

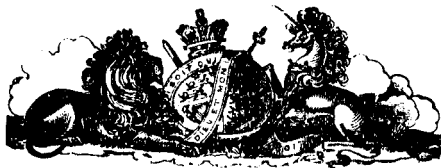
JOURNAL  
OF  
EDUCATION,

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

NOVA SCOTIA.

---

APRIL, 1909.



Published by Order of the Legislature of Nova Scotia.

---

HALIFAX, N. S. :  
COMMISSIONER PUBLIC WORKS AND MINES,  
KING'S PRINTER,  
1909.

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

# JOURNAL OF EDUCATION.

---



THIRD SERIES, VOL. VI.....No. 3.—(TOTAL No. 135.)

---

SECOND SERIES: OCTOBER, 1878, TO AUGUST, 1892; XII. VOLS., 29 Nos

FIRST SERIES: SEPTEMBER, 1866, TO AUGUST, 1877; 73 Nos.

---

HALIFAX, NOVA SCOTIA, APRIL, 1909.

---

## 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. W. T. PIPES, K. C., M. P. P., *Attorney-General.*

HON. C. P. CHISHOLM, M. P. P., *Commissioner of Public Works and Mines.*

HON. DAVID MCPHERSON, M. P. P.

HON. B. F. PEARSON, M. P. P.

HON. JASON M. MACK, M. L. C.

HON. O. T. DANIELS, K. C., M. P. P.

HON. JAMES MACDONALD, M. P. P.

HON. H. S. LEBLANC, 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.*

FREDERIC H. SEXTON, S. B., *Director of Technical Education, and Principal of the Nova Scotia Technical College.*

GEO. W. T. IRVING, *Chief Clerk.*

## 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—Colin W. Roscoe, A. M., Wolfville.
- 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, C. B.
- Division No. 8, the County of Victoria and the District of North Inverness—James MacKinnon, Whyecomagh, C. B.
- 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, M. A., Truro.

PROVINCIAL AID

To Teachers employed in the Public Schools for the half year ended, Feb. 5th, 1909.

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

ANNAPOLIS.

	Number of Teaching Days employed.	Am't paid to Teachers from Provincial Treasury.		
Lyons, Nellie B	101	88 23	Chesley, Ella M.	103 45 00
Magee, Wm. H	101	102 93	Corning, Nellie R.	103 45 00
Ruggles, Lenfest	103	105 00	Crowe, Bessie H.	103 45 00
Andrews, Lillian M.	103	60 00	Durling, Edna	100 43 68
Atwood, Alice J.	103	60 00	Ellis, Florence M.	97 42 37
Balcom, Irene C.	103	60 00	Gesner, Annie J.	102 44 56
Baltzer, Ivy M.	101	58 83	Gibson, Ethel W.	101 44 12
Banks, Beriah S.	103	60 00	Guild, Jean	49 21 40
Banks, Wilford E.	103	60 00	Harris, Mary H.	101 44 12
Bent, Sarah R.	103	60 00	Healy, Bertha A.	103 45 00
Bustin, Harry L.	103	60 00	Hoyt, Bessie G.	103 45 00
Chesley, Carrie E.	103	60 00	Johnson, Mary A.	103 45 00
Chipman, Emma W.	103	60 00	Leonard, E. Stewart	103 22 71
Clarke, Hattie M.	103	60 00	Longley, Annie G.	52 45 00
Cossett, Ethel J.	103	60 00	Longley, Annie M.	103 42 37
Eaton, Ethel M.	89	51 83	Longmuir, Rosa T.	97 45 00
Fancy, Lydia A.	101	58 83	Macdonald, Laura A.	103 45 00
Fitz Randolph, Mary F.	98	57 07	McCormick, Albert E.	103 44 56
Foote, Elida W.	103	60 00	McLannan, Alfaretta	102 45 00
Gilliatt, Mary L.	103	60 00	McLean, Minnie J.	103 45 00
Graves, Ena F.	103	60 00	Mills, Hattie G.	103 44 56
Harris, C. Louise	98	57 07	Moses, Agnes	102 45 00
Lockward, Grace E.	103	60 00	Mussells, Dora R.	103 45 00
MacInnis, A. D.	100	58 25	Nichols, Leon L.	103 19 65
McGill, Dora P.	103	60 00	Parker, Carrie M.	45 45 00
McGill, Geo. B.	103	105 00	Payson, Mary P.	103 45 00
McMillan, Nellie	101	58 83	Perry, Lydee S.	103 3 48
Moore, E. Blanche	103	60 00	Roop, Eva L.	8 44 56
Rice, Ina M.	103	60 00	Ruggles, Florence L.	102 45 00
Spinney, Hattie S.	103	60 00	Rumsey, Clara I.	103 45 00
Spinney, Theodore H.	101	58 83	Stevenson, Margaret B.	103 45 00
Spurr, E. Blanche	78	45 42	Troop, Bessie L.	103 45 00
Starratt, Hattie B.	103	60 00	Wade, Edna M.	103 42 80
VanBuskirk, John L.	103	60 00	Whitman, Minnie C.	98 45 00
Walker, Charlotte E.	103	60 00	Woodman, Edith E.	103 45 00
Walker, Mabel R.	103	60 00	Young, A. Maud	103 45 00
Whitman, Jean E.	12	6 98	Zwicker, Lulu deB.	103 30 00
Woodward, Lola M.	103	60 00	Andrews, C. Lester	103 30 00
Woodworth, B. May	103	60 00	Armstrong, Georgie E.	103 30 00
Wotton, Eunice R.	103	60 00	Baker, Hallie J.	103 30 00
Anderson, Eunice M.	100	43 68	Balcom, Mary W.	103 11 26
Bacon, Agnes S.	103	45 00	*Barteaux, Amy E.	29 29 70
Baker, Kate A.	103	45 00	Beardsley, Jos. D.	102 26 40
Banks, Almeda M.	103	45 00	*Bent, Blanche J.	68 35 72
Bertaux, A. Josephine	101	44 12	*Bent, Hazel W.	92 26 50
Buckler, Emily J.	97	42 37	Bishop, Etta B.	91 30 00
			Bowlby, Jessie I.	103 39 61
			*Brown, Myrtle B.	102 30 00
			Brown, Vernon E.	103 30 00
			Caldwell, Lola I.	103 30 00
			Calnek, Anna A.	103 21 36
			*Charlton, Elvida M.	55 29 70
			Charlton, Mabel E.	102 30 00
			Cochran, Florence	103 30 00
			Dakin, Ellery G.	103 28 73
			*Dunn, Beatrice H.	74 30 00
			Fairn, Bessie C.	103 19 03
			*Fairn, Henrietta M.	49 30 00
			Foster, Winnifred	103 39 61
			*Gehue, Etta M.	102 28 73
			*Gesner, Edw. D.	74 28 34
			*Gibbons, Grace	73 28 29
			*Gibson, Hazel I.	78 30 56
			Hall, Pauline E.	50 14 00
			Halliday, Isaiah	103 30 00
			Hamilton, Louis G.	18 20 70
			Harris, Lucy E.	102 29 00



*Hinds, Elsie L.	103	40 00
Jacques, Violet D.	103	30 00
Lambertson, Myrtle F.	103	30 00
Margeson, Lenora E.	53	15 43
Marshall, Ida M.	91½	26 65
McGinnis, Viola M.	93	27 08
*McKay, Dorothy A.	44	17 09
*McKay, Josephine H.	102	29 70
*Meisner, Hilda M.	102	39 61
Moore, John A. C.	40	11 65
*Noggar, Lilla M.	86	33 39
Phinney, Annie M.	103	30 00
Phinney, Earle C.	103	30 00
Phinney, Ethel P.	103	30 00
*Potter, Effie M.	88	34 17
*Robinson, Stewart I.	78	30 29
Roope, Bessie J.	23	6 69
*Schaffner, Margaret M.	58	22 52
*Simpson, Esther M.	103	40 00
Stoddart, Agenora	98	28 53
*Whelock, Mildred E.	94	36 50
*Whitman, Annie S.	54	20 97
Winchester, Ruth H.	103	30 00
Young, Flossie C.	67½	19 65

ANNUITANTS.

Shaffner, Samuel C.		75 00
Brown, Alfred D.		60 00
Vidito, Helen A.		60 00
Sanders, Arthur W.		45 00

ANTIGONISH.

Tompkins, J. J.	93	94 78
Boyd, Donald D.	93	81 24
Boyle, James	93	81 24
McLeod, Anna E.	103	75 00
Sister St. Leonard	103	75 00
Sister St. Thomas des Anges	103	75 00
Boyd, Angus J.	103	60 00
Chisholm, W. J.	89	51 83
Chisholm, W. J.	95	55 33
Gillis, Janie A.	96	55 91
McAmis, Katie	103	60 00
Macdonald, Alex.	100	58 25
McKenzie, Dan. J.	103	60 00
McLean, William	103	60 00
Somers, Alex. M.	103	60 00
Sister M. Leonora	103	60 00
Taylor, Maud L.	102	59 41
Cameron, W. D.	103	45 00
Cameron, Christina	100	43 68
Chisholm, Christina	89	38 87
Chisholm, Dan. M.	94	41 06
Courteen, Violet	103	45 00
Condon, Josephine M.	101	44 12
Hanifen, Marg. M.	102	44 56
Kennedy, Janie	103	45 00
McCarthy, Mary E.	103	45 00
Macdonald, A. T.	100	43 68
Macdonald, Cassie	103	45 00
Macdonald, Mary C.	97	42 37
McGillivray, A. J.	103	45 00
McKenzie Gertrude	103	45 00

McKeough, Anna M.	102	44 56
McNeil, Florence	69	30 13
McPherson, John A.	103	45 00
McPherson, Alex.	73	31 88
Purcell, Marg. E.	103	30 00
Rogers, Wm. J.	103	45 00
Suttan, Catherine E.	101	44 12
Sister M. Dionysia	103	45 00
Sister M. Irene	103	45 00
Sister St. Hugh	103	45 00
Sister St. Camillus	103	45 00
*Chisholm, Marg. M.	94	36 50
*Campbell, Mary	103	40 00
Campbell, Libby	102	29 70
Fraser, William	54	15 72
Fitzgerald, Annie	40	11 65
Forbes, Florence	103	30 00
Gillis, Sarah B.	103	30 00
Gillis, Augusta J.	103	30 00
Gillis, Bessie J.	89	25 91
Green, Elizabeth E.	25	7 28
Levandier, William	15	4 36
Leydon, Sarah B.	103	30 00
McArthur, Janet	103	30 00
McCormick, Annie	103	30 00
Macdonald, Mary A.	103	30 00
Macdonald, Sadie	103	30 00
Macdonald, Martha	103	30 00
Macdonald, Annie J.	102	29 70
Macdougall, Florence M.	101	29 41
McEachern, Mary F.	103	30 00
McGregor, Minnie	102	29 70
McGillivray, Mary A.	102	29 70
McGillivray, Mary	101	29 41
McGillivray, Bessie A.	100	29 12
McGillivray, Mary	68	19 79
*McInnis, Cassie M.	103	40 00
*McNaughton, Bessie	103	40 00
Martin, Ellen	103	30 00
Mullins, Annie J.	98	28 53
*Somers, George T.	93	36 11
Stewart, Kate E.	82	23 88
Strahan, Mary Angela	93	27 03
Sister St. Thomas de S. C.	103	30 00
Sister St. Walburga	103	30 00
Wilmot, Mary	101	29 41
Watt, Bridget G.	98	28 53
Consolidated Section	89	25 91
Consolidated Section	89	25 91

ANNUITANTS.

Chisholm, Alex.		75 00
Gillis, Angus		60 00
McGillivray, Andrew		60 00
Boyd, Angus A.		45 00
Bonin, John B.		45 00
Fraser, William		45 00
Macdonald, Donald		30 00

ASSISTANTS.

McPherson, Hugh	93	36 11
Beaton, Ronald	93	27 08

CAPE BRETON.							
Armstrong, J. Arthur	98	85	59	Sister M. Victoire	89	51	83
Bingay, James	43	43	82	Sister M. Vincentine	103	60	00
Brodie, William S.	54	55	02	Sister St. Bernard	89	51	83
Davidson, Milton D.	103	105	00	Sister St. Mary (Asc.)	102	60	00
Haverstock, Wm. Ernest	102	103	95	Sister Teresa Joseph	103	57	07
Keating, Florence M.	101	73	52	Sutherland, Mary	98	58	88
Matheson, Duncan M.	103	90	00	Thurber, Ronald E.	101	57	07
Moore, Clarence L.	101	102	93	Wilton, Richard T.	99	57	07
Stewart, Frank I.	101	88	23	Woodill, Arthur W.	98	10	91
Beaton, A. Laura	18	10	47	Barrington, Harriet H.	25	42	80
Boutillier, Theresa	103	60	00	Barss, Muriel J.	98	45	00
Bown, Eleanor F.	102	59	41	Bruce, Alice A.	103	33	62
Bruce, Harriet S.	51	29	70	Bryden, Margaret	77	44	56
Campbell, Lizzie M.	103	60	00	Buckles, Sarah	102	45	00
Chisholm, Jennie	97	56	49	Burke, Helena B.	103	44	12
Crowell, Annie E.	35	20	38	Cameron, Annie	101	45	00
Curry, Delila Pearl	103	60	00	Cameron, Annie M.	103	42	80
Dean, Bertha	102	59	41	Cameron, Mary C.	98	45	00
Dodd's, Agnes A.	101	58	83	Cameron, Olive E.	103	45	00
Doyle, Cecilia J. M.	89	51	83	Coady, Peter W.	103	34	06
Edgecombe, Ethel L.	98	57	07	Cann, Lillian B.	78	45	00
Fulton, Edith Irene	101	58	83	Currie, Donald J.	103	45	00
Fulton, Elora	25	14	56	Currie, Michael D.	103	19	65
Fulton, Mary Eureka	96	55	91	Cuthbert, Mary G.	45	39	75
Gillis, Simon P.	102	59	41	Desmond, Mary M.	91	45	00
Gilmour, Annie E.	103	60	00	Douglas, Havelock G.	103	44	12
Goode, Myrtle M.	98	57	07	Downing, Florence C.	101	45	00
Gray, Gracie L.	103	60	00	Elderkin, Elizabeth J.	103	44	12
Gunn, Annie	103	60	00	Flynn, Sadie	101	44	34
Gunn, Jessie A.	103	60	00	Fraser, Ida Janet	101½	44	12
Haverstock, Alice M.	103	60	00	Fraser, Lulu F.	101	42	37
Henry, Jessie Ellen	103	60	00	Fullerton, Mabel	97	45	00
Kilpatrick, Hattie	103	60	00	Fyfe, Magdalen M.	103	45	00
Lawley, James H.	98	57	07	Gillis, Jennie May	103	42	80
MacDougall, Jean	98	57	07	Gillis, Margaret	98	44	56
MacDougall, John	103	60	00	Gillis, Mary	102	45	00
Macintosh, Anna B.	101	58	83	Graham, Bessie F.	103	42	80
McKay, Katherine	103	60	00	Grattan, A. Myrtle	98	44	12
MacKenzie, Anna B.	103	60	00	Greenwell, Bertha	101	45	00
MacKenzie, Kate A.	25	14	56	Greig, Ida H.	103	17	47
MacKinnon, Mary	98	57	07	Gunn, Helen C.	40	44	12
McLean, Christena	103	60	00	Hamilton, Agnes E.	101	23	15
MacLennan, Florence B.	101	58	83	Hanrahan, Mary	53	19	65
MacNeil, Jennie E.	96½	56	20	Harrington, Annie E.	45	42	80
MacRac, Mary I.	98	57	07	Harris, Gladys E.	98	45	00
MacRury, Sadie M.	103	60	00	Hartigan, Katherine L.	103	45	00
Morrison, Alexander B.	103	60	00	Johnson, Annie L.	102	44	12
Morrison, Eva J.	101	58	83	Kelly, Amy R.	101	42	80
Mortimer, J. Wallace	101	58	83	Knowlton, Edith	98	42	80
Parker, Lillian C.	101	58	83	LeBlanc, Leo J.	98	45	00
Pippy, George F.	52	30	28	McCabe, Georgie	103	45	00
Robson, Norman	101	58	85	McCormick, Catherine	103	36	25
Rose, Lily M.	103	60	00	McDonald, Annie C.	83	42	80
Schurman, Sadie M.	98	57	07	MacDonald, Daisy	98	42	80
Seifert Maudena Mac	103	60	00	Macdonald, Ethel M.	98	44	12
Sister M. Amabilis	103	60	00	Macdonald, Jean F.	101	42	80
Sister M. Ambrosia	103	60	00	Macdonald, Margaret J.	98	45	00
Sister M. Annette	103	60	00	Macdonald, Nellie	103	45	00
Sister M. Clarissa	103	60	00	Macdonnell, Theresa	103	45	00
Sister M. Cleophas	103	60	00	McDougall, Daniel J.	103	41	80
Sister M. Concepta	103	60	00	MacInnis, Dorothea J.	95	42	80
Sister M. Edwina	103	60	00	MacIntosh, Margaret E.	98	42	71
Sister M. Gerard	103	60	00	McIntyre, Matilda	95½		
Sister M. Josita	103	60	00	McIsaac, D. Joseph			
Sister M. Lawrence	103	60	00	East Bay Consolidation, 3 D., 95½ days	79		
				McIsaac, Margaret			

