .....      |     |     |
| 80. Number of Thunder Storms (with dates of each) .....          |     |     |
| Jan. ...., Feb. ...., Mar. ...., Apr. ...., May. ....            |     |     |
| June .....   |     |     |
| July .....   |     |     |
| Aug. ...., Sept. ...., Oct. ...., Nov. ...., Dec. ....           |     |     |

Day of year corresponding to the last day of each month.

|           |            |            |           |
|-----------|------------|------------|-----------|
| Jan. 31.  | April 120. | July 212.  | Oct. 304. |
| Feb. 49.  | May 151.   | Aug. 243.  | Nov. 334. |
| March 90. | June 181.  | Sept. 273. | Dec. 365. |

[For LEAP years increase each number except that for January by 1]

Going North  
or coming  
in Spring.

Going South  
or leaving  
in Fall.

(MIGRATION OF BIRDS, ETC.)

|  |  |  |
|--|--|--|
| 81. Wild Duck migrating .....                                  |  |  |
| 82. Wild Geese migrating .....                                 |  |  |
| 83. Song Sparrow ( <i>Melospiza fasciata</i> ) .....           |  |  |
| 84. American Robin ( <i>Turdus migratorius</i> ) .....         |  |  |
| 85. Slate coloured Snow Bird ( <i>Junco hiemalis</i> ) .....   |  |  |
| 86. Spotted Sand Piper ( <i>Actitis macularia</i> ) .....      |  |  |
| 87. Meadow Lark ( <i>Sturnella magna</i> ) .....               |  |  |
| 88. Kingfisher ( <i>Ceryle Aleyon</i> ) .....                  |  |  |
| 89. Yellow Crowned Warbler ( <i>Dendroæca coronata</i> ) ..... |  |  |
| 90. Summer Yellow Bird ( <i>Dendroæca aestiva</i> ) .....      |  |  |
| 91. White Throated Sparrow ( <i>Zonotrichia alba</i> ) .....   |  |  |
| 92. Humming Bird ( <i>Trochilus Colubris</i> ) .....           |  |  |
| 93. King Bird ( <i>Tyrannus Carolinensis</i> ) .....           |  |  |
| 94. Bobolink ( <i>Dolchonyx oryzivorus</i> ) .....             |  |  |
| 95. American Gold Finch ( <i>Spinus tristis</i> ) .....        |  |  |
| 96. American Redstart ( <i>Setophaga ruticilla</i> ) .....     |  |  |
| 97. Cedar Waxwing ( <i>Ampelis cedrorum</i> ) .....            |  |  |
| 98. Night Hawk ( <i>Chordeiles Virginianus</i> ) .....         |  |  |
| 99. Piping of Frogs .....                                      |  |  |
| 100. Appearance of Snakes .....                                |  |  |

(OTHER OBSERVATIONS OR REMARKS.)

101. *Senecio Jacobaea* (St. James Ragwort); Is it found within the school section?  
If so, to what extent? etc.
102. The Brown Tail Moth, etc.