Melisaac, Mary J.	98	42 80	*Cox, Mary E.	40	15 53
McKeough, A. A.	103	45 00	Crewe, Myra A.	44	12 81
McKeough, William F.	98	42 80	Currie, Teresa	103	30 00
MacKinnon, Katie	98	42 80	Dillon, Agnes W.	101	29 41
McLean, S. Agnes	99	43 24	Downing, L. Minnie	101	29 41
MacLellan, Jennie	78	34 06	Egan, Carlotta	98	28 53
McLeod, Cecilia	102	44 56	*Farrell, Hugh	73	28 34
McLeod, Tena H.	24	10 47	Fjelding, Clara	103	30 00
Macmillan, Gordon	94	41 06	*Finlayson, Tena J.	101	39 22
Macneil, Alexandra	103	45 00	Francis, Hildred O.	103	30 00
McNeil, Annie L.	98	42 80	Fraser, Esther C. I.	89	25 91
McNeil, Katie	103	45 00	Gillis, Minnie	87	25 33
McNeil, Maria	98	42 80	Gouthro, Veronica	82	23 88
MacPhee, Annie R.	100	43 68	Jenner, Lenna M.	50	14 56
Merritt, Mary	103	45 00	Kerr, Annie	101	29 41
Morrison, Margaret	103	45 00	Kerr, Annie F.	103	30 00
Mosher, Blanche	103	45 00	Knox, S. Edna	103	30 00
Muggah, Margaret	98	42 80	McBeth, Frank	69	20 09
Phillips, Katie F.	102	44 56	Macdonald, Elizabeth	103	30 00
Phoran, Alice	102	44 56	McDonald, Ella	24	6 98
Pierce, Celeste	103	45 00	McDonald, Joanna	33	9 60
Plant, Thos. W.	25	10 91	MacDonald, Mary C.	50	14 56
Richards, Clara	77	33 62	McDonald, Mary J.	29	8 44
Robinson, Hattie L.	102	44 56	McDonald, Mary J.	103	30 00
Rose, Lenora B.	102	44 56	*McDonald, Peter	103	40 00
Ross, Annie J.	103	45 00	*McDonald, Ronald J.	78	30 29
Ross, Maggie	100	43 68	*McDougall, Duncan	103	40 00
Simpson, A. Olive P.	100	43 68	*MacInnis, Margaret M.	103	40 00
Simpson, Margaret J.	102	44 56	*MacInnis, Margaret May	71	27 57
Sister Francis Leon	103	45 00	MacIver, Lizzie	103	30 00
Sister M. Ambrose	103	45 00	Mackenzie, Katherine	100	29 12
Sister M. Andrea	98	42 80	MacKenzie, Lottie	103	30 00
Sister M. Angelorum	103	45 00	Mackenzie, Margaret	98	28 53
Sister M. Annina	103	45 00	McKeough, Wilfred A.	103	30 00
Sister M. Bernardine	103	45 00	MacKinnon, Christine	89	25 91
Sister M. Camillus	103	45 00	MacKinnon, Jessie M.	98	28 53
Sister M. Eulalia	89	38 87	*McKinnon, Mary L.	24	9 32
Sister M. Gualbert	103	45 00	MacKinnon, Sadie M.	68	19 79
Sister M. Josephine	39	17 03	MacLean, Ellen K.	25	7 28
Sister M. Leonard	103	45 00	MacLean, Myrtle L.	50	14 56
Sister M. Louise	103	45 00	McLean, Rachel	84	24 46
Sister M. Oswald	103	45 00	*McLennan, Sadie K.	81	31 45
Sister M. Stephen	103	45 00	McLeod, Janie E.	62	18 05
Sister M. Veronica	103	45 00	*McLeod, Jessie W.	62	24 07
Sister M. Wilfrid	103	45 00	McLeod, Margaret	99	28 82
Sister St. Aldric	98	42 80	McLeod, Sarah	103	30 00
Sister St. Alexander	102	44 56	McMillan, Fanny	27	7 86
Sister St. Andrew	9	3 92	MacMillan, Katherine	103	30 00
Sister St. Casilda	98	42 80	McNeil, James	103	30 00
Sister St. Henedine	102	44 56	Matheson, Anselm I.	71½	20 83
Sister St. John	102	44 56	Mattatall, Florence	103	30 00
Sister St. Marcella	98	42 80	Morrison, Jessie A.	97	28 24
Sister St. M. Aloysius	98	42 80	Morrison, Lottie	103	30 00
Sister St. Reginald	98	42 80	Morrison, Margaret M.	39	11 35
Smith, Gertrude O.	70½	30 79	Nicholson, Mary V.	90	26 21
Battersby, Ethel E.	89	25 91	Nickerson, Margaret	103	30 00
Boutillier, Elizabeth	79	23 00	O'Handley, Joanna	98	28 53
Brennan, Maude E.	92	26 79	Ross, Margaret	103	30 00
Burke, Dormitella M.	103	30 00	Sampson, Clara May	100	29 12
*Calder, Elsie	79	30 58	Scott, Mary Alice	103	30 00
Cameron, Bessie Jean	89	25 91	Sister M. Imelda	14	4 07
*Campbell, Mary	15	5 82	Sister M. Lucilla	103	30 00
Carlin, Mary M.	96½	28 10	Sister St. Ann	98	28 53
Carmichael, Jessie	103	30 00	Sister St. Frances	98	28 53
Coady Margaret A.	94	27 37	Sister St. Gregory	96½	28 10
Coady Mary Ellen	13	3 78	Sister St. Mary	96½	
Coady Mary Ellen	91	26 50	Smith, Christina	103	

Smith, John	99	28 82
Sullivan, Catherine	92	26 79
Sullivan, Marie	98	28 53
*Sullivan, Martha A.	103	40 00
Townsend, Matilda F.	103	30 00
Wallace, Jean	84	24 46
Young, N. Edgar	101	29 41

## ANNUITANTS.

Dowling, Thomas C.	60 00
McDonald, Joseph	60 00
McNeil, John D.	60 00
Garrett, Charles V.	45 00
McDougall, Philip	45 00

## COLCHESTER.

## SOUTH.

Creelman, W. A.	101	88 23
England, Harry E.	103	90 00
McKenzie, George	103	90 00
Richardson, L. A.	89	77 73
Creelman, Martha	101	58 83
Barnes, Blanche	98	57 07
Barteaux, J. E.	103	60 00
Coulter, Christena	101	58 83
Crowe, Jeanetta	103	60 00
Dickson, Hattie D.	103	60 00
Doyle, Sarah Mable	103	60 00
Harvey, Essie C.	103	60 00
Johnson, Harriet	103	60 00
Hunter, Jennie	101	58 83
Lank, Annie C.	101	58 83
Lavers, Josephine	98	57 07
Logan, Margaret	101	58 83
Mosher, Amy	101	58 83
McCurdy, Ruth	17	9 89
McKenzie, Georgie	103	60 00
McLennan, Jennie	101	58 83
McNeill, Bessie	101	58 83
McPherson, Margaret	101	58 83
Nelson, Eda	101	58 83
Nichols, Harriet	101	58 83
Shaw, F. L.	99	57 66
Stevens, Georgie	103	60 00
Walker, Jean	101	58 83
Archibald, Janet	101	44 12
Archibald, Gertrude	102	44 56
Archibald, Jessie D.	103	45 00
Beckwith, Florence	98	42 80
Brown, Bertha	103	45 00
Bradley, Annie	100	43 68
Crowe, Jennie D.	102	44 56
Crowe, Bell a	103	45 00
Cruikshank, Edna	103	45 00
Crooke, Georgie	69	30 13
Cooke, Mary L.	103	45 00
Davis, D. G.	101	44 12
Fulton, Mildred	102	44 56
Fiske, Mable	81	35 37
Graham, Ida May	101	44 12
Graham, Addie R.	73	31 88
Guild, Jean	14	6 10

Hamilton, Mable	103	45 00
Hutchinson, Esther	100	43 68
Hutchinson, Grace	101	44 12
Kelley, Marion	101	44 12
Little, Ada C.	101	44 12
Lunn, Ethel C.	101	44 12
Langille, Hilda	102	44 56
Miller, Agnes	103	45 00
McKim, Agnes	73	31 88
McKay, Olivia	103	45 00
Parker, Fssie	98	42 80
Roode, Annie C.	25	10 91
Rogers, Sadie	24	10 69
Schurman, Annie	77	33 62
Taylor, Mary Edith	103	45 00
Turner, Josephine	101	44 12
Wallace, May	102	44 56
Wright, Jessie	103	45 00
*Archibald, Maynard	77	29 90
*Bates, Edwina	102	39 61
Carter, Medora	91	26 50
Deckman, Elizabeth	103	30 00
Deckman, Florence May	80	23 30
*Fulton, Agnes May	100	38 83
Fulton, Nellie P.	93	27 08
Fox, Alice	98	28 53
Gordon, Evelyne	100	29 12
Higgins, Matilda J.	103	30 00
Higgins, Lida M.	101	29 41
Johnson, Ethel G.	98	28 53
*Lynds, Adelaide	103	29 41
Morgan, Lizzie	101	40 00
*Murray, Alexandra	80	29 41
Mosher, Ellen S.	78	31 06
McLaughlin, Nellie	103	22 71
McLeod, Susie	103	30 00
McLeod, Elsie	29	8 44
*O'Brien, Janie	103	30 00
Rutherford, Ada M.	101	29 41
Parker, Laura D. B.	101	28 34
*Sutherland, Jean	73	29 41
Strople, Florence	103	30 00
Urquhart, Nellie	78	30 00
*Vance, Ruby	102	22 71
Wright, Bertha	103	39 61
Whidden, Carletta	69	30 00

## ANNUITANT.

Calkin, J. B.

## WEST.

Cameron, Wyman A.	103	60 00
Carson, Teresa B.	103	60 00
Davidson, Lucretia F.	102	59 41
Dawson, J. Arthur	103	60 00
Deckman, Elsie E.	103	60 00
Fulton, Beatrice O.	103	60 00
Peppard, Ruth	101	58 83
Tibert, W. K.	103	60 00
Boyd, Grace	103	45 00
Collins, Susie	103	45 00
Cooke, Agnes B.	103	45 00
Drysdale, Carrie M.	103	45 00
Faulkener, Susie C.	77	33 62
Fulton, Sarah J.	103	45 00

Lighthody, Ina B.	103	45 00
Johnson, Lizzie	103	45 00
Morrison, Ida M.	103	45 00
Morash, Isabel C.	103	45 00
McIntosh, Laura B.	103	45 00
Roberts, Marion	103	45 00
Scott, Catherine	100½	43 90
Smith, Ada E.	103	45 00
Totten, Bertha	102	44 56
Vance, Luther C.	103	45 00
Williams, Margaret	103	45 00
Archibald, Ethel	103	30 00
Boyd, Jessie B.	103	30 00
Carter, Olive	103	30 00
Cottle, Hannah	103	30 00
Crowe, Tressie May	101	29 41
*Gamble, Ruth	20	7 77
Jones, Estella	103	30 00
*Marsh, Isabel	97	37 67
Purdy, Agnes	103	30 00
Reid, Sarah Ellen	103	30 00
Schwartz, Frances	101	29 41
Schurman, Lulu	87	25 33
Smith, Ina L.	103	30 00
Vance, Sadie E.	103	30 00
Great Village Consolidation	103	30 00

STIRLING.

Currie, Nellie S.	97	42 37
Currie, Mary M.	103	45 00
Drysdale, Janet R.	103	45 00
Gunn, Mamie A.	103	45 00
Kennedy, Lizzie A.	103	45 00
Langille, Annie M.	103	45 00
McLeod, Jennie A.	103	45 00
McCleave, R. D.	103	45 00
Sutherland, Bessie	93	40 62
Taylor, Arabella	103	45 00
Baillie, Christie M.	103	30 00
Byers, Jennie C.	84	24 46
Byers, Maggie J.	74	21 55
Craig, Jean	102	29 70
Donaldson, Lloyd C.	103	30 00
Ferguson, Bessie C.	102	29 70
Langille, Jennie	28	8 15
Lynds, Bessie	103	30 00
Matheson, Annie	99	28 82
Mingo, Edith	102	39 61
*Murdoch, Ethel	103	30 00
*McEachern, Lydia	89	34 56
*Mckay, Jessie B.	102	29 70
McKay, Margaret	103	30 00
McLandress, Minnie	99	28 82
Patterson, Frank	77	29 90
*Rutherford, Julia	103	30 00
Sutherland, Jennie	103	30 00
Sutherland, Katherine	103	30 00
Weatherby, Hattie	103	30 00
Wilson, Irene	102	29 70

CUMBERLAND.

Brennan, D. S.	99	72 05
Lay, E. J.	103	105 00

Morehouse, F. G.	103	105 00
Smith, Lizzie	103	90 00
Stevens, Josephine	99	100 87
Brownell, Irene G.	103	60 00
Charman Mary E.	97	56 49
Crawford, Roy D.	103	60 00
Gordon, Sadie J.	103	60 00
Grant, Mabel	78	45 42
Hall, Georgie	98	57 07
Hibbert, T. M.	103	60 00
Hill, Alice D.	102	59 41
Lantz, Theresa	103	60 00
Lawrence, Jennie	99	57 66
Lay, Jean P.	73	42 51
Lent, F. T.	103	60 00
Lent, Irene	103	60 00
McKenzie, Annie	98	57 07
McKenzie, Amelia	101	58 83
McLean, Herbert B.	25	14 56
McPhie, Loretta J.	98	57 07
McRae, Muriel	103	60 00
McWilliams, Jessie	25	14 56
Mitchell, Jennie M.	103	60 00
Moore, A. K.	25	14 56
Purdy, Pearl	103	60 00
Roney, Ebbie	98	57 07
Shortliffe, D. L.	103	60 00
Smith, Eva	103	60 00
Sproule, Lottie	103	60 00
Swift, Alice	98	57 07
Thompson, Alice	97	56 49
Amos, Maud	98	42 80
Atkinson, Helen L.	103	45 00
Baird, Jean F.	101	44 12
Beaton, Mary	102½	44 78
Bent, Roland	78	34 06
Bigney, Bessie	103	45 00
Bird, Vera	103	45 00
Brown, Margaret	103	45 00
Brownell, Mayme	103	45 00
Brundage, Kate	103	45 00
Burden, Isabella	25	10 91
Butler, Mamie E.	74	32 31
Callaghan, Lena M.	103	45 00
Cameron, Donnie	103	45 00
Cameron, Blanche	102	44 56
Charman, Eliza G.	103	45 00
Clarke, Agnes	103	45 00
Clarke, Elizabeth J.	103	45 00
Coates, Clara	98	42 80
Costin, Marion	89	38 87
Craig, Muriel E.	103	45 00
Creelman, Jean	103	45 00
Elliott, Minnie	78	34 06
Elliott, Ida W.	100	43 68
Embree, Sara	103	45 00
Evans, Gertrude	98	42 80
Falconer, Jean	97	42 37
Fawles, Margaret	103	45 00
Frame, Annie	103	45 00
Fulmore, Della M.	84	36 68
Grant, Lena	103	45 00
Hall, Mabel	73	31 88
Hanna, Mabel E.	98	42 80
Harrison, Kate B.	86	37 55
Harrison, Erna	98	42 80
Henley, Theresa	98	42 80



Gallager, Adelaide I.	103	45 00
Gibson, Florence	103	45 00
Kerr, Minnie	103	45 00
Lockhart, Annie J.	102	44 56
O'Regan, Nellie	103	45 00
Oxley, Annie	103	45 00
Rogers, Sadie	103	45 00
Spicer, Perle A.	77½	33 84
Ward, Cora	103	45 00
Lerry, Ethel	98	42 80
Canning, Minnie	103	30 00
Davidson, Rebecca A.	97	28 24
Doane, Margaret A.	94	27 37
Fullerton, Marion T.	102	29 70
Gilbert, Elsie P.	81	23 59
McCullum, Alberta M.	102	29 70
*Mosher, Susie A.	103	30 00
Quinn, Dora	96	37 28
Salter, Josephine	103	30 00
Stropole, G. E.	103	30 00
Willis, Jennie L.	102	29 70
Consolidated School, Advocate	84	24 46
Consolidated School Wentworth	103	30 00
	101	29 41

ANNUITANT.

Sister Mary Ann		60 00
-----------------	--	-------

DIGBY.

Morton, Rupert F.	103	105 00
Belliveau, John E.	103	60 00
Rest, Ella M.	101	58 83
Churchill, Harry W.	108	62 91
Frost, Myrtle B.	103	60 00
Cesner, C. Leonard	103	60 00
Harris, Cora M.	103	60 00
Hayford, Albert C.	103	60 00
Hemeon, Elizabeth	103	60 00
Hicks, Blanche G.	103	60 00
Hogg, Augusta A.	103	60 00
Hogg, Nathaniel W.	98	57 07
Melancon, Frank E.	103	90 00
Outhouse, Lizzie	103	60 00
McWhinnie, Eva C.	103	60 00
Pettit, Annie M.	103	60 00
Sister M. Alonzo	99	57 66
Sister Baptista Maria	103	60 00
Turnbull, Bessie B.	97	56 49
Woodbury, Mabel B.	101	58 83
Amirault, Alfred A.	98	57 07
Amirault, Ellen	74	32 31
Baneroff, Helen	5	2 18
Belliveau, Antoinette	103	45 00
Comeau, Amy	103	45 00
Deveau, B. Mildred	103	45 00
Doucet, Beatrice M.	103	45 00
Doucet, Adele	93	40 62
Doucet, Elizabeth	103	45 00
Doucet, Jos. Phillip	103	45 00
Dugan, Aggie	103	45 00
Dugan, Ina L.	103	45 00
Cower, Viola C.	103	45 00
Hayden, Viola C.	103	45 00

Hiltz, Josie A.	101	44 12
Hutchinson, Nina B.	103	45 00
LeBlanc, Daniel	103	45 00
Letteney, Edith P.	102	44 56
Lombard, Elizabeth	78	34 06
MacEwen, Mary C.	24	10 47
Melancon, Rose A.	103	45 00
Mussells, Maude A.	103	45 00
Peters, E. Gertrude	103	45 00
Pothier, Adaline C.	85	37 12
Robbins, Myrtle J.	102	44 56
Saulnier, Catherine	103	45 00
Shortliffe, Maud A.	103	45 00
Simpson, Florence E.	103	45 00
Sister Mary	103	45 00
Sister M. Anthony	103	45 00
Sister M. Elise	103	45 00
Sister M. Modesta	103	45 00
Spurr, Annie M. W.	25	10 91
Stevens, Endora M.	103	45 00
Taylor, Addie D.	103	45 00
Thibault, Alma	20	8 72
Thibodeau, Beatrice	103	45 00
Titus, Lawrence L.	103	45 00
Trevo, Archie H.	103	45 00
Urquhart, Margaret P.	102½	44 78
Varner, Disa M.	100½	43 90
Walsh, Grace B.	103	45 00
Amirault, Edith S.	86	25 04
*Andrews, Nina B.	69½	26 98
Bailey, Edna E.	103	30 00
Brooks, Grace D.	14	4 07
Campbell, Lola B.	98½	28 68
Comeau, Marie Ann	103	30 00
*Comeau, Marie Rose	103	40 00
Crocker, Eva M.	93	27 08
Dakin, Guy Allen	89	25 91
DeLancey, Mary S.	103	30 00
Denton, E. May	103	30 00
*Denton, A. Augusta	103	40 00
Deveau, Louise	49	14 26
*Doty, Floris G.	103	40 00
*Doty, Lytha M.	103	40 00
Doucet, Nellie	102	29 70
Durland, Bessie R.	103	30 00
*Franklin, Alma M.	68	26 40
Gormley, Katherine I.	94	27 37
Grant, Estella V.	93	27 08
Harris, Nellie M.	103	30 00
Hersey, Laura B.	103	30 00
Hiltz, Livian M.	93	27 08
Kinney, Rowena J.	100	29 12
LeBlanc, Symphorien	103	30 00
*Lewis, Jessie M.	91	35 34
*Mack, Annie L.	103	40 00
Manzar, Gladys R.	100	29 12
*McCullough, Nettie B.	94	36 50
*Melancon, Leonie A.	50	19 41
Melancon, Nellie	103	30 00
*Millner, G. Evelyn	97	37 67
Morse, Ethel E.	89	25 91
Nowlan, Lena M.	88	25 62
Prime, Lenetta	103	30 00
Ring, Viva M.	103	30 00
Robichaud, Emelie	103	30 00
Robicheau, Isabella	103	30 00
Robicheau, Loretta M.	103	30 00





Hill, K. F.			Shields, E. G.	98	57 07
Blois, H. H.	39		Shields, S. W.	103	60 00
Butler, G. K.	103	90 00	Sims, S. A.	98	57 07
Cummings, E.	98	85 59	Spenser, A.	98	57 07
Deberty, D. P.	98	57 07	Spencer, F. M.	98	57 07
Evaristus, Sr.	61	44 40	Sullivan, Mme.	98	57 07
Marshall, G. R.	98	85 59	Theakston, H. S. F.	98	57 07
Murray, Mme.	67	48 75	Tulloch, M. E.	98	57 07
O'Hearn, P.	98	71 32	Thompson, F.	98	57 07
Rosaria, Sr.	103	90 00	Tynan, J. C.	98	57 07
Rosaire, Sr.	98	85 59	Wakeley, A. C.	98	57 07
Agnes, Sr.	98	57 07	Walsh, J. L.	98	57 07
Agnita, Sr.	98	57 07	Whalen, A. T.	98	57 07
Allen, M. E.	98	57 07	Wiswell, I. M.	98	57 07
Amund, E.	98	57 07	Woolrich, M. E.	98	57 07
Archibald, S.	103	60 00	Xavier, Sr.	74	43 09
Berchmans, Sr.	98	57 07	Ackhurst, M. L.	98	42 80
Borcham, E. M.	98	57 07	Ancient, F. S.	73	31 88
Bowden, I. M.	98	57 07	Baker, G. H.	98	42 80
Bowden, L. J.	103	60 00	Bayer, A. L.	98	42 80
Britts, M. C.	98	57 07	Bayer, H. M.	98	42 80
Brunt, B. G.	98	57 07	Blakeney, B. H. V.	25	10 91
Brunt, H. D.	98	57 07	Blois, E. H.	95	41 49
Brodie, I.	103	60 00	Broadhurst, M. E.	103	45 00
Brown, E. R.	98	57 07	Butler, E. R.	36	15 71
Brown, M. L.	98	57 07	Catherine, Sr.	98	42 80
Boutlier, M. L.	98	57 07	Christina, Sr.	98	42 80
Cameron, E.	98	57 07	Clark, E. M.	98	42 80
Cecilia, Sr.	98	57 07	Clement, Sr.	98	42 80
Chapman, E. L.	103	60 00	Cunningham, E. S.	98	42 80
Chisholm, E. A.	98	57 07	Curren, E. M.	98	42 80
Concepta, Sr.	98	57 07	DePazzi, Sr.	98	42 80
Creighton, I. M.	9	5 23	Delphine, Sr.	98	42 80
Cunningham, A. M.	98	57 07	Devine, M. E.	98	42 80
Delahanty, K.	98	57 07	Ead, M. J.	98	42 80
Dempsey, I. B.	98	57 07	Evangelista, Sr.	98	42 80
Dolorita, Sr.	98	57 07	Felix, Sr.	98	42 80
Dolorosa, Sr.	98	57 07	Finn, Mme.	98	42 80
Dwyer, M. E.	98	57 07	Gervase, Sr.	98	42 80
Eucharia, Sr.	98	57 07	Grant, R. G.	84	36 68
Florence, Sr.	98	57 07	Grierson, F.	98	42 80
Flowers, E. M.	98	57 07	Grierson, M. H.	98	42 80
Flowers, H. L.	98	57 07	Hamilton, H. H.	98	42 80
Francis, Sr.	98	57 07	Hartigan, Sr.	98	42 80
Gaul, R. E.	98	57 07	Healy, K. E.	98	42 80
Greig, G. S.	98	57 07	Henrion, C. E.	98	42 80
Harlow, A. C.	98	57 07	James, C. A.	98	42 80
Hazie, E. M.	98	57 07	Jamieson, H. J.	98	42 80
Huggins, C. M.	98	57 07	J. Baptist, Sr.	98	42 80
Kelly, J. M.	98	57 07	Johns, M. A.	98	42 80
Kelly, Mme.	98	57 07	Johnston, L. J.	98	42 80
Laracy, A. X.	98	57 07	Joseph, Sr.	98	42 80
Leontine, Sr.	98	57 07	Kennedy, M. C.	98	42 80
Madeline, Sr.	98	57 07	Leo, Sr.	98	42 80
Maria, Sr. S.	98	57 07	Leocadia, Sr.	98	42 80
Marshall, L. E.	98	57 07	Logan, Sr.	98	42 80
Mason, H. E. M.	98	57 07	Lyall, B. H.	98	42 80
Phelan, M. F.	103	60 00	Lyons, M.	34	14 84
Plus, Sr.	98	57 07	McArthur, J. R.	98	42 80
Rhankine, A. B.	98	57 07	McDonell, Mme.	98	42 80
Richardson, R.	98	57 07	McGregor, A.	98	42 80
Ross, E. D.	98	57 07	McLean, A.	98	42 80
Rose, E. J.	98	57 07	Maria, Sr. A.	98	42 80
Sanders, A. K.	98	57 07	Martin, J. J.	15	6 54
Sanders, K. O.	98	57 07	Mary, Sr.	98	42 80
Sanders, A. C.	103	60 00	Mitchell, L. E. J.	98	42 80
	89	51 83	Mooney, E. M.	98	42 80
	98	57 07			
	98	57 07			

O'Brien, M. A.	98	42	80
O'Donoghue, M. T. T.	98	42	80
Perpetua, Sr.	98	42	80
Phelan, F.	19	8	28
Publicover, J. E.	98	42	80
Putnam, A. F.	98	42	80
Raphael, Sr.	98	42	80
Remigius, Bro.	98	42	80
Rita, Sr.	98	42	80
Rockett, M. M.	98	42	80
Ross, Carrie E.	98	42	80
Stanislaus, Sr.	98	42	80
Strattan, E.	98	42	80
Sullivan M.	98	42	80
Sullivan, M. T.	98	42	80
Sullivan, M. T. R.	98	42	80
Theakston, S. E.	103	45	00
Travis, A. A.	98	42	80
Trivett, M. E.	98	42	80
Vincent, Sr.	98	42	80
Walsh, A. M.	98	42	80
Warner, M. F.	98	42	80
Wells, C.	98	42	80
Wells, M. H.	98	42	80
Willis, E. J.	98	42	80
Jemmott, M. F.	98	28	53
Patrick, Bro.	98		

EVENING SCHOOLS.

Huggins, G. M.	17 $\frac{1}{2}$	6	79
Ross, E. J.	18 $\frac{1}{2}$	7	17
Titus, R. L.	18	6	99

ANNUITANTS.

Hall, Helen McG.	98	60	00
Torrey, E. C.	98	45	00
Gossip, C. M.	98	30	00

COUNTY.

Patterson, Gladys M.	103	90	00
Stapleton, W. C.	101	102	93
Stapleton, W. C.	28	16	30
Allen, Christina	101	58	83
Bell, Mary F.	98	57	07
Corkum, Ethel	98	57	07
Creighton, Frances G.	98	57	07
Grant, Ethel M.	103	60	00
Guild, Lulu J.	98	57	07
Henry, Ethel K.	103	60	00
Hill, Annie L.	103	60	00
Hiltz, Ethel M.	98	57	07
Miller, Florence M.	98	57	07
Ogilvie, Estey M.	103	60	00
Prescott, Alice	101	58	83
Rutherford, Margaret F.	103	60	00
Settle, Gertrude	93 $\frac{1}{2}$	54	45
Tupper, Edith I.	103	60	00
Ahern, Mary	47	20	52
Balcombe, Florence C.	19	8	28
Browne, Grace A.	103	45	00
Burgess, Bertha L.	101 $\frac{1}{2}$	44	34
ameron, Sadie	101	44	12
ark, Janet G.	91	39	75
Clark, Ina J.	100	43	68

Coleman, H. E.			
Conrad, Ethel M.			
DeVan, Eileen M.			
Dickie, Gertrude H.			
Dickie, Lillie A.			
Eaton, Bertha M. L.			
Ellis, Nina M.			
Erskine, Jennie B.			
Fahie, Annie M.			
Farnell, Eva T.			
Findlay, Sadie			
Findlay, Sadie (Ev. Sc.)			
Fisher, Adela B.			
Foley, Ethel			
Fox, Jean Christie			
Fraser, Ella J.			
Gallagher, Adelaide			
Gallagher, Mildred			
Gates, Gertrude M.			
Goodick, J. R.			
Graham, Myrtle E.			
Grant, Christine			
Greig, Lily C.			
Hamilton, Mary A.			
Hartling, Etta M.			
Heisler, Arthur J.			
Higgins, Emma A.			
Hume, Mary M.			
Hume, Bessie			
Laidlaw, Elizabeth			
Langille, Jessie E.			
Marryatt, Ida M.			
Mellish, Mary			
Morash, Sara M.			
Myers, Jeanetta A.			
Myers, Tillie A.			
MacGillivray, Flora			
MacKay, Isabel			
McKenzie, Margaret A.			
McLeod, Beatrice			
Reid, Mary K.			
Remby, Lottie R.			
Roche, Mary			
Schultz, Sadie E.			
Shaffelburg, Ada L.			
Shaw, Sarah E.			
Shute, Jessie T.			
Smith, Etna O.			
Smith, Anna M. E.			
Smith, Isabella			
Smith, Pearl, M.			
Stiles, Edna M.			
Strachan, Katherine			
Tays, Gertrude H.			
Tays, Hattie S.			
Thomas, Bessie			
Thompson, Roy M.			
Tucker, Bessie J.			
Vaughan, Ethel			
Wickwire, Annie L.			
Wier, Amelia			
Withrow, Helena H.			
Archibald, Emma			
*Anderson, Arthur J.			
Atkins, R. A.			
Baker, Winifred			
Burgoyne, Alice V.			

103  
45 56  
102  
45 00  
103  
45 00  
103  
44 00  
103  
44 00  
102  
45 00  
103  
28 77  
59  
91  
103  
98  
28  
102  
103  
102  
101  
103  
103  
10  
23  
98  
94  
98  
78  
101  
103  
103  
103  
98  
97  
98  
103  
103  
103  
102  
98  
98  
101  
20  
98  
102  
98 $\frac{1}{2}$   
95  
98  
102  
103  
79  
97  
84  
98  
103  
103  
98  
100  
103  
97  
103  
101  
101  
41  
78  
103  
100  
98

Burris, Edith A.	103	30 00
Clarke, Catherine B.	98	28 53
Comeau, Cordelia R.	48	12 23
Comeau, Eva	52	15 14
Collins, Margaret	98	28 53
Collins, Pearl	92	26 79
Corner, Anna	103	30 00
Corner, Bessie B.	103	30 00
Cruikshank, Norman	101	29 41
Curry, Emma	103	30 00
Dauphinee, Elsie M.	103	30 00
Dickie, Mabel B.	102	29 70
*Eastham, Gertrude	103	40 00
*Elliot, Vera F.	78	30 29
Fahie, Annie Mae	90	26 21
*Fader, Eva M.	54	20 97
Ferguson, Cora M.	101	29 41
Foley, Irene	100	29 12
*Fox, Bertha	103	40 00
Gaetz, Florence	103	30 00
Gates, Plessah M.	103	30 00
*Glawson, Ethel M.	103	40 00
Grant, Edna G.	103	30 00
Guild, Ethel G.	103	30 00
Hall, Mabel E.	103	30 00
Heisler, Nellie M.	103	30 00
Higgins, Josephine	99	28 82
*Harpell, Amanda	103	40 00
*Hilchie, Lillie M.	82	31 84
Josey, Gladys P.	101	29 41
*Jones, M. Elanor	103	30 00
Julien, Emma B.	97	37 67
Josey, Hattie B.	103	30 00
Kennedy, Winifred M.	59	17 17
*LaPierre, Matilda	98	28 53
*Lowe, Catherine M.	87	33 78
Melvyn, Wilhelmina	89	34 56
Murphy, Mary	69	20 09
Murray, Mary Isabel	103	30 00
Myra, Blanche	69	20 09
MacKenzie, Elsie C.	103	30 00
*McLeod, Elsie	103	30 00
*McLeod, Jennie S.	30	8 73
Ogilvie, Bertha	94	36 50
Ogilvie, Bessie R.	83	24 17
Ogilvie, Phelie A.	103	30 00
Parlee, Alwida M.	103	30 00
Perry, Eva M.	103	30 00
*Prest, Mary M.	103	30 00
*Pye, Odessa M.	103	30 00
*Reid, Mabel L.	84	32 62
Richardson, Edith M.	93	36 11
*Ritcy, Augusta O.	103	30 00
Sibley, Florence E.	103	40 00
Sibley, Harriet M.	103	30 00
*Simpson, Ruth B.	101	29 41
*Skerry, Emma	42	12 23
Skerry, Margaret E.	87	33 78
*Smith, Alice M.	103	30 00
Smith, Gladys B.	88	34 17
Smith, Maie Addie	88	25 62
Stoddard, Sabina B.	103	30 00
Sutherland, Grace	103	30 00
Sullivan, Rose	99	28 82
Sutherland, Jessie C.	103	30 00
Warner, Mary B.	103	30 00
	89	25 91

Webber, Kathleen J.	94	27 37
Yeadon, Ida M.	103	30 00
Naylor, Kate	98	28 53

ANNUITANTS.

Gibbons, John		30 00
Bacon, Amelia A.		30 00

HANTS.

WEST.

Kaulbach, Lenore	98	85 59
Smith, J. A.	101	102 93
Best, Flora A.	97	56 49
Brennan, Maude A. M.	103	60 00
Faulkner, Aveline	101	58 83
Faulkner, Harriett C.	103	60 00
Faulkner, Nina Ethel	99	57 66
Lockhart, Bessie B.	102	59 41
Lockhart, Lena W. C.	103	60 00
McCulloch, H. Gertrude	103	60 00
McDonell, L. Margaret	103	60 00
McLellan, Mary	98	57 07
O'Brien, Annie B.	25	14 56
Oulton, Millage	98	57 07
Parker, Maie L.	101	58 83
Pentz, Bertha E.	102	59 41
White, Jennie, M.	98	57 07
Baizley, Abby B.	101	44 12
Bennett, Hanna	98	42 80
Burgoyne, N. A.	97	42 37
Caldwell, Winnie B.	103	45 00
Campbell, Lena B.	94	41 06
Dimock, Annie A.	98	42 80
Dimock, Jessie	103	45 00
Dow, Margaret J.	103	45 00
Goudy, Emily F.	97	42 59
Graham, Alice E.	103	45 00
Harrison, Alma F.	88	38 43
Harvie, Alice	101	44 12
Hebb, Florence Edith	73	31 88
Kelley, Minnie A.	98	42 80
Lawrence, Harriett E.	103	45 00
Lynch, Jessie A.	103	45 00
Mariette, Emma M. i	103	45 00
McCurdy, Helen	98	42 80
McLearn, Gertrude E.	102	44 56
Miller, A. Blanche	102	44 56
Mosher, Idella P.	101	44 12
North, Marjorie D.	98	42 80
Parsons, Harriett A.	101	44 12
Peck, Jessie A.	103	45 00
Rines, Rossie A.	102	44 56
Sanford, Alida R.	103	45 00
Shaw, Mildred	103	45 00
Simm, Ethalyn L.	101	44 12
Spencer, Fred L.	103	45 00
Wallace, Ellen	101	44 12
*Chesley, Isabel E.	84	32 62
Corbett, Edith Cassie	94	27 37
Gray, Bessie C. A.	103	30 00
Greenough, Jennie	103	30 00
Lantz, Mabel E.	103	30 00

Laws, Lillian F.	98	28 53
*Levy, Evelyn M.	69	26 79
*MacKee, Ethel G.	103	40 00
Meadows, Mary Pearl	102	29 70
*Miller, Edna J.	54	20 97
Mosher, Mary Louise	103	30 00
O'Brien, Alice I.	78	22 71
O'Spearing, Alice M.	98	28 53
Smith, Emma G.	95	27 66
*Smith, Ida L.	103	40 00
*Stewart, Violet R.	74	28 73
Underwood, Janie	103	30 00
*Vaughan, Mary Pamela	68	26 40

EAST..

Archibald, John T.	103	60 00
Eaton, Lucia H.	103	60 00
Holesworth, Mabel C.	101	58 83
Lewis, Lena L.	103	60 00
Marchant, Laura L.	103	60 00
McNutt, Annie	103	60 00
Morrison, Maggie M.	103	60 00
Rines, Maggie L.	103	60 00
Adams, Floretta M.	73	31 88
Archibald, Irene	103	45 00
Auld, Margaret E.	101	44 12
Brison, Nellie G.	102	44 56
Brown, Laura A.	103	45 00
Dalrymple, Lucy M.	99	43 24
Dechman, Edith H.	101	44 12
Densmore, Agnes McHarrie	103	45 00
Dowell, Helen Grace	103	45 00
English, Mabel Irene	101	44 12
Faulkner, Susan O.	96	41 93
Gaul, Ethel	89	38 87
Graham, Julia	25	10 91
Hamilton, Mildred	102½	44 78
Harvey, Arabella	102	44 56
Harvey, Jessie L.	103	45 00
Kent, M. Lillian	103	45 00
MacCabe, V. Pearl	103	45 00
MacDougall, Lois M.	79	34 50
MacDougall, Myrna M.	103	45 00
McGill, Frances	102	44 56
MacLeod, Margaret	103	45 00
Moore, Henrietta	38	16 59
Moore, Jamesina	38	16 59
Nicholson, M. Vance	103	45 00
North, Bertha M.	103	45 00
Quigley, Mary E.	72	31 44
Weatherhead, Jessie E.	94	41 06
*Bowes, Willetta J.	103	40 00
Brown, Ellen C.	103	30 00
Clarke, Eva Pauline	62	18 65
Clarke, Helen	84	24 46
Cole, Lydia M.	103	30 00
Dowell, Vera Belle	103	30 00
*Etter, A. Gorden	53	20 58
Goff, Flora M.	103	30 00
Hale, Sadie E.	49	14 26
Hennigar, Jessie W.	19½	5 67
*Kavanagh, Cecilia A.	92	35 72
Logan, Katie L.	101	29 41
*Main, Mildred Eliza	94	36 50
Mason, Sarah Jane	24	6 98
*MacKenzie, Gertrude M.	57	22 13

MacLean, Jessie R.	102
McKay, Violet K.	103
McLellan, Annie M	98
Murchy, B. Alice	71
Parker, Alice B.	74
Pratt, Lena H.	103
Robertson, Jennie A	89
Spares, Sadie J.	64
Stillman, Flora Blanche	93
*Vaughan, Alice G	94
*Wambolt, Ethel A.	50
*Weldon, Augusta	103
*Wickwire, Margaret Alice	102
Williams, Reta H.	103
*Withrow, Blanche H.	103

ANNUITIANTS.

Scott, Lily A.	60 00
Smith, Letson M.	60 00

INVERNESS.

NORTH.

Boudreau, A. C	103	60 00
Cormier, Wm. C	103	60 00
Gillis, James John	54	31 44
Gillis, Malcolm H	77	44 84
Herdman, William C	94	54 74
McDonald, Duncan H	103	60 00
MacRae, Agnes	103	60 00
Murray, Mildred	103	8 14
Sister Mary St. Stephen	14	25 04
Sister St. Bernard	43	45 00
Tompkins, Matthew	103	38 87
Arseneau, Mary B	89	40 62
Austin, Kenneth J	93	44 12
Boudreau, Placide C	101	45 00
Chiasson, Ephraim	103	45 00
Coady, Sarah Jane	103	13 53
Daigle, Annie M	31	45 00
Dimock, Clarence L	103	45 00
Hattie, John D	103	45 00
LeBlanc, John P	103	44 56
McDaniel, Annie E	102	45 00
McDougall, Mary Agnes	103	45 00
McEachen, Mary M	103	43 24
MacKinnon, A. E	90	45 00
McKinnon, Mary C	103	45 00
McLean, I. E	103	45 00
McLellan, Marjorie A	103	45 00
McLellan, A N	103	45 00
McLellan, Florence C	103	45 00
MacQueen, Katherine	103	18 77
Mattatal, Daisy	43	24 02
Munro, Jephtha S	55	38 87
Munro, Jephtha S	89	45 00
Sister St. Andrew	103	42 80
Sister St. Genevieve	98	26 91
Tompkins, Mary E	89	9 71
Arsenault, Henry P	89	25 59
*Aucoin, Peter J	25	22 13
Bayne, Thomas A	87	
Blanchard, Annie J.	76	

*Cameron, Christina	73	28.34
*Campbell, James Arthur	83	32.23
Des Vaux, Adele D	103	30.00
Gillis, John	103	30.00
*Kennedy, Murdoch D	63	24.46
LeBlanc, Effie A	65	18.92
*MacDaniel, Nellie J	57	16.59
McDonald, Angus A	100	38.83
McDonald, Stephen A	72	20.97
McDonald, Mary L	100	29.12
*McGillivray, Jessie	50	19.41
Macintosh, Sophie M	103	30.00
*McKay, Daniel P	93	36.11
McKenzie, Rod. Y	15	4.36
McKinnon, Roderick	94	27.37
McLean, Elizabeth D	103	30.00
McLellan, Duncan	103	30.00
McLellan, Mary C	102	29.70
*McLennan, Kenneth J	102	39.61
McLeod, Mary A	103	30.00
McLeod, Maggie C	103	30.00
MacMillan, Dan A	83	24.17
MacMillan, Murdock R	50	14.56
MacQuarrie, Annie	93	27.08
Martin, Mabel B	64	18.63
Murphy, Mary R	103	30.00
Raukin, Agnes	93	27.08
Sister Margaret Mary	103	30.00
*Smith, Susie R	81	31.45
Walker, Mary C	92	26.79

ANNUITANTS.

McLean, Donald E.	60.00
McDougall, Arch S.	45.00
MacKinnon, Malcolm	45.00
Gillis, John A.	45.00
Nicholson, A. G.	45.00
MacMillan, Peter	30.00

SOUTH.

Tompkins, Ida	101	102.93
Chisholm, Duncan	58	33.77
Gillis, James D	84	48.92
Knickle, Charles E	103	60.00
McDougall, Jessie A	103	60.00
Sr St. Mary of C.	97	56.49
Beaton, Margaret	103	45.00
Calder, Allister	47	20.52
Finn, Violet A. C.	20	8.72
Hemmeon, Emma T.	103	45.00
Hennesy, Eva B.	103	45.00
McDonald, Angus L.	89	38.87
McDonald, Mary B.	76	33.19
McDonald, Mary	103	45.00
MacDonald, James R.	101	44.12
MacDonnell, Christine E.	103	45.00
MacLean, Edgar H.	103	45.00
McMaster, D. B.	103	45.00
Morrison, Edith	91	39.75
O'Brien, Rufus B.	98	42.80
Sr. Sr. Marie Dolores	103	45.00
Sr. St. Philip of J.	97	42.37
Sinclair, Alexander	103	45.00
Smyth, M. Beatrice	102	44.56
Sproule, Anna D.	103	45.00

Beaton, Mary Belle	98	28.53
Beaton, Sarah Ann	4	1.16
Bell, Elizabeth	89	25.91
Bell, Hugh P.	49	14.26
Cameron, Jessie M.	102	29.70
*Chisholm, Cassie	20	5.82
Gillis, Mary Bell	99	28.82
Grant, Edith E.	91	26.50
Hawley, Maude	103	30.00
Leonard, Eliza May	86	25.04
McArthur, Sadie	43	12.52
*McDonald, Angus D	45	13.10
McDonald, Annie M.	98	28.53
McDonald, Anna F.	76	22.13
McDonald, Eva	54	15.72
Macdonald, Effie Jane	102	29.70
McDonald, Florence	103	30.00
McDonald, Jessie	20	5.82
McDonald, Katie	94	27.37
McDonald, Mary Jane	103	30.00
Macdonald, Mary S.	30	8.73
McDougall, Jessie Ann	103	30.00
McEachen, Mrs. J.	81	23.59
McGillivray, Margaret	102	29.70
MacIntosh, Jessie A.	36	10.47
MacIntyre, Catharine J.	103	30.00
MacKillop, Ethel Bell	73	21.26
McLean, Sophia Jane	20	5.82
McLeod, Catharine	32	9.31
MacMaster, Mamie	103	30.00
MacMillan, Victoria K	19	5.52
McMillan, Katie	101	29.41
Macnamara, Rose Jane	83	24.17
MacNeill, Mary A.	103	30.00
McQuarrie, Wm. Albert	92	26.79
Matheson, Dolena C.	102	29.70
Nelson, Gustave Adolf	18	5.23
Proctor, Bessie G.	54	15.72
Proctor, M. E.	27	7.86
Rose, Violet	84	24.46
Ross, John A.	82	23.88
Skinner, Daniel J.	9	2.62
Smith, Sarah Lorena	103	30.00
Porter, A. Murray	39	11.35
*Breen, Frances E.	100	38.83
*Chisholm, Cassie	97	37.67
*Coady, Daniel M.	54	20.97
*Davis, Mrs. Mary	103	40.00
*Davis, Mrs. Mary	25	9.71
*Grant, Bertha Alice	92	35.72
*Jameson, Roberta	78	30.29
*MacDonald, Flora Bell	95	36.89
*Macdonald, Mary Jane	103	40.00
*McLean, Charles A.	15	5.82
*MacLean, Ellie Barbara	64	24.85
*MacLean, Margaret A.	79	30.58
*Moran, James	59	22.91
*Quigley, May E. last term		5.00

ANNUITANT.

Angus McQuarrie	30.00
-----------------	-------

KINGS.

Campbell, Jessie B.	101	102.93
Fairweather, Ernest E.	103	105.00

Ford, Robie W.	103	105.00	McDonald, John A.	103	45.00
Oxner, Bertha G.	103	90.00	Millet, Susie	103	45.00
Webster, Winnifred M.	103	90.00	Morse, Kate O.	103	42.80
Boyle, Annie B. T.	103	60.00	Mosher, Margaret E.	98	45.00
Brinton, Effie S.	103	60.00	Nichols, Lola M.	103	43.68
Cochran, S. Ethel	103	60.00	North, Zetta C.	100	45.00
Chute, Fannie LaV.	103	60.00	Parke, Nellie L.	103	44.12
Chute, Hettie M.	101	58.83	Parker, Iva E.	101	45.00
Cottle, Pauline D.	101	58.83	Parker, Prue E.	103	44.34
Crisp, William K.	85	49.50	Patterson, Florence S.	101½	45.00
Crossley, Nellie B.	102	59.41	Phinney, Jenny D.	103	44.12
Crowe, Louise B.	97½	56.78	Robinson, Clara	101	45.00
Dennison, Gertrude A.	103	60.00	Robinson, Mabel	103	44.56
Dow, Jessie M.	103	60.00	Rockwell, Lila I.	102	45.00
Durling, Ina	103	60.00	Roy, Maude E.	103	44.56
Elliott, S. E. Primrose	102½	59.70	Ryan, Irene Elizabeth	102	45.00
Foote, Rebecca K.	98	57.07	Sanford, Celia A.	103	43.24
Foster, Mayhew C.	18	10.47	Sanford, Sadie Weaver	99	45.00
Gilliat, Ruth E.	98	57.07	Shipley, Mary H.	103	45.00
Hamilton, Helena H.	92	53.58	Smith, B. Evelyn	103	45.00
Healy, Lidy A.	103	60.00	Swindell, Charlotte E.	103	45.00
Hines, Nora Geneva	25	14.56	Taylor, Sadie E.	103	45.00
Hird, Cassie B.	78	45.42	Tobin, Gertrude	103	44.56
Illsley, Ethel M.	57	33.19	Turner, Beatrice M	102	45.00
Langille, Antoine	102	59.41	Weaver, Beatrice M.	103	45.00
Lee, Minnie M.	103	60.00	Wickwire, Mabel E.	103	45.00
Loomer, Estella J.	103	60.00	Wilkins, Hattie E.	103	45.00
MacGregor, Ruperta	15	8.73	Yould, Evangeline	103	33.41
Margeson, Susie M.	103	60.00	Young, Etta L.	76½	29.81
McMurtery, Haidee P.	103	60.00	*Barnaby, Elsie	57	29.46
Morse, Elizabeth G.	103	60.00	*Bishop, Terry N.	81	14.26
Munro, Lizzie B.	103	60.00	*Bowser, Mary Frances	49	25.46
Smith, Vera M.	103	60.00	*Collins, Leila L.	70	33.82
Spurr, Alice M.	103	60.00	*Costly, N. Royal	93	30.00
Wood, Apha Maie	103	60.00	*Dorey, Hattie B.	103	25.46
Woodward, Grace L.	103	60.00	*Driscoll, Fred A.	70	28.72
Wylde, Sara P. W.	103	60.00	*Driscoll, Loretta C.	79	30.00
Annis, Bessie M.	20	8.72	Eason, Mabel B.	103	27.27
Annis, Vivian	98	42.80	*Foley, Ethel Viola Hiltz	75	30.00
Archibald, Rosamond	8	3.48	Griffin, Grace Lillian	103	28.36
Barkhouse, Grace B.	103	45.00	*Hazell, Eliza J.	78	28.00
Barteaux, Myrtille E.	103	45.00	*Harvey, Bessie B.	77	30.00
Bisset, Amy R.	103	45.00	Hennigar, Grace D.	103	26.91
Boyle, Harriet M.	103	45.00	*Illsley, Julia S.	74	37.46
Browne, Laurie B. W.	100	43.68	*Jenkins, Mary	103	37.46
Cahill, Cassie I.	103	45.00	*Kaulbach, James O.	103	27.05
Challen Bessie	103	45.00	Keddy, Harlaw F.	96	27.52
Chase, Minnie C.	103	45.00	Lantz, Helena M.	93	32.36
Chute, Edith A.	103	45.00	*Loomer, Elizabeth M.	76½	37.10
Clarke, Jennie M.	103	45.00	*Mapplebeck, Idella	89	26.91
Coldwell, Ross F.	103	45.00	*McMann, Gertrude L.	102	32.36
Corkham, D. A.	103	45.00	*Nowlin, Elsie M.	74	30.00
Cox, Miriam J.	96	41.93	*Ogilvie, Gertrude	89	30.00
Daniels, Mildred W.	103	45.00	Palmeter, Lizzie May	103	28.00
Davison, Nina E. Read	98	42.80	*Parker, Bertha M.	77	32.00
Eaton, Lennie May	103	45.00	*Parker, Ruby H.	88	30.00
Foote, Edith May	103	45.00	Parrish, Cora B.	103	32.36
Foster, Laurie E.	98	42.80	*Pineo, Ida B.	89	15.72
Fraser, Daisy Reid	103	45.00	*Russell, Gertrude E.	54	22.17
Guild, Libbie	103	45.00	*Russell, Harriet L.	61	37.46
Higgins, Margaret	103	45.00	*Smith, Eva M.	103	32.36
Jenkins, Giralda H.	72	31.44	*Sperry, Jessie B.	25	32.36
Lamont, Mary Gertrude	103	45.00	*Swindell, Ina	89	32.63
Lee, Ena	103	45.00	*Vaughan, Cora A.	98	17.80
Lockhart, Harry P.	103	45.00	*Veinot, Sophia F. Keddy	49	21.55
Mahan, Effie E.	103	45.00	Weaver, Annie L.	74	38.60
Margeson, Hannah L.	103	45.00	Weaver, Ernie Althea	79	

Woodworth, Cora E. 103 30.00

ANNUITANTS.

Godfrey, John F. 75.00  
 Andrews, Henry W. 60.00  
 Foster, A. D. 60.00  
 Banks, J. Alonzo 60.00  
 Craig, James 45.00

ASSISTANTS.

Reade, Elizabeth H. 69 13.39

LUNENBURG AND NEW DUBLIN.

Hewitt, Minnie C. 103 90 00  
 McKittrick, B. 88 89 67  
 Smeltzer, H. R. 103 105 00  
 Smith, A. W. L. 103 105 00  
 Balcom, Lewis 103 60 00  
 Bruhm, Muriel 95 55 33  
 Joudrey, Grace A. 103 60 00  
 Mader, Edith 103 60 00  
 Mader, Annie A. 103 60 00  
 Maxner, Morris 103 60 00  
 Morton, Beatrice 101 58 83  
 Mullock, Florence 103 60 00  
 McLaughlin, Lilla 98 57 07  
 McMillan, Margaret 103 60 00  
 Prince, Ina B. 103 60 00  
 Rudolf, Mary 103 60 00  
 Silver, Lottie M. 103 60 00  
 Strumm, Gladys E. 103 60 00  
 Veinot, Alice M. 103 60 00  
 Wentzell, Minnie 103 60 00  
 Young, Helen R. 103 60 00  
 Young, Mary E. 103 60 00  
 Zinck, Etta M. 103 60 00  
 Bolivar, Alma 103 45 00  
 Bowers, Mary 103 45 00  
 Bruhm, Flora 103 45 00  
 Christie, Katherine 98 42 80  
 Corkum, Cassie 9 3 92  
 Crawford, Florence 89 38 87  
 Croft, Margaret 103 45 00  
 Dauphinee, Tessie 53 23 15  
 Duncan, Jessie W. 103 45 00  
 Eisenbauer, Harvey 103 45 00  
 Ernst, Jessie M. 102 44 56  
 Ernst, Phebe 103 45 00  
 Falkenham, Emma 103 45 00  
 Fancy, Jennie 103 45 00  
 Freeman, Winnie 100 43 68  
 Fralic, Elsie C. 102 44 56  
 Fralic, Elva L. 103 45 00  
 Godfrey, Selena 103 45 00  
 Hawksworth, Eva 98 42 80  
 Hebb, Claribel 103 45 00  
 Hebb, Jennie L. 98 42 80  
 Hirtle, Bertha 103 45 00  
 Hirtle, Ethel 103 45 00  
 Hirtle, Mary 103 45 00  
 Home, Florence 103 45 00  
 Jackson, Annie 54 23 58  
 103 45 00

Keddy, Bessie 103 45 00  
 Langille, Edith 103 45 00  
 Lantz, Hannah 103 45 00  
 Lohnes, Minnie 103 45 00  
 Mader, Bessie 103 45 00  
 Manning, Myra 103 45 00  
 Manthorne, Maud 103 45 00  
 Manthorne, Muriel 74 32 31  
 Mason, Jessie 103 45 00  
 Millett, Sadie 72 31 44  
 Mouzar, Laliah 103 45 00  
 McLachlan, Ethel 98 42 80  
 McLachlan, Lelia 98 42 80  
 Naugler, Agnes 93 40 62  
 Parker, Carrie 15 6 54  
 Rafuse, Eva 103 45 00  
 Reinhardt, Grace 103 45 00  
 Richard, Edith 102 44 56  
 Ritcey, Winnie 103 45 00  
 Romkey, Mary C. 103 45 00  
 Silver, Florence 103 45 00  
 Silver, Susie 103 45 00  
 Smeltzer, Lillie 103 45 00  
 Smith, Eva M. 102 44 56  
 Smith, Idella 103 45 00  
 Smith, Lola 103 45 00  
 Smith, Mary 100 43 68  
 Taylor, Edith 99 43 24  
 Thompson, Florian 73 31 88  
 Thompson, Mary E. 103 45 00  
 Tobin, Mary E. 103 45 00  
 Tobin, Ellen M. 103 45 00  
 Wamback, Vera 103 45 00  
 Warner, Emma L. 103 45 00  
 Webber, Debbie L. 103 45 00  
 Wentzell, Lois 103 45 00  
 West, Ella L. 103 45 00  
 Wynthacht, Maggie 98 42 80  
 Young, Edith M. 102 44 56  
 Bell, Gertrude 103 30 00  
 Bell, Minnie 103 30 00  
 Berringer, Ross J. 103 30 00  
 Brooks, Lena 103 30 00  
 Burns, Elsie 103 30 00  
 Chesley, Jessie 103 30 00  
 Corkum, Beatrice 102 29 70  
 Corkum, Gladys 103 30 00  
 Crouse, Cynthia 98 28 53  
 Crouse, Georgina 99 28 82  
 \*Dauphinee, Lee 103 40 00  
 Deal, Bernice 103 30 00  
 Dolliver, Lydia 103 30 00  
 Durland, Nina 102 29 70  
 Eisenhauer, Beulah 103 30 00  
 Eisnor, Idella 74 21 55  
 Ernst, Charlotte 96 27 95  
 Fancy, Elizabeth 102 29 70  
 Feindell, Addie 103 30 00  
 \*Fralic, Enid C. 103 40 00  
 \*Hamm, Nellie 33 12 82  
 Hawboldt, Ida 103 30 00  
 Hebb, Lavinia 102 29 85  
 Hebb, Leda 94 27 37  
 Herman, Eva H. 99 28 82  
 Himmelman, Viola 103 30 00  
 Hirtle, Amanda 103 30 00  
 Hirtle, Etta M. 97 28 24

Hirtle, Gladys	103	30 00
Hirtle, Jessie	103	30 00
Inglis, Mary	54	15 72
*Jefferson, Howard	103	40 00
*Jefferson, Minnie	103	40 00
Joudrey, Lida	56	16 30
Kaulback, Laura	98	28 53
Kennedy, Lois	103	30 00
Langille, Aileene	103	30 00
*Langille, Emery	98	38 06
Langille, Rebecca	91	26 50
Lohnes, Flossie	102	29 70
*Lohnes, Stella	94	36 50
Marryatt, Ethel	101½	29 56
Morash, Carrie	103	30 00
Mullock, Addie	103	30 00
Mossmann, Ada	103	30 00
*Mossmann, Cora	101	39 22
MacInnes, Winifred	103	30 00
*Newcombe, Florence	68	26 40
Nickerson, Goldie	25	7 28
Rafuse, Maggie	101	29 41
Ritcey, Geraldine	103	30 00
Ritcey, Lillas	103	30 00
*Slauenwhite, Florence	103	40 00
Smith, Ada A.	103	30 00
*Smith, Harrie A.	101	39 22
Smith, Minnie B.	103	30 00
Strumm, Emma	103	30 00
Tufts, Edna A.	103	30 00
*Veinot, Lillian	103	40 00
Wagner, Ella A.	85½	24 90
Wentzell, Edith	103	30 00
Wentzell, Jemima	103	30 00
Wentzell, Mary P.	103	30 00
Wessell, Laura	100	29 12
Westhaver, Jennie	103	30 00
Wolfe, Blanche M.	103	30 00
Zwicker, Bessie	101	29 41
Zwicker, Flora M.	103	30 00

ANNUITANTS.

Rieser, Daniel		60 00
Faulkner, Jas.		45 00
Stoddart, Marie		45 00
Heckman, Albert		30 00

CHESTER.

Roy, Frances B.	101	102 93
Hennigar, MaZel	100½	58 54
Webb, Hattie M.	101	58 83
Zinck, Austin A.	101	58 83
Zinck, Minnie A.	103	60 00
Countway, Blanche	98	42 80
Hatt, Ellie M.	103	45 00
Hennigar, Nina E.	103	45 00
Hirtle, Seward W.	103	45 00
Houghton, Mary C.	103	45 00
Kempton, Jessie M.	103	45 00
Nauss, Ola G.	101	44 12
Pentz, Harriet M.	102	44 56
Webber, Olie B.	103	45 00
Zinck, Florence	103	45 00
*Alders, Jessie	93	36 11
*Acker, Hattie	103	40 00

Burgoyne, Mildred	101
Corkum, Annie B.	102
Corkum, Minnie	103
Forbes, Annie	101
Hawboldt, Gertrude	103
Hiltz, Cora E.	102½
Hyson, A. E.	102
Keddy, Sadie	103
Meisner, Jessie	103
Palmer, Queenie	103
*Rhynard, Gertrude	102
*Sanford, Ethel G.	64
Shatford, Estella	102
*Spidell, Jennie	103
Strumm, Annie	103

PICTOU.

NORTH.

Fraser, W. P.	100
Maclellan, Robt.	100
MacLeod, Robt. H.	100
Munro, H. F.	100
Fraser, Annie D.	101
MacRae, Alice	101
McArthur, Olive	98
McInnes, Katherine	98
McLean, Viola B.	100
Stewart, Martha	103
Brown, Isabelle	102
Campbell, Margaret	102
Cameron, Bessie N.	96
Grant, W. A.	103
Gourley, Catherine	101
Gray, Alice E.	41
Haley, Mary	42 80
MacIntosh, Jennie S.	41 93
MacKay, Janie	44 56
MacKay, Marion	44 56
MacKenzie, Barbara	103
MacKenzie, Emma	103
MacKnight, Jessie	102
MacLanders, Jennie	101
MacVicar, J. E.	42 80
Maxwell, Lola	98
McCunn, Isabel	101
McGirr, Gertrude	102
McIntosh, Grace	86
McMillan, Anabelle	45 00
Munro, Margaret A.	44 56
Patriquin, Bertha	44 12
Payne, Sadie M.	44 12
Reid, Edna E.	44 12
Reid, M. Olive	44 12
Rogers, Marion	44 56
Rose, Jessie E.	44 56
Ross, Bessie B.	44 56
Schultz, Sadie J.	37 55
Sylvester, Mary	44 56
Tattrie, Mabel	44 56
Woodbury, R. C.	45 00
Archibald, Hattie N.	44 12
Baillie, Margaret A.	44 12
*Baillie, Janet	44 12

29 41  
29 70  
30 00  
29 41  
30 00  
29 85  
29 70  
30 00  
30 00  
30 00  
39 61  
24 85  
29 70  
40 00  
30 00

87 36  
101 92  
87 36  
87 36  
58 83  
58 83  
57 07  
57 07  
58 25  
60 00  
44 56  
44 56  
41 93  
45 00  
44 12  
17 90  
42 80  
41 93  
44 56  
10 91  
45 00  
103  
44 56  
44 12  
44 12  
44 12  
44 56  
44 56  
45 00  
44 12  
44 12  
29 70  
68  
44 12  
44 56  
44 56  
42 80  
45 00  
45 00  
103  
103  
103  
101  
103  
98  
59  
26  
35



Currie, Mary F.	97	28	24
Dwyer, M. Ella	103	30	00
Graham, Margaret	67	19	50
MacBain, Henrietta	83	24	17
MacDonald, Essie J.	102	29	70
MacKenzie, Florence	101	29	41
MacKay, Catherine	88	25	62
MacLeod, Bessie M.	81	23	59
*MacTavish, Elizabeth	88	34	17
Matheson, Myrtle	101	29	41
Matheson, Ivy	103	30	00
MacQuarrie, Jessie	102	29	70
McDonald, Catherine	91	26	50
McKay, Nettie	88	25	62
Murray, Grace A.	103	30	00
Rae, Janie L.	103	30	00
*Redmond, Ada F.	87	33	78
*Ross, Annie J.	77	29	90
Sutherland, Christena	101	29	41
Sillers, Annie F.	93	27	08
Stramberg, Johnina	103	30	00
*Sutherland, Mrs. J. W.	102	39	61
Thomas, Hilda	102	29	70
Wilson, Anna M.	33	9	60

ANNUITANTS.

Fraser, William		60	00
Gollan, John		60	00
MacKay, John		60	00
McArthur, A.		60	00
McDonald, D. W.		60	00
Ross, Marion		45	00
Cameron, Jessie		45	00

SOUTH.

MacLeod, Jeanette	101	88	23
McLeod, John T.	101	102	93
Osborne, N. A.	101	102	93
Barnhill, M. Gertrude	103	60	00
Bannerman, Margaret	103	60	00
Clarke, Adelia	101	58	83
Cox, O. Stanleigh	101	58	83
Demmons, Mona	101	58	83
Denton, Kelsey C.	101	58	83
Ellis, Russell	101	58	83
Fraser, Attie	103	60	00
Fraser, Winifred	103	60	00
Fraser, M. Louise	103	60	00
Fraser, Emily	103	60	00
Kerr, M. Estelle	101	58	83
MacBean, Jennie	101	58	83
MacLeod, Gretha	101	58	83
MacLeod, F. T.	101	58	83
MacGlashan, Isabel	101	58	83
Macpherson, Eliza	101	58	83
MacKay, Luella B.	103	60	00
MacKenzie, A. S.	103	60	00
MacLean, Cassie	103	60	00
Miller, Lola D.	103	60	00
Munn, Nina	103	60	00
Murray, Sadie A.	103	60	00
Munro, Ethel M.	103	60	00
Reeves, Annie W.	101	58	83
Thompson, Eliza	102	59	41
Archibald, Ann	101	58	83
	101	44	12

Archibald, Caroline	101	44	12
Archibald, Blanche	103	45	00
Ballantyne, Jean	103	45	00
Boutillier, Eunice	93	40	62
Bryden, Myra	101	44	12
Cameron, Mary M.	103	45	00
Chisholm, Marianne	102	44	56
Chisholm, Mary M.	101	44	12
Crockett, Anne C.	103	45	00
Cunningham, Dolina	101	44	12
Cunningham, Leah	101	44	12
Dimock, Imogene	101	44	12
Ferguson, Janie A.	103	45	00
Fraser, Gertrude C.	103	45	00
Grant, Etta W.	103	45	00
Gunn, Mary A.	78	34	06
Jordan, Catherine	101	44	12
Keith, Sylvia	101	44	12
MacArthur, Annie	101	44	12
Macdonald, Agnes	103	45	00
Macdonald, Margaret	103	45	00
MacDonald, Ada	103	45	00
MacDonald, Dolena	103	45	00
MacIntosh, Jennie	103	45	00
MacKenzie, Christena	103	45	00
MacKenzie, Charlotte	102	44	56
MacLeod, Isabel J.	103	45	00
MacLellan, Elizabeth	103	45	00
Macgillivray, Jane R.	101	44	12
Matheson, Jean M.	100	43	68
Maxwell, Bessie B.	98	42	80
McIntosh, Miranda	103	45	00
McIntosh, Mabel	102	44	56
Meikle, Margaret	103	45	00
Patterson, Margaret	101	44	12
Robertson, Susie	100	43	68
Russell, Martha	103	45	00
Smith, Isabel C.	102	44	56
Sutherland, Lexie	103	45	00
Titus, Lizzie T.	101	44	12
Thompson, Mary A.	103	45	00
Wilson, Zella B.	103	45	00
Walker, Jennie	97	42	37
Wagner, Georgina	78	34	06
Adamson, Mary	99	28	82
Ballantyne, Esther	10.	30	00
*Ballantyne, Agnes	78	30	29
Ballantyne, Mary	103	30	00
Cameron, Hannah	101	29	41
Cameron, Barbara	78	22	71
*Crockett, Luella	34	13	21
Crooks, Helena	103	30	00
Fraser, Margaret C.	103	30	00
*Fraser, Alice E.	92	35	72
*Fraser, Letitia	103	40	00
*Fraser, Alexander R.	103	40	00
Graham, Jane E.	103	30	00
MacArthur, Elizabeth	97	28	24
Macdonald, Catherine	102	29	70
Macdonald, Anna	98	28	53
MacDonald, Minnie	103	30	00
MacQuarrie, Mabel	102	29	70
MacKenzie, Ethel A.	79	23	00
*MacLean, Jessie A.	91	35	34
Matheson, Maud	103	30	00
McDonald, Margaret D.	75	21	84
McDonald, Marcella	101	29	41

McLean, C. Myrtle	103	30 00
MacKinnon, Catherine	98	28 53
Mills, Martha	101	29 41
Munsie, Jessie M.	102	29 70
Robertson, Margaret G.	102	29 70
Ross, Minnie	101	29 41
*Ross, Annie L.	103	40 00
Ross, Bella J.	103	30 00
Ross, Isabella	103	30 00
Scott, Margaret	103	30 00
Sharpe, Janie	68	19 79
Sutherland, Mary M.	96	27 95
Thompson, Daisy	103	30 00
*Thompson, Irene	103	40 00
Wright, Joanna	103	30 00

QUEENS.

SOUTH.

Richardson, R. P.	103	105 00
Mullins, Jennie E.	103	90 00
Baltzer, Mary H.	103	60 00
Clements, Mary	102	59 41
Farnsworth, P. W.	103	60 00
Freeman, Nettie	78	45 42
Harrington, Blanche	103	60 00
Harrington, Georgie	25	14 56
Smith, Sophia	103	60 00
Thompson, Lillian	103	60 00
Benjamin, May L.	103	45 00
Ernst, Florence C.	103	45 00
Freeman, Allene	103	45 00
Hanley, Ruth	82	35 81
Hartlen, Ida	103	45 00
Hiltz, Mary C.	103	45 00
Homans, Estella	102	44 56
Huskins, Pearl	103	45 00
McLeod, Ethel	102	44 56
McLeod, Mabel	103	45 00
Osborne, Melissa	103	45 00
O'Neil, Annie	103	45 00
Rafuse, Gertrude	103	45 00
Ridley, Grace	103	45 00
Spinney, Edith	103	45 00
Wylde, Mary A.	102½	44 78
*Bolivar, Elsie	53	20 58
*Burgess, Annie R.	103	40 00
Feindell, Flora	103	30 00
Feindell, Theresa	103	30 00
Freeman, Verta	103	30 00
Forbes, M. G.	103	30 00
Hagan, Matilda	102½	29 85
Mack, Theresa	81	23 59
MacKay, Gertrude	102½	29 85
Lloyd, Florence	103	30 00
*Naugler, Emma	75	29 12
*Reinhardt, Mildred	95	36 89
Smith, Henrietta	103	30 00
Swimm, Maude	103	30 00
Taylor, Bessie	103	30 00
*Veinot, Minnie	94	36 50
Vogler, Ethel	94	27 37

NORTH.

Freeman, Jessie E.	102	59 41
--------------------	-----	-------

Bell, Marie R.	49	21 40
Cushing, Nina	102	44 58
Freeman, Grace D.	103	45 00
Freeman, Hilda R.	54	23 58
Freeman, Juna P.	20	8 72
Hammond, Helen G.	102	44 56
Johnson, Annie M.	102	44 58
Kempton, Susie	103	45 00
McGinty, Katherine	103	45 00
Ramey, Jessie M.	103	45 00
Turner, Flora A.	103	45 00
*Bell, Emma L.	20	7 77
Devine, Harriet	102	29 70
*Devine, Jean	77	29 90
Doane, Ada G.	100	29 13
Froude, Gertrude	103	30 00
*Holdright, Caro	103	30 61
Milllett, Phyllis	102	27 95
Patterson, Lulu M.	96	8 77
*Seamond, Ethel	93	27 08
*Wile, Dora A.	77	27 08
*Hebb, Wm. E.	87	29 90
	31	33 78
		12 04

RICHMOND.

MacKay, Catharine E.	102	103 95
Stramberg, Charles W.	45	26 21
Boyd, Christina	103	60 00
Hennessey, Margaret	103	60 00
Lewis, Florence O.	97	56 49
MacInnis, Duncan	94	54 74
Malzard, M. Lelia E.	103	60 00
Beranger, Alvina	103	45 00
Boyd, Laura E.	103	45 00
Burke, Eva May	16	6 97
Canavan, Annie E.	95	41 49
Currie, Charlotte	103	45 00
Forbes, Jessie May	102	44 56
Foret, Charles J.	103	45 00
Gagnon, Henry L.	103	45 00
Grady, Alice Maud	103	44 12
Henderson, Mamie B.	101	45 00
Johnston, Mary C.	103	45 00
Kavanagh, Eva C.	27	11 78
Kemp, Hector F.	103	45 00
LeBlanc, Z. Rose	94	41 06
Latteemoore, Libbie F.	98	42 80
MacAulay, E. R.	103	45 00
MacKay, David	20	8 72
MacKay, John Daniel	102	44 56
MacKillop, Ewen D.	98	42 80
McKillop, A. B. B.	90	39 31
McKinnon, John J.	66	28 83
McLeod, Christina A.	50	21 84
McLeod, John R.	103	45 00
McLeod, Peter A.	103	45 00
Macneil, Margaret	103	45 00
Macneil, Minnie A.	103	45 00
Macneil, Minnie V.	79	34 87
Major, William	94	41 06
Matheson, Maude H.	103	45 00
Morrison, Annie	103	45 00
Murphy, Margaret A.	101	44 07
Nelson, J. Scott	103	44 07
Power, Mary Gertrude	103	44 07

Reid, Marian J.	103	45 00
Stalker, Elizabeth J.	102	44 56
White, Minnie M.	103	45 00
Brymer, Lottie M.	103	30 00
Burke, Mabel H.	85	24 75
Cameron, Katie A.	99	28 82
Cameron, Marion	103	30 00
Daigle, Joseph	103	30 00
Devereaux, Charlotte M.	102	29 70
Doucet, Aivena E.	103	30 00
Etteune, Marie L.	89	25 91
Jackson, Annie J.	100	29 12
Kyte, Angela	103	30 00
LeBlanc, Harriet Ann	54	15 72
LeBlanc, Marie M.	75	21 84
MacAulay, Ada Anna	97	28 24
McKenzie, Teresa	103	30 00
McLean, Jennie F.	64	18 63
MacLeod, Marie S.	103	30 00
Macneil, Florence	99	28 82
MacNeil, Mary Ella	99	28 82
Major, Lina	94	27 37
Morrison, Ella H.	102	29 70
Morrison, Katie	88	25 62
Murphy, Minnie E.	103	30 00
Mury, Simon	94	27 37
Nicolle, Everett J.	97	28 24
Sutherland, Daniel J.	103	30 00
Thibeau, Peter	103	30 00
*Bissett, Clara P.	103	40 00
*Burke, Sara S.	89	34 56
*Cameron, Henrietta J.	89	34 56
*Cameron, Ida W.	102	39 61
*Coffey, Julia B.	97	37 67
*Holmes, Jessie K.	92	35 72
*McLean, Rebecca B.	77	29 90
*McPherson, Murdoch	100	38 83
*Patterson, George J.	97	37 67
*Sampson, Annie E.	101	39 22
*Sutherland, Donald A.	97	37 67

ANNUITANTS.

McDougall, Peter	45	00
McKay, John	45	00

SHELBURNE.

Harding, M. K.	102	103 95
Allen, Janie R.	102	59 41
Bower, Ethel H.	102	59 41
Capstick, Grace	103	60 00
Hirtle, A. G.	102	59 41
Allen, Mary V.	102	44 56
Atwood, Maud L.	103	45 00
Barclay, Josie P.	103	45 00
Bruce, Arthur C.	103	45 00
Doleman, T. W.	103	45 00
Etherington, Lillian	100	43 68
Hardy, Ruby A.	102	44 56
Lyle, Emily R.	103	45 00
MacKay, Maude A.	102	44 56
MacKay, Max B.	88	38 43
Mills, Mary E.	103	45 00
Nickerson, Charlotte	102½	44 78
	102	44 56

Rawlings, Adina	103	45 00
Walls, Gertrude M.	103	45 00
Bower, Edna G.	103	30 00
Bower, Elizabeth F.	94	27 37
Decker, Bertha C.	102	29 70
Doane, Estella S.	103	30 00
Downie, Eula M.	103	30 00
Firth, Alice W.	101	29 41
Firth, E. Louise	103	30 00
Giffin, Flo. M.	103	30 00
Giffin, Brenda M.	92	26 79
Harding, Wilhelmina	103	30 00
Harris, Emily B.	103	30 00
Kavanagh, Elinor A.	64½	18 77
Matthews, Annie L.	103	30 00
McKay, Hattie	103	30 00
McKenne, Lulu	103	30 00
McLean, Mary M.	103	30 00
*Perry, Berlina E.	93	36 11
Perry, Ora E.	99	28 82
*Purney, Helen J.	102	39 61
Smith, Marjorie C.	103	30 00
Smith, Myrtle L.	101	29 41
*Swanburg, Nellie B.	103	40 00
Taylor, Lillian	103	30 00
Thomas, Genevieve	103	30 00
Thomas, Helen	103	30 00
Thorburn, Marion	103	30 00

ANNUITANTS.

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

BARRINGTON.

Crowell, A. Brunhilda	103	60 00
Doane, Edith	103	60 00
Doane, Jennie	103	60 00
Fox, A. D.	103	60 00
Messenger, W. S.	103	60 00
Smith, Annie S.	103	45 00
Blackadar, Karl K.	49	21 40
Brannen, Gertrude E.	52	22 71
Brannen, Lennie M.	51	22 27
Christie, Katherine E.	103	45 00
Doleman, G. Harry	103	45 00
Freeman, Nellie B.	103	45 00
Goodwin, Genesta E.	103	45 00
Hogg, Garnet W.	103	45 00
Hopkins, Bella L.	103	45 00
Knowles, Ina	48	20 96
McAlpine, F. D. H.	103	45 00
McKay, Nettie M.	103	45 00
Nickerson, Sadie B.	103	45 00
Nickerson, L. Isora	92½	40 40
Nickerson, Nettie M	103	45 00
Ross, Beulah B.	103	45 00
Sutherland, Bessie	103	45 00
Swaine, Mysie M.	103	45 00
Thomas, Elvah B.	25	10 91
Walker, Bertie E.	103	45 00
Brannen, Pearl V.	103	30 00
*Harding, Laura M.	79	30 58
Hopkins, Eva B.	103	30 00
Knowles, Meda I.	99	28 82
Locke, Louise M.	103	30 00

*McGinnis, Gladys R.	103	40 00
McGinnis, Annie H.	103	30 00
McGray, Fannie E.	102	29 70
*McKay, Elizabeth B.	64	24 85
*McKay, Laura H.	93	36 11
Nickerson, Eulalia	103	30 00
Shupe, Ianthe	91	26 50
Spanks, Margaret	103	30 00
Spanks, Carrie	103	30 00
Spinney, Amy L.	102½	29 85
Thorburn, Kathryn	103	30 00

ANNUITANT.

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

VICTORIA.

Gallant, Thos.	83	84 59
Hall, Henry E.	39	22 71
Herdman, William C.	21	12 23
McDonald, M. B.	103	60 00
McLean, Christena O.	30	17 47
McLeod, Bessie M.	103	60 00
Anderson, M. Blanche	93	40 62
Crocker, Nellie F.	103	45 00
DeVoe, Mary A.	83	36 25
Hennessey, Martha	103	45 00
Howatson, Jessie	96	41 93
MacAskill, Flora B.	103	45 00
Macaulay, Jessie	103	45 00
Macdonald, Louise	92	40 18
McInnis, Dan F.	103	45 00
McInnis, Wm. C.	103	45 00
MacIntosh, Annie Isabel	91½	39 97
MacKenzie, Margaret M.	103	45 00
McLeod, Mary M.	103	45 00
McLeod, John D.	69	30 13
Montgomery, Sadie	103	45 00
Watson, Ella M.	98	42 80
Bethune, Roderick O.	35	10 18
Boyle, Cecilia M.	103	30 00
Buchanan, Mary J.	93	27 08
Campbell, Jean E.	103	30 00
Campbell, Mary J.	88	25 62
Doyle, Sarah J.	102	29 70
*Forbes, Jessie A.	102	39 61
Fownes, Grace McD.	85	24 75
Fox, Frank B.	103	30 00
Horton, Annie	103	30 00
Macaulay, Katherine C.	89	25 91
Macaulay, Marguerita C.	103	30 00
MacAulay, Peter	10	2 91
Macaulay, James Fraser	103	30 00
McCharles, Malcolm D.	103	30 00
*McDonald, Hannah C.	80	31 06
Macdonald, Kenneth J.	79	23 00
*McGregor, Mary A.	20	7 77
*McInnis, Annie M.	73	28 34
McInnis, Jessie	70	20 39
*McInnis, Dan H.	79	30 58
McLennan, Hannah	103	30 00
McLennan, Margaret R.	103	30 00
*McLeod, Annie M.	89	34 56
*McLeod, Dan A.	98	38 06

McLeod, Belle C.	48
McLeod, C. Harriet	103
McLeod, Katherine	92
McNeil, John M.	72
*McRae, Annie J.	88
McRitchie, Dan J.	103
*Matheson, John R.	22
*Miller, Christena J.	54
Montgomery, Christene	82
Morrison, Annie M.	103
Morrison, Joanna B.	102
Nicholson, Dan.	24
Ross, Annabel M.	103
Sellon, Belle C.	74
Smith, Mary A.	101
"Kempt Head"	
Consolidation, D.	103

YARMOUTH.

Allen, E. C.	98
Bingay, J. H.	47½
Bingay, Norna B.	98
Blackadar, Geo. D.	103
Cleland, Jane E.	102½
Hall, Florence B.	88
Horner, A. W.	103
Kempton, W. F.	98
McGray, Margaret W.	103
Spinney, Mary E.	98
Tooker, Beatrice	25
Trask, J. Logan	75 00
Wyman, H. J.	103
Allen, Georgie W.	90 00
Allen, Letha S.	98
Allen, Shenton B.	92
Baker, Ethel M.	11 64
Bond, Mary G.	57 95
Burrell, F. T.	20
Churchill, Nelson	98
Crimp, Laura	20½
Cossitt, O. VanB.	103
D'Eon, J. Octave	40
Ellenwood, Margaret H.	57 07
Fleet, Sarah J.	98
Frost, Georgia B.	100½
Goudey, Alice A.	103
Goodwin, Effie B.	85½
Grierson, Jean E.	73
Hopkins, Marion J.	22 71
Huestis, Hannah	39
Jenkins, E. J.	47 18
Killam, Flora	81
Kinney, Laura	56 49
Letson, Ella M.	97
McGray, Jean D.	57 07
McLeod, A. J.	97
Morse, E. P.	98
Moses, Etta F.	98
Phillips, E. R.	103
Platt, Bessie H.	59
Raymond, Luella	103
Robinson, Winifred E.	98
Smith, Charlotte W.	100
Allan, Frances L.	98

13 97  
30 00  
26 79  
20 97  
34 17  
30 00  
8 55  
20 97  
23 88  
30 00  
30 70  
6 98  
30 00  
21 55  
29 41  
30 00

71 33  
41 46  
71 33  
59 00  
64 05  
75 00  
99 86  
75 00  
71 33  
18 20  
75 00  
90 00  
103  
57 07  
53 56  
57 95  
11 64  
57 07  
11 93  
60 00  
14 56  
23 30  
60 00  
40  
57 07  
58 54  
60 00  
60 00  
49 79  
42 51  
57 07  
73  
22 71  
47 18  
45 42  
56 49  
56 49  
57 07  
57 07  
57 07  
60 00  
34 36  
60 00  
57 07  
57 07  
58 25  
57 07  
38 87

Bain, Ethel M.	103	45 00
Bond, Anna B.	22	9 59
Brown, Maud S.	78½	34 28
Bryant, Arletta	103	45 00
Challon, Minnie V.	78	34 06
Chipman, Agnes J.	91	39 75
Churchill, Gordon H.	103	45 00
Churchill, Vera L.	42	18 34
Crosby, Jessie H.	98	42 80
Crosby, Mildred	103	45 00
Delamere, Susan P.	98	42 80
Dorrie, Gladys A.	15	6 54
Durland, Addie W.	4	1 74
Goudey, L. Ada	80	34 94
Kean, Evelyn S.	103	45 00
McKay, Janet McP.	98	42 80
Moses, Della	98	42 80
Newcombe, Bertha E.	103	45 00
Platt, Ada M.	103	45 00
Roach, Florence L.	103	45 00
Smith, Elsie B.	102	44 56
Tefry, Katie C.	103	44 56
Wyman, C. Winifred	103	45 00
*Adams, Alice M.	89	34 56
Baker, Genie A.	103	30 00
Brannen, Lottie G.	91	26 50
Churchill, Addie M.	98	28 53
Crosby, Marion	103	30 00
Floyd, A. Pearle	103	30 00
Hatfield, Lizzie V.	103	30 00
Hogg, Gladys H.	103	30 00
Hogg, Jennie A.	103	30 00
McGray, Anna E.	103	30 00
Purney, Maria I.	103	30 00
*Robichaud, Mary	59	22 91
*Snow, Lennie M.	103	40 00
*Turner, Johanna	93	36 11
Winter, Maude	103	30 00
ANNUITANTS.		
Munro, Jas. H.		75 00
Hilton, Mary H.		45 00
ARGYLE.		
D'Eon, J. Octave	63	36 69
D'Eon, Stillman L.	99	57 66
Frost, Isabel F.	103	60 00
Mack, Robt. T.	103	60 00
Scott, Anna	103	60 00
Sister Alexius	103	60 00
Amirault, Lena B.	87	37 99

Amirault, Eva A.	103	45 00
Babin, Eugenie L.	103	45 00
Belliveau, Matilda R.	103	45 00
*Bourque, Elizabeth	103	45 00
Black, Rosie C.	102	44 56
Chivers, Gladys P.	103	45 00
Croft, Margaret W.	24	10 47
D'Entremont, Mary A.	103	45 00
D'Eon, Laura F.	103	45 00
Francy, Bertha M.	103	45 00
Frost, Charlotte W.	102	44 56
Melanson, Bertha E.	103	45 00
Nickerson, Nellie G.	103	45 00
Pennington, J. G.	103	45 00
Pothier, Therese E.	103	45 00
Sister Lucina	103	45 00
Sister Eugenie	103	45 00
Sister Seraphia	103	45 00
Surette, Rose D.	98	42 80
Thomas, Ida M.	88	38 43
Walsh, Margaret M.	81	35 37
Wilson, Myrtle C.	102	44 56
Amirault, Rose I.	103	30 00
Amirault, Theresa M.	103	30 00
Amirault, Edith S.	92	26 79
Amirault, Muriel A.	103	30 00
Amirault, Jeanne L.	103	30 00
Belliveau, Genevieve	25	7 28
Belliveau, Mary	103	30 00
*Bethune, Annie B.	93	36 11
Bleakay, Edw. M.	103	30 00
*Bonquet, Philomene	54	20 97
Bourque, Mary A.	103	30 00
*Bourque, Rosie	103	40 00
*Brannen, Ruby V.	93	36 11
D'Entremont, Clara	103	30 00
Doucette, Alma M.	103	30 00
Duncanson, Linda	103	30 00
*Gavel, J. J.	103	40 00
Goodwin, Rosa P.	103	30 00
Hatfield, Emma M.	94	27 37
Holden, Mary E.	88	25 62
LeBlanc, John B.	103	30 00
*Mood, Regina M.	64	24 85
Richard, Angele	93	27 08
Scott, Margaret	103	30 00
Shields, Dorinda	103	30 00
Waite, Edith M.	103	30 00

ANNUITANTS.

Homer, Agnes W		45 00
----------------	--	-------

# THE MORE IMPORTANT AMENDMENTS OF THE SCHOOL LAW SINCE THE CONSOLIDATION OF 1900.

## LEGISLATION OF 1901.

### CHAPTER 37.

An Act to Amend Chapter 52, Revised Statutes, 1900, "Of Public Instruction."

Be it enacted by the Governor, Council, and Assembly as follows:—  
1. Chapter 52 of the Revised Statutes, entitled, "Of Public Instruction," is hereby amended as follows:—

(1) Section 71 is amended by adding at the end thereof the words following:—  
"Except in the cases of any section the schools of which are affiliated with the  
"Provincial Normal School and of City of Halifax, in which two cases the amount  
"shall not in any year exceed twelve hundred dollars."

(2) The following section is added after section 67:—  
67A. "The time employed by the principal of the schools of any school section  
in supervising or grading the schools, the time employed by teachers of his staff who  
are required to assist in the grading of any of the departments, the time teachers are  
in attendance at certain educational institutes with the consent of their trustees and  
the time lost by the necessary closing of a school on account of such conditions as  
the presence of contagious disease, shall be reckoned as authorized teaching time  
in lieu of actual teaching on authorized teaching days according to the conditions pre-  
scribed by the Council."

## LEGISLATION OF 1902.

### CHAPTER 39.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—  
1. Section twenty-one, sub-section, (1), of 'Chapter fifty-two, Revised Statutes,  
1900, is amended by striking out the following words in the last line thereof: "at  
the hour of eight o'clock in the evening."

2. Sub-section two of said section twenty-one (21) is amended by striking out  
the words 'and another hour' in the second and third lines thereof.

3. Section seventy-seven of said Act is amended by adding to sub-section (7)  
of said section the following words: "the cost of conveying children to school, and"

## LEGISLATION OF 1903.

### CHAPTER 4.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—  
1. Section 80, of Chapter 52 of the Revised Statutes, 1900, is repealed, and the  
following substituted therefor:

80. (1) Notwithstanding anything contained in the two preceding sections, all the real and personal property assessed according to the municipal assessment roll situated within the boundaries of school sections named in the second schedule to this Act, excepting dyke lands, shall be liable for sectional school rates for the support of schools in such sections without regard to the place where the owners of such property reside, and such property shall not be liable to sectional school rates for the support of any school or schools other than those of such school sections; and property owned by persons residing within any of the said school sections and situate within the country, including cities and incorporated towns within the geographical limits of the county outside of such section, shall be ratable for school purposes in the section in which it is situate.

(2) In all the school sections in the county of Halifax (except the City of Halifax and the town of Dartmouth) all the real and personal property assessed according to the municipal rate roll situated within the boundaries of such school sections, excepting dyke lands, shall be liable for sectional school rates for the support of schools in such sections, without regard to the place where the owners of such reside, and such property shall not be liable to sectional school rates for the support of any school or schools other than those of such school sections; and property owned by persons residing within the limits of the school section and situated within the county of Halifax (including the city of Halifax and any incorporated town within the geographical limits of the county of Halifax) outside of such section, shall be ratable for school purposes in the section in which it is situate.

(3) Between the city of Halifax and any incorporated town located within the geographical limits of Halifax county the provisions of section 79 shall apply.

CHAPTER 6, 1903.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Sub-section (b) of section eleven of the Education Act is amended by adding thereto the following words, "and also any existing school section or part of a school section."

2. Section fourteen of said Act is amended by inserting after the word "determine" in the second line thereof the words, "subject to the recommendation of the inspector."

3. Sub-section two of section sixteen of said Act is amended by striking out the word "alteration" in the second line thereof.

4. Sub-section three of section twenty-eight of said Act is amended by inserting after the word "ratepayers" in the second line thereof, the words, "or in case there are less than fourteen ratepayers in the section, on the requisition of the majority of ratepayers."

5. Sub-section two of section thirty-seven of said Act is amended by striking out the words, "as soon as practicable," in the first and second lines thereof, and substituting the words, "if necessary, or if required by the inspector," in lieu thereof.

6. Section sixty-three of said Act is amended by striking out the words "at a rate not exceeding five per cent," in lines five and six thereof.

7. Section seventy-two of said Act is repealed and the following substituted therefor:—

72. (1) The clerk of the municipality of every county or district shall annually add to the amount required for county purposes, but distinct from all other amounts required for such purposes, a sum sufficient, after deducting the estimated cost of collection and probable loss, to yield an amount equal to thirty-five cents for every inhabitant according to the last census of the municipality and of all incorporated towns which before incorporation territorially formed a part of such county or district.

(2) The said sum shall be divided between and borne by the municipality and the incorporated towns in the same proportions as the county fund, under the provisions of The Town's Incorporation Act and the Assessment Act and amendments thereto respectively, and shall be collected in the same manner as other rates and taxes.

(3) Notwithstanding the provisions of any statute of Nova Scotia, every incorporated town shall annually, on or before the thirtieth day of June, pay to the treasurer of the municipality of the county or district of which it before incorporation territorially formed part, its proportionate part of the said sum.

(4) The sum so raised by the municipality and incorporated towns shall be paid out annually for the support of schools by the treasurer of the municipality upon the order of the Superintendent, and shall be called the Municipal School Fund.

8. Section ninety-nine of said Act is amended by inserting after the word "section" in the sixth line thereof the words, "or in case of their refusal, the inspector."

#### CHAPTER 22. 1903.

##### An Act Relating to the Consolidation of School Sections.

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. The Council of Public Instruction is authorized to expend a sum not exceeding thirty-six thousand dollars for the purpose of assisting in consolidating school sections and the schools therein, and in arranging for the conveyance of pupils to and from such consolidated schools.

2. Such sum shall be expended in accordance with regulation to be made by the Council, and shall be paid out of the Provincial Treasury upon the order of the Secretary of the Council.

3. A copy of all regulations made under the provisions of this Act shall be laid before the House of Assembly and Legislative Council within the first ten days of the next session of the Legislature after the regulations are made.

#### CHAPTER 24. 1903.

##### An Act for the Encouragement of Rural School Libraries.

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. The Council of Public Instruction may pay annually out of the Provincial Treasury to any teacher acting as the librarian of the school library of the school section the sum of five or ten dollars, according as the equipment of the school, the value and use of the library, and the general management of the school and library, attain the standards prescribed by regulations of the Council for the smaller or larger library grant respectively.

2. Nothing in this Act shall apply to the schools in any incorporated town or in any school section employing a Class A teacher drawing a superior school grant, or a teacher drawing an Agricultural or Manual Training grant.

### LEGISLATION OF 1903-4.

#### CHAPTER 8.

##### An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

(Passed the 3rd day of March, A. D. 1904.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

2. Section 5 of said Act is amended by adding thereto as sub-section 21 the following:

"(On the recommendation of an inspector, supported by evidence, that the union of any two or more sections or parts of sections will effect a saving in the amounts to be paid out of the municipal school fund and the provincial aid grant, the council may, notwithstanding any provision of the Education Act, make regulations for the granting out of the said municipal and provincial grant such amounts as in the opinion of the inspector are necessary to maintain the said union by aiding the conveyance from beyond a distance of two miles from the school house, provided the respective amounts so required are less than the respective amounts which would otherwise be drawn from the same sources."

3. Section 42 of said Act is amended by striking out the words "from other sections" after the word "pupils" in the third line of said section, and substituting therefor the words "whose parents or guardians reside outside the section"



4. Section 72 of the said Act as amended by chapter 6 of the Acts of 1903, is further amended by adding thereto the following sub-section:

(5) The council of any municipality may, by resolution, increase the municipal school fund to any amount not exceeding sixty cents for every inhabitant according to the last census of the municipality and incorporated towns, provided that the council of every incorporated town affected by the increase concurs in such resolution, or if such concurrence cannot be obtained, that the Governor-in-Council upon application by the municipality concurs in such proposed increase.

5. Section 78 of said Education Act is amended by the addition thereto of the following as sub-section 3:

"Sections maintaining an ungraded school with one teacher shall not participate in the distribution of the said municipal school fund in regard to days' attendance made by the enrolled pupils for a greater number of days than eight thousand, except in cases in which an assistant teacher is employed by the trustees."

6. Section 76, sub-section 1, of said Act, is amended by substituting in third line, for the words "one-third" the words "one-half."

**CHAPTER 9. 1903-4.**

**An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."**

(Passed the 3rd day of March, A. D., 1904.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. That the second schedule to Chapter 52 of the Revised Statutes, 1900, the Education Act, is amended by adding at the end of the paragraph referring to Yarmouth: "Plymouth, 35"; at the end of the paragraph referring to Lunenburg and New Dublin: "Stanbourne, 38; East Dublin, 100"; at the end of the paragraph referring to Kings: "Islands, 75; West Black Rock, 86"; at the end of the paragraph referring to Cumberland: "Warren, 39"; at the end of the paragraph referring to South Pictou: "Cumberlond, 9"; at the end of the paragraph referring to North Pictou: "Scotch Hill, 51"; at the end of the paragraph referring to Richmond: "Sea View, 19."

2. Section 80 of Chapter 52 of said Revised Statutes, is amended by adding thereto the following clause:

"The Council of Public Instruction may, upon the recommendation of the Superintendent, add to said second schedule the name of any school section which applies by petition of a majority of its ratepayers to be added thereto."

(Reg. passed by C. P. I. 8th April, 1905.)

When a school section is placed on the *Second Schedule* by the C. P. I., the law takes effect on the first day of the next school year following.

**LEGISLATION OF 1905.**

**CHAPTER 19.**

**An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."**

(Passed the 7th day of April, A. D., 1905.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Section 69 of Chapter 52 of the Revised Statutes, 1900, "The Education Act," is amended by striking out the words "Principal of the School of Agriculture," in line twelve and inserting in lieu thereof the words "Inspector of Schools."

2. Sub-section 2 of section 75 of said Act is amended by inserting after the word "employed" in line three thereof the words, "and a sum not exceeding twenty-five dollars, according to the recommendation of the Inspector for each school garden kept up to the standard of form and efficiency prescribed by the Council."

3. Section 85 of said Act is amended by adding thereto the words "Provided however, that the exemption allowed by this section shall not apply in cases where the rate is upon the real estate and there is a male relative capable of managing said pro-

erty, of the age of twenty-one years, residing with the widow, unmarried woman or wife, upon the property so assessed."

4. Section 93 of said Act is amended by adding thereto the words, "And amounts so rated in respect to real property shall constitute a lien upon such property, which may be enforced under the provisions of the Assessment Act."

5. Said Chapter is amended by adding thereto after section 109 the following section:

109A. (1) Subject to the authority of the trustees, the teachers shall have a general oversight over the school premises during school hours, and may exclude therefrom all persons who disturb or attempt to disturb, the school work.

(2) Every person who in or upon any school premises and in the presence of a pupil or pupils attending such school, uses profane, threatening, abusive or improper language towards the teacher, or speaks or acts in such a way as to impair the maintaining of discipline by the teacher in such school, shall be liable to a penalty of not less than five dollars nor more than twenty dollars, and in default of payment to imprisonment for a period not exceeding thirty days.

#### CHAPTER 20. 1905.

An Act to Amend Chapter 54, Revised Statutes, 1900, entitled, "Of the Education of the Blind."

(Passed the 7th day of April, A. D., 1905.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Section 3 of Chapter 54 of the Revised Statutes of Nova Scotia, 1900 is amended by striking out the words "seventy-five" in the seventh line thereof, and inserting in place of said words, the word "ninety," and by striking out the words "same sum" in the ninth line thereof, and inserting in place of said words, the words "sum of ninety dollars."

2. Section 4 of said Chapter is amended by striking out the words "seventy-five" in the twelfth line thereof, and inserting in place of said words, the word "ninety."

#### CHAPTER 45. 1905.

An Act to Amend Chapter 131, Revised Statutes, 1900, entitled, "Of Library Associations and Institutes."

(Passed the 7th day of April, A. D., 1905.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. The following sections are hereby added to Chapter 131 of the Revised Statutes of 1900, entitled "Of Library Associations and Institutes."

14. Any Town Council of an Incorporated Town, and any Municipal Council of any Municipality, may vote and appropriate an annual sum, not exceeding Five Hundred Dollars per year, towards the support, purchase of books or other the purposes of any Library Association, incorporated under this Act, and whose Library is within the bounds of the county wherein said incorporated Town or Municipality is situated. Such sum when voted shall be included in the annual appropriations for the towns or Municipality for the year, and shall be assessed and collected with other the towns or taxes required to be assessed for Towns or Municipal purposes.

15. All property, real and personal, of any Library Association incorporated under this Act, shall be exempt from taxation for Town, School, Road, Poor, Railway, Municipal, Civic, Provincial or other purposes.

### LEGISLATION OF 1906.

#### CHAPTER 5.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—  
Chapter 52 of the Revised Statutes, 1900, "The Education Act," is amended by adding thereto, after Section 6, the following section:

ADVISORY BOARD OF EDUCATION.

- GA. (1) There shall be a Board consisting of seven persons, which shall be known as "The Advisory Board of Education," and shall perform the duties mentioned in this section.
- (2) Two members of the Board shall be elected by the licensed teachers engaged in teaching in the public schools in attendance at the Provincial Educational Association and shall be licensed teachers actually engaged in teaching in Nova Scotia; five members of the said Board shall be appointed by the Governor-in-Council.
- (3) The duties of said Board shall be to advise the Council and the Superintendent as to the following matters:
- (a) Text books and apparatus for use in the schools, books for school libraries.
  - (b) Qualification and examination of teachers.
  - (c) Courses of study for the public schools and the standard for admission to County Academies and high schools.
  - (d) The classification, organization and discipline of the Normal School, County Academies and the public schools.
  - (e) Such other educational matters as may from time to time be referred to them by the Superintendent or the Council.
- (4) Members of the Board shall hold office for two years, but shall be eligible for re-election or re-appointment.
- (5) The Board may make regulations for the time, place and conduct of its meetings.
- (6) Four members of the Board shall constitute a quorum.
- (7) The members of the Board shall receive from the Provincial Treasury such sums as will indemnify them for any expense incurred by them respectively by reason of attendance at the meeting of the Board.

CHAPTER 6. 1906.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Section 68 of Chapter 52 of the Revised Statutes, 1900, "The Education Act," is repealed and the following substituted therefor:
68. Every legally qualified teacher employed in a public school conducted according to law, shall be entitled to receive annually from the Provincial Treasury, the following sums, or such proportion thereof as the number of days taught by such teacher bears to the prescribed number of teaching days in the school year. Said sum shall be paid in semi-annual instalments:
- |  |          |
|--|----------|
| For class D, in any public school .....  | \$ 60 00 |
| " " C, " " " " .....   | 90 00    |
| " " B, " " " " .....   | 120 00   |
| " " A, in a superior common school of prescribed status .....  | 150 00   |
| " " A, in a high school of prescribed status .....   | 180 00   |
| " " A, when principal of the high school of prescribed status in a section having at least three departments ..... | 210 00   |
2. This Act shall not come into force until proclaimed by the Governor-in-Council.

CHAPTER 7. 1906.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Chapter 52 of the Revised Statutes, 1900, "The Education Act", is amended by adding thereto the following sections:
125. 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 no teacher shall receive more than \$150.00 per annum under the provisions of this section.
126. Teachers who, after twenty years' service, become totally disabled or incapacitated from any cause may, on satisfactory proof of such total disability or in-

capacity, retire so long as the total disability or incapacity exists, and shall be entitled to receive the annuity mentioned in the next preceding section.

127. School Boards, Municipal Councils, and Trustees are hereby empowered to supplement such annuities under pension or superannuation systems approved by the Council or regulations approved by the Council, and may also similarly provide for other teachers or educational officers employed by them who may not be beneficiaries under the next two preceding sections.

2. Moneys payable under the provisions of this Act shall not be transferable and shall not be liable to be taken by legal process to satisfy any debt or judgment.

3. The Council may, from time to time, make regulations for carrying into effect the provisions of this Act. Such regulations shall be published in the JOURNAL OF EDUCATION.

4. This Act shall come into force upon the first day of September, A. D., 1906.

### CHAPTER 8. 1906.

#### An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Sub-section 2, of Section 16, of Chapter 52 of the Revised Statutes, 1900, "The Education Act," is repealed and the following substituted therefor.  
 "Notice of the next annual school meeting after any such alteration,\* sub-division or union, or of a special annual school meeting, if the date of the regular annual meeting is past or inconvenient, shall be given by the Inspector; and such meeting shall elect a board of three trustees and transact all the other business of the regular annual school meeting for the ensuing school year, for the new section or sections.

2. Sub-section 1, of Section 24, of said Act is amended by striking out the words "up to the close of the school year, which ended on the thirty-first of July last," in the eighth line thereof.

3. Section 69 of said Act is amended by striking out the words "School of Agriculture" in the second line thereof and substituting therefor the words "rural science course in affiliation with the Provincial Normal School."

4. Clause (g) of Section 77, of said Act is amended by adding thereto the words "and pensions."

5. Section 99\*\* of said Act is amended by adding thereto the following sub-sections:  
 (2) If in any school section no provision or insufficient provision for the support of this section, before the first day of October in any year, the committee of the District Board appointed under Section 13 of the Education Act, may fix the sum of money necessary to make adequate provision for such school for the current school year, and shall notify the Inspector of the fixing of such sum.

(3) The Inspector shall certify the sum to the Municipal Clerk, who shall levy the said sum so fixed upon the section in the same manner as if it had been voted for school purposes at a regular school meeting called for the purpose, and shall prepare a collectors' roll for the collection of the same. The regular municipal collectors shall collect rates and taxes in the same manner and with the same remedies and for the same remuneration as in the case of other municipal rates and taxes, and shall return the same to the Municipal Treasurer.

(4) The amount so collected shall be paid on the order of the Inspector to meet the necessary expenses for the support of a public school in the said section.

6. Section 120, Sub-section 1 of said Act is hereby amended by substituting for the word "forty" in the third line of clause (b) the words "thirty-five", and in the third line of clause (c) for the word "eighty" the word "seventy", and in the third line of clause (d) for the words "one hundred and twenty" the words "one hundred."

7. Section sixty-seven A, added to Chapter 52 of the Revised Statutes 1900, "The Education Act", by Chapter 37 of the Acts of 1901, is amended by adding after the word "schools" at the end of the first line of said section sixty-seven A, the words "or the supervisor of the schools."

8. Section forty-two of said Act is amended by adding thereto the following sub-section:

(1) The School Board of the City of Halifax may by by-law to be approved by the Council of Public Instruction, fix a fee for the tuition of the children of the permanent militia forces, and such fee must be paid before any such child has the right to attend the public schools in the City of Halifax.

\*"Alteration" is proposed to be struck out by an amendment now before the legislature, March 1909.—See Legislation of 1909 towards end of volume.

\*\*Amended. See Legislation 1909.

EDUCATIONAL LEGISLATION, 1907.

NOVA SCOTIA TECHNICAL COLLEGE.

CHAPTER I, 1907.

An Act Relating to Technical Education.

Be it enacted by the Governor, Council, and Assembly, as follows:—  
 1. This Act may be cited as 'The Technical Education Act.'

DIRECTOR OF TECHNICAL EDUCATION.

2. (1) The Governor-in-Council may appoint a person to be Director of Technical Education, who shall be an officer of the Council of Public Instruction and shall be paid such salary (and receive such allowances) as the Governor-in-Council determines.
- (2) The Council of Public Instruction shall, upon the recommendation of the Director, provide the Director with such assistants as may be found necessary, and shall define their duties and fix the salaries they shall receive.
3. The duties of the Director of Technical Education shall be as follows:—
  - (a) To exercise general supervision over the conduct and management of all schools established or carried on under the provisions of this Act;
  - (b) To report and advise the Council as to all matters relating to engineering, mining and industrial education;
  - (c) To promote the establishment and efficiency of local technical schools and other schools under his supervision;
  - (d) To report annually to the Legislature on the state of technical education in the province, and as to the condition and efficiency of the schools under his supervision, with detailed accounts of the expenditure of the moneys appropriated for the support of the same;
  - (e) Such other duties as the Council of Public Instruction from time to time prescribes.
4. The Governor-in-Council, on behalf of the province, may accept, take, hold and administer any gifts bequests or devises of real or personal property of every kind which may be made for the furtherance of any of the objects of this Act

TECHNICAL COLLEGE.

5. There shall be established at Halifax an institution for the purpose of affording facilities for scientific research and instruction and professional training in civil, mining, mechanical, chemical, metallurgical and electrical engineering or any other departments which may from time to time be added.
6. The institution shall be called the Nova Scotia Technical College.
7. The Governor-in-Council is hereby authorized to borrow a sum not exceeding \$100,000, and to expend the same in securing a site, erecting a building and in providing adequate apparatus, plant, books, materials and appliances for the purposes of said institution.
8. The Council of Public Instruction may from time to time make such rules and regulations as it deems expedient for the efficient conduct of the said institution, and may amend or repeal the same.
9. The Director of Technical Education shall be the principal of the said institution.
10. The Council of Public Instruction shall, upon the recommendation of the principal, appoint such professors and instructors as the Council considers requisite for the purposes for which the institution is established.
11. (1) The members of the teaching staff of the institution having the rank of professors, and such representative of any university of the province or elsewhere as the Council may select shall constitute a body corporate, under the name of the Nova Scotia Technical College.

(2) The said corporation shall have power to grant such degrees as it may determine, to prescribe the several qualifications therefor, the course of study to be pursued in the several departments, and in respect to all matters of discipline and all matters connected with the educational work of the institution shall have the control thereof.

(3) In the event of any part or parts of the course of study prescribed for the said institution for the first and second years being included in the educational work done in the universities recognized by the Council in this province or elsewhere, the Council of Public Instruction shall exclude such part or parts from the course of study of the said institution.

(4) The principal shall report from time to time the proceedings of the corporation to the Council of Public Instruction, and the Council may modify or reverse any action or ruling taken or made by the corporation.

12. The annual expenditure incurred in connection with the institution shall be defrayed out of the provincial treasury.

#### LOCAL TECHNICAL SCHOOLS.

13. The Governor-in-Council may from time to time establish, in such places as it may be deemed advisable, local technical schools to furnish industrial education of such character and extent as will most effectively meet the requirements of the population and industries of the locality.

14. No such local technical school shall be established until the necessity or desirability thereof, the amount of local aid to be furnished, the facilities which can be afforded and the advantages to be derived have been reported upon by the Director of Technical Education, and he has recommended the establishment of such school.

15. (1) The Council of Public Instruction may make such rules and regulations as they deem advisable for the support, conduct and management of the school.

(2) Subject to such regulations the Council may associate the Board of School Commissioners of the place in which the school is established, or a committee thereof, or any other person or persons with the Director in the management of any local technical school.

16. The Council of Public Instruction shall, upon the recommendation of the Director appoint such instructors as may be required for the carrying on of such schools and shall fix their salaries.

17. Such sums as may be required in addition to the local aid provided, for the establishment and maintenance of the local technical schools shall be paid out of the provincial treasury.

#### SCHOOLS FOR MINERS.

18. The schools of instruction for miners established under the provisions of chapter 22 of the Revised Statutes, 1900, "Of Schools of Instruction for Miners," are hereby continued and hereafter the establishment and maintenance of such schools shall be under the direction of the Council of Public Instruction.

19. Such schools shall be for the purpose of instructing persons who wish to prepare themselves to undergo examination by the board of examiners for the purpose of obtaining certificates of competency as underground managers or stationary engineers, under the provisions of "The Coal Mines' Regulation Act," and amendments thereto.

20. All such schools shall be under the supervision and control of the Director of Technical Education.

21. (1) The instructors in such schools shall be appointed by the Council of Public Instruction upon the recommendation of the Director.

(2) Such instructors shall be paid such salaries as the Council determines.

22. No teacher in any such school shall take from any intending candidate any fee for the instruction given by him; provided, however, that this provision shall not apply in the case of any person desiring instruction but not contemplating examination for a certificate.

23. No fee shall be charged by the board of examiners to candidates who have been prepared at any school established or continued under the authority of this Act.

24. All expenditure necessary for the establishment and maintenance of said schools, including buildings, rent, apparatus, instruments, instruction, fuel, light and incidental expenses shall be defrayed out of the provincial treasury on the certificate of the Director of Technical Education.

25. The Council of Public Instruction may from time to time make such regulations as are necessary or expedient for the conduct and management of said schools, and may amend or repeal the same.

26. Chapter 22 of the Revised Statutes, 1900, "Of Schools of Instruction for Miners" is repealed.

LEGISLATION, 1907.

CHAPTER 38.

An Act to Amend Chapter 52, Revised Statutes, 1900, „The Education Act.”

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Sub-section one of section twenty-three of chapter 52 of the Revised Statutes, 1900, „The Education Act,” is amended by inserting the word “resident” before the word “rate-payers” in the first line.
2. Sub-section two of said section twenty-three is amended by inserting the word “resident” before the word “ratepayers” in the second line.
3. Sub-section one of section twenty-four is amended by striking out the word “of” in the fifth line and inserting in the place thereof the words “residing in.”
4. Sub-section (b) of section fifty-five is amended by striking out of the third line the words “or unlicensed” with the brackets enclosing the same.
5. Section seventy-seven is amended by adding the following sub-section (gg):—  
(gg) “Any necessary expense for the periodical dental and general medical examinations of the pupils attending school.”
6. Section ninety-nine of chapter fifty-two of the Revised Statutes, 1900, “The Education Act,” and all Acts and parts of Acts in amendment thereof, are repealed and the following substituted therefor:—  
\*99. (1) If, in any school section where sectional assessment is required to support a free public school, no provision is made at the annual meeting for the support of a school for the ensuing year, or if no annual meeting has been held, or if the provision made at said annual meeting proves to be insufficient to have a school provided and opened before the twentieth day of September in any year, the committee of the District Board appointed under section thirteen of the Education Act shall, when notified by the Inspector that any section is without a school for any of the above reasons, appoint not more than three trustees in the said section interested in the keeping school open, and they shall thereupon be and become the trustees of the said school section with all the power and authorities vested in trustees under the Education Act in the place of the trustees, if any, elected by the ratepayers, whose duties will, during the remainder of said school year, be suspended.  
(2) The said trustees or trustee so appointed shall, forthwith estimate and name the sum of money which they deem sufficient for the support of a school for the remainder of the current year, and shall submit their estimate to said committee for its approval, and when so approved of, the amount thereof shall be communicated to the Inspector by the said committee in writing.  
Provided, however, that if the committee of the District Board is unable to secure desirable trustees or trustee, they shall notify the Inspector of that fact, in which case the Inspector shall have all the powers of trustees for the school section as provided in this section, and shall forthwith estimate and name the sum of money which he deems sufficient for the support of a school for the remainder of the current school year, and shall submit his estimate to the said committee for its approval as above provided for, which approval shall be communicated to the Inspector by the said Committee in writing.  
(3) The Inspector shall certify the said sum to the municipal clerk who shall levy the said sum so fixed on the section in the same manner as if it had been voted for school purposes at a regular school meeting called for the purpose, and shall prepare a collectors’ roll for the collection of the same. The regular municipal collectors shall collect such rates and taxes in the same manner and with the same remedies and for the same remuneration as in the case of other municipal rates and taxes and shall return the same to the municipal treasurer.  
4. The amount so collected shall be paid on the order of the Inspector to meet the necessary expenses for the support of a public school in the said section.  
7. Section one of chapter seven of the Acts of 1906, entitled an Act to amend chapter fifty-two, Revised Statutes, 1900, “The Education Act,” is amended by adding thereto the following section:—  
128. “Such school boards, municipal councils and trustees are hereby empowered to enter into any agreement with any annuity company to undertake the payment of such annuities under such agreements as may be approved by the Council.”

\*Section 99 is proposed to be amended by a bill now before the legislature, March, 1909. See Legislation of 1909 towards end of volume.

## LEGISLATION, 1908.

## CHAPTER 13.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act."

(Passed the 16th day of April, A. D., 1908.)

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Chapter 52 of the Revised Statutes, 1900, "The Education Act," is amended by adding thereto, after section 71, the following section:—

71A. (1) Every poor section determined under the provisions of section 14 of this Act, and the amendments thereto, which

(a) is isolated so as to be clearly impossible to be united with or absorbed into another school section or other school sections,

(b) is rated for sectional school rates on property assessed at a value of not more than \$3,000,

(c) has not within its bounds more than twelve families, and

(d) votes and collects for current school expenses at a rate of not less than two per cent, on the property ratable for sectional school rates, shall be known as a special poor section.

2 There may from time to time be paid to any special poor section out of the Provincial Treasury, upon the recommendation of the Inspector and the authorization of the Council of Public Instruction, such grant in addition to the extra aid provided for poor sections by this chapter as may be recommended by the Inspector; provided, however, that in no case shall the said grant exceed the amount voted and collected by the section as sectional school rates, nor in any case the sum of \$60.



COMPLETE LIST OF SCHOOL SECTIONS NAMED IN SECOND SCHEDULE.

INSPECTORIAL DIVISION, No. 1

All sections in the Municipal District of Halifax.

INSPECTORIAL DIVISION, No. 2.

LUNENBURG AUD NEW DUBLIN

No. 2	..... First Peninsula.	No. 40	..... Meisner's.
No. 34	..... Centre Range.	No. 44	..... Oakhill.
No. 4	..... Garden Lots.	No. 57	..... Lr. Second Peninsula.
No. 7	..... Heckman's Island.	No. 60	..... Clearland.
No. 16	..... Lower La Have.	No. 80	..... Hebb's Mills.
No. 22	..... North West.	No. 86	..... Wileville.
No. 24	..... Whynacht.	No. 97	..... Pine Grove.
No. 25	..... Mader's Cove.	No. 100	..... East Dublin.
No. 26	..... Mahone Bay.	No. 107	..... Upper Woodstock.
No. 27	..... Oakland.	No. 109	..... Rosebud.
No. 30	..... Block House.	No. 111	..... Lr. Woodstock.
No. 35	..... Parkdale.		
No. 38	..... Stanbourne.		

SOUTH QUEENS.

No. 9.....Milton.

INSPECTORIAL DIVISION, No. 3.

YARMOUTH

No. 2	..... Little River.	No. 23	..... Hebron.
No. 3	..... Arcadia.	No. 24	..... Dayton.
No. 8	..... Overton.	No. 34	..... Carleton.
No. 10	..... South Cheggogin.		ARGYLE.
No. 12	..... North Cheggogin.	No. 35	..... Plymouth.
No. 13	..... Sanford.		SHELBURNE
No. 14	..... Port Maitland.		
No. 15	..... Richmond.	No. 17	..... East Jordan.
No. 16	..... Norwood.	No. 18	..... Jordan Falls.
No. 17	..... Lake Annis.	No. 19	..... Upper West Jordan.
No. 20	..... Brenton.		
No. 21	..... Ohio.		

INSPECTORIAL DIVISION, No. 4.

ANNAPOLIS, WEST.

DIGBY.

No. 45	..... Allen River.	No. 18	..... Weymouth Bridge.
		No. 19	..... Weymouth Mills.
		No. 22	..... Sissiboo Falls.
		No. 28	..... Digby.

INSPECTORIAL DIVISION, No. 5.

KINGS.

No. 24	..... Waterville C).	No. 79	..... Grand Pre.
No. 37	..... Cold Brook.	No. 82	..... Middle Pereaux.
No. 41	..... Canaan.	No. 83 and 39	..... Halfway River.

No. 45	Sheffield Mills.	No. 85	Upper Gaspereaux.
No. 49	N. Scott's Bay.	No. 86	West Black Rock.
No. 50	Scott's Bay Road.	No. 88	Pleasant View.
No. 52	Upper Pereaux.	No. 91	White Rock.
No. 54	Habitant.	No. 92	Rockland.
No. 56	Woodside.	No. 96	South Tremont.
No. 60	Town Plot.	No. 99	Highbury.
No. 64	New Minas.	No. 102	Kingsport.
No. 73	Avonport.	No. 104	Garland.
No. 75	Islands.	No. 109	West Brooklyn.
No. 77	Prospect.	No. 110	South Waterville.

## HANTS, WEST

No. 2	Wentworth.
No. 11	Mt. Denson.
No. 14	Belmont.
No. 15	Poplar Grove.
No. 17	Kennetcook Dyke.
No. 19	Summerville.
No. 20	Cheverie.
No. 23	Pembroke.
No. 25	Cogmagun.
No. 35	St. Croix.
No. 38	Ellershouse.
No. 39 and 24	Walton.
No. 45	Mills.

## HANTS, EAST

No. 6	West Gore.
No. 14	East Indian Road.
No. 27	Urbania.
No. 31	Upper Selma.
No. 33	Noel Shore.
No. 37	Moose Brook.
No. 42	Kennetcook Church.
No. 50	Gore.

## INSPECTORIAL DIVISION, No. 6.

## ANTIGONISH.

No. 33	E. Har. au Bouche.
No. 48	Salt Springs.
No. 49	West River.

## GUYSBORO.

No. 19	Hazel Hill.
No. 38	Pirate Harbor.

## INSPECTORIAL DIVISION, No. 7.

## RICHMOND.

No. 11	D'Escousse.	No. 21	Basin.
No. 18	Grandique Ferry.	No. 32	Sea View.
No. 19	Louisdale.		

## INSPECTORIAL DIVISION, No. 8.

## NORTH INVERNESS.

No. 58	Whycocomagh.
--------	--------------

## VICTORIA.

No. 1	Baddeck.	No. 48	South Gut.
-------	----------	--------	------------

## INSPECTORIAL DIVISION, No. 9.

## PICTOU, SOUTH.

No. 4	White Hall.
No. 5	Marshdale.
No. 9	Riverton.
No. 10	Fox Brook.
No. 14	Springville.
No. 15	Bridgeville.
No. 16	Glencoe.
No. 17	Sunny Brae.
No. 19	Blanchard.

No. 36	North Fraser's Mt.
No. 37	Little Harbor.
No. 38	Pine Tree.
No. 39	Sutherland's River.
No. 40	West Merrigomish.
No. 41	Merigomish.
No. 42	Piedmont Valley.
No. 44	Lr. Barney's River.
No. 57	Meiklefield.
No. 59	S. McLellan's Mt.
No. 60	N. Little Harbor.

No. 26	.....	Kirk Mount.
No. 30	.....	Linacy.
No. 31	.....	Brookville.
No. 33	.....	Trenton.
No. 34	.....	Abercrombie.

No. 63	.....	Upper Hopewell.
No. 64	.....	Wentworth Grant.
No. 71	.....	Thorburn.
No. 74	.....	Centredale.
No. 75	.....	Eureka.

PICTOU, NORTH.

No. 2	.....	Cariboo River.
No. 7	.....	Poplar Hill.
No. 9	.....	Marshville.
No. 15	.....	Bigney.
No. 22	.....	South Dalhousie.
No. 23	.....	Millsville.
No. 27	.....	Scotsburn.

No. 30	.....	Roger's Hill.
No. 37	.....	West River Station.
No. 39	.....	Landsdowne.
No. 40	.....	Millbrook.
No. 42	.....	Pleasant Valley.
No. 48	.....	Durham.
No. 51	.....	Lr. Scotch Hill.
No. 53	.....	Fisher's Grant.
No. 56	.....	Cariboo Island.

INSPECTORIAL DIVISION, No. 10.

CUMBERLAND.

No. 24	.....	Upper Pugwash.
No. 27	.....	Roslin.
No. 29	.....	Victoria.
No. 39	.....	Warren.
No. 45	.....	Maccan.
No. 62	.....	East Mapleton.
No. 66	.....	Wyndham Hill.
No. 81	.....	River Philip.
No. 90	.....	Farmington.
No. 93	.....	Lake Road.
No. 107	.....	Clifton.
No. 115	.....	Black River.

No. 117	.....	Springhill Junction.
No. 119	.....	Valley Road.
No. 123	.....	South Pugwash.

PARRSBORO.

No. 3	.....	New Prospect.
No. 4	.....	Green Hill.
No. 5	.....	Black Rock.
No. 6	.....	Cross Roads.
No. 14	.....	Advocate.
No. 17	.....	Lakelands.
No. 20	.....	Sugar Hill.

INSPECTORIAL DIVISION, No. 11.

CAPE BRETON.

No. 8	.....	Lakevale.
No. 67	.....	Clark's Road.
No. 68	.....	Mainadieu.
No. 71	.....	Little Lorraine.

No. 72	.....	Big Lorraine.
Ho. 74	.....	West Louisburg.

INSPECTORIAL DIVISION, No. 12.

COLCHESTER, SOUTH.

No. 3	.....	Upper Onslow.
No. 12	.....	Nutby.
No. 14	.....	Central North River.
No. 21	.....	Riverside.
No. 24	.....	Camden.
No. 35	.....	Brookfield.
No. 38	.....	Alma.
No. 45	.....	Coldstreams.
No. 46	.....	St. Andrews.
No. 56	.....	Cross Roads.
No. 59	.....	Smithfield.

COLCHESTER, WEST.

No. 7	.....	Pleasant Hills.
No. 10	.....	Castlereagh.
No. 15	.....	Acadia Mines.
No. 18	.....	Folly Village.
No. 20	.....	Masstown.
No. 23	.....	Folly Lake.
No. 24	.....	Londonderry Station.

STIRLING.

No. 6	.....	French River.
No. 8	.....	Murphy's.
No. 21	.....	Brule.
No. 29	.....	Denmark.

MARCH ANNUAL SCHOOL MEETING.

In some fishing districts it may be found desirable to take advantage of that

provision of the law under which the Council of Public Instruction may fix for a given section an earlier date for its annual school meeting than the last Monday of June. If any such cases exist, it is very desirable that these early annual meetings be held on the same day. The first Monday in March is selected as likely to be the most generally convenient date.

Sections feeling the necessity of an early date for the annual school meeting should, through their trustees, make an application to the Council through their Inspector before the end of January, so that the Inspector may be able to transmit all such applications with recommendations or comments thereon, to the Council of Public Instruction on the first day of February, when it is probable action can be taken and due notice given in time for the holding of the meetings on the first Monday of March.

The suggestion, it is hoped, will enable cases of this kind to be arranged easily and without the delay otherwise necessary.

The following list of school sections includes those given in No. 42 of the *Comments and Regulations of the Council of Public Instruction, "Manual of School Law Nova Scotia, 1901,"* pages 68 to 71, whose regular annual meetings were changed by the Council on the 11th September, 1903, from the last Monday in March to the first Monday in March of each year.

### COMPLETE LIST OF SECTIONS.

whose regular annual meetings have been fixed by the C. P. I., to be held on the first Monday in March of each year.

#### INSPECTORIAL DIVISION, No. 1.

##### HALIFAX, WEST.

No. 1	Hubbard's Cove.
No. 6	Head Harbor.
No. 9	Glen Margaret.
No. 11	Indian Harbor.
No. 13	West Dover. . .
No. 25	Sambro.
No. 28	Ketch Harbor.
No. 29	Portuguese.
No. 67	Seaforth.
No. 68	West Chezzetcook.
No. 69	Grand Desert.
No. 70	Head Chezzetcook.
No. 71	Hope Ridge.
No. 72	Lr. E. Chezzetcook.
No. 73	West Petpeswick.
No. 75	Bayer's.
No. 76	East Petpeswick.
No. 77	Steven's.
No. 78	Bowser's.
No. 79	Pleasant Point.
No. 80	West Jeddore.
No. 81	Head Jeddore.

##### HALIFAX, EAST.

No. 1	Oyster Pd., Jeddore.
No. 2	Lr. East Jeddore.
No. 3	Upper Lakeville.
No. 4	Lower Lakeville.
No. 5	Clam Harbor.
No. 6	Owl's Head.
No. 7	South Ship Harbor.
No. 9	Newcombe's Brook.
No. 11	Murphy's Cove.
No. 12	Pleasant Harbor.
No. 13	Tangier.
No. 16	Gerrard's Island.
No. 17	Spry Harbor.
No. 18	Spry Bay (Hentley).
No. 19	Spry Bay (Leslie).
No. 29	Beaver Harbor.
No. 30	Port Dufferin.
No. 32	Quoddy.
No. 33	Harrigan Cove.

#### INSPECTORIAL DIVISION, No. 2.

##### LUNENBURG AND NEW DUBLIN.

No. 3	2nd Peninsula, Upr.
No. 3 1/2	Upper Centre.
No. 4	Garden Lots.
No. 5	Blue Rocks.
No. 6	Black Rocks.
No. 7	Heckman's Island.
No. 8	1st South.
No. 9	Middle South.
No. 10	Feltzen South.
No. 11	Upper Rose Bay.
No. 15	Ritcey's Cove.
No. 16	Lower LaHave.
No. 17	Park's Creek.
No. 18	Middle LaHave.
No. 19	St. Matthew's.
No. 20	Summerside.
No. 21	Snyder's.
No. 22	North West.
No. 23	Fauxbourg.
No. 25	Mader's Cove.
No. 26	Mahone Bay.
No. 27	Oakland.

No. 12	Lower Rose Bay.
No. 13	Upper Kingsburg.
No. 14	Lower Kingsburg
No. 15	Ritcey's Cove.
No. 16	Lower LaHave.
No. 17	Park's Creek.
No. 18	Middle LaHave
No. 19	St. Matthew's.
No. 20	Summerside.
No. 21	Snyder's.
No. 22	North West.
No. 23	Fauxbourg.
No. 25	Mader's Cove.
No. 26	Mahone Bay.
No. 27	Oakland.
No. 28	Indian Point.
No. 29	Martin's River.
No. 57	2nd Peninsula, Lr.
No. 58	Tancook.
No. 60	Clearland.
No. 61	Eastern Point.
No. 62	Big Lots.
No. 65	Conquerall Bank.
No. 66	Pleasantville.
No. 67	Fralig's.
No. 68	Pentz's.
No. 69	Getson's.
No. 70	West Dublin.
No. 72	New Cumberland.
No. 73	Mount Pleasant
No. 74	Petite Riviere.
No. 75	Broad Cove.
No. 76	Cherry Hill.
No. 77	Vogler's Cove, W.
No. 78	Crousetown.
No. 100	East Dublin.

No. 101	Herman's Island.
No. 103	Corkum's Island.
No. 105	Vogler's Cove, E.

CHESTER.

No. 2	East Chester.
No. 3	Mariott's Cove.
No. 15	Gold River N.
No. 15½	Gold River S.
No. 16	Martin's Point.
No. 17	Indian Point.
No. 18	Blandford.
No. 19	Bayswater.
No. 20	Fox Point.
No. 23	North West Cove.
No. 24	Mill Cove.
No. 28	Pine Plain.
No. 29	Deep Cove.

SOUTH QUEENS.

No. 1	St. Catherine River
No. 2	Port Joli.
No. 3	Cent'l Port Mouton.
No. 4	Port Mouton, N.
No. 5	Hunt's Point.
No. 6	Western Head.
No. 7	Moose Harbor.
No. 11	Beach Meadow.
No. 12	Eagle Head.
No. 13	West Berlin.
No. 15	East Port Medway.
No. 18	Gull Island.
No. 19	White Point.

INSPECTORIAL DIVISION, No. 3.

SHELBURNE.

No. 5	Middle West Sable.
No. 6	Louis Head.
No. 7	Little Harbor.
No. 8	Matthew's Point.
No. 9	Rockland.
No. 11	Osborne.
No. 16	West Green Harbor.
No. 19	Upper West Jordan.
No. 20	West Jordan Ferry.
No. 22	Lower Sand Point.
No. 23	Sand Point.
No. 30	Port Saxon.
No. 31	North East Harbor.
No. 32	Black Point.
No. 33	Roseway.
No. 35	Churchover.
No. 36	Birchtown.
No. 37	McNutt's Island.

BARRINGTON.

No. 4	Cape Negro.
No. 6	Cape Negro Island.
No. 16	Bear Point.

No. 17	Shag Harbor.
No. 19	Up. Wood's Harbor
No. 27	Stony Island.

ARGYLE.

No. 2	Mid. East Pubnico.
No. 3	East Pubnico.
No. 5	Up. West Pubnico.
No. 6	Middle W. Pubnico.
No. 8	Argyle Sound.
No. 14	West Glenwood.
No. 15	Lower Eel Brook.
No. 16	Eel Brook.
No. 17	Abraham's River
No. 18	Morris Island.
No. 19	Surette's Island.
No. 20	Sluice Point.
No. 21	Tusket Hill.
No. 22	Hubbard's Point
No. 25	North Belleville
No. 27	South Belleville.
No. 28	Bell Neck.
No. 30	West Quinan.
No. 31	East Quinan.

## INSPECTORIAL DIVISION, No. 4.

## DIGBY.

- No. 14.....Port Gilbert.  
 No. 41.....East Ferry.  
 No. 42.....Tiverton.  
 No. 43.....Central Grove.

## CLARE.

- No. 31.....Cape St. Mary.

## INSPECTORIAL DIVISION, No. 6.

## ANTIGONISH.

- No. 32.....Harbor Bouchie.  
 No. 33.....E. Harbor Bouchie.  
 No. 70.....Auld's Cove.  
 No. 76.....Frankville.  
 No. 77.....Cape Jack.

## GUYSBORO.

- No. 2.....Riverside.  
 No. 10.....Roachvale.  
 No. 13.....New Harbor, Upper.  
 No. 14.....Sandy Cove.  
 No. 15.....Halfway Cove.  
 No. 16.....Queensport.  
 No. 17.....Half Island Cove.  
 No. 18.....Black Point.  
 No. 21.....Up. White Head.  
 No. 22.....Lr. White Head.  
 No. 25.....Middle Melford.  
 No. 26.....Sand Point.  
 No. 31.....Port Shoreham.  
 No. 32.....St. Francis Harbor.  
 No. 39.....Steep Creek.  
 No. 40.....Oyster Ponds.  
 No. 44.....Lower New Harbor.  
 No. 47.....Seal Harbor.

- No. 51.....Codale's Harbor.  
 No. 53.....Dover.  
 No. 55.....Yankee Cove.  
 No. 58.....Port Felix, E.  
 No. 59.....Port Felix, W.  
 No. 60.....Cole Harbor.  
 No. 61.....Charlo's Cove.  
 No. 62.....Larry's River, W.  
 No. 63.....Larry's River, E.  
 No. 64.....Gammon Point.  
 No. 65.....Fisherman's Harbor.

## ST. MARY'S.

- No. 15.....Ecum Secum.  
 No. 16.....Marie Joseph.  
 No. 17.....Liscomb Mills.  
 No. 18.....Middle Liscomb.  
 No. 19.....Lower Liscomb.  
 No. 20.....Wine Harbor.  
 No. 21.....Port Hilford.  
 No. 23.....Sonora.  
 No. 27.....Port Bickerton.  
 No. 28.....Chegoggin.  
 No. 29.....West Liscomb.  
 No. 30.....Spanish Ship Bay.

## INSPECTORIAL DIVISION, No. 7.

## RICHMOND.

- No. 1.....Acadiaville.  
 No. 2.....Port Royal.  
 No. 3.....Janvrin's Island.  
 No. 4.....Arichat.  
 No. 5.....Poulamond.  
 No. 6.....Martinique.  
 No. 8.....D'Escousse.  
 No. 9.....Poirierville.  
 No. 10.....Cape La Ronde.  
 No. 11.....Rocky Bay.  
 No. 12.....Edwards.  
 No. 13.....Petit de Grat.  
 No. 15.....Orange.  
 No. 16.....Point Marache.  
 No. 17.....Cape Auguet.  
 No. 18.....Grand Digue.  
 No. 19.....Louisdale.  
 No. 20.....East Basin.  
 No. 21.....Basin.  
 No. 22.....Richmond Mines.  
 No. 23.....Port Richmond.  
 No. 24.....Port Malcolm.  
 No. 25.....Sunnyside.

- No. 27.....Hureauville.  
 No. 32.....Seaview.  
 No. 38.....Cape George.  
 No. 39.....Beaver's Cove.  
 No. 41.....River Bourgeois.  
 No. 42.....Cannes.  
 No. 43.....Lynch's River.  
 No. 44.....Salmon River.  
 No. 45.....Soldier's Cove.  
 No. 46.....Macnab.  
 No. 47.....Hay Cove.  
 No. 48.....Red Islands.  
 No. 50.....Peter's Mountain.  
 No. 52.....West Loch Lomond.  
 No. 53.....Aberdeen.  
 No. 55.....Stirling.  
 No. 56.....Cape Breton.  
 No. 57.....Fourche.  
 No. 58.....Framboise.  
 No. 59.....Intervale.  
 No. 60.....St. Esprit.  
 No. 61.....Archeveque.  
 No. 62.....Grand River.  
 No. 63.....Head Loch Lomond.  
 No. 64.....Lewis Cove Road.

No.	65	.....	Point Micheau.
No.	66	.....	Grand River Road.
No.	67	.....	Brymer.
No.	68	.....	L'Ardoise.
No.	69	.....	West L'Ardoise.
No.	70	.....	Rockdale.
No.	71	.....	Grand Greve.

SOUTH INVERNESS.

No.	3	.....	Low Point.
No.	6	.....	Albion.
No.	16	.....	Dunmore.
No.	61	.....	Rhodena.

INSPECTORIAL DIVISION, No. 8.

NORTH INVERNESS.

No.	1	.....	Grantosh, Pleasant By.
No.	2	.....	Pleasant Bay.
No.	8	.....	Le Fort.
No.	11	.....	Le Blanc.
No.	12	.....	Ruisseau-du-lac.

No.	34	.....	Gillis Point.
No.	38	.....	Clyburne Brook.
No.	41	.....	Sea View.
No.	43	.....	Middle Ridge.
No.	44	.....	Big Intervale.
No.	57	.....	Tarbert.
No.	59	.....	Indian Brook.
No.	65	.....	South Ingonish.
No.	69	.....	Sugar Loaf, C. North.
No.	73	.....	Neil's Harbor.
No.	82	.....	West Ingonish.

VICTORIA.

No.	26	.....	Upper Washabuck.
No.	31	.....	Estmere.

INSPECTORIAL, DIVISION No. 11.

CAPE BRETON.

No.	20	.....	South Head.
No.	22	.....	Milton.
No.	23	.....	Round Island.
No.	25	.....	Horn's Road.
No.	30	.....	Caribou Marsh.
No.	32	.....	Marion Bridge.
No.	34	.....	Woodbine.
No.	39	.....	Edwardsville.
No.	42	.....	Ball's Creek.
No.	65	.....	Catalone.
No.	66	.....	Bateston.
No.	67	.....	Clark's Road.
No.	68	.....	Mainadieu.
No.	70	.....	Baleine.
No.	71	.....	Little Lorraine.

No.	72	.....	Big Lorraine.
No.	74	.....	West Louisburg.
No.	77	.....	Trout Brook.
No.	78	.....	Big Ridge.
No.	79	.....	French Road.
No.	80	.....	Ocean View.
No.	81	.....	Gabarus Bay.
No.	82	.....	Gabarus.
No.	83	.....	Gull Cove.
No.	84	.....	Gabarus Lake.
No.	85	.....	Belfry.
No.	86	.....	Canoe Lake.
No.	87	.....	Upper Grand Mira.
No.	88	.....	Grand Mira.
No.	89	.....	Victoria Bridge.
No.	90	.....	Grand Mira, N.
No.	91	.....	Caledonia.
No.	97	.....	Big Pond.

## MORE IMPORTANT REGULATIONS OF C. P. I. SINCE THE CONSOLIDATION IN THE MANUAL OF 1901.

For the Provincial Normal School see the latest Calendar and the intimations in this issue of the JOURNAL.

For Teachers' Licenses, Provincial Examinations, Courses of Study, Vacations, Institutes, and the Provincial Educational Association, etc., see the regulations as published in this issue of the JOURNAL.

For Rural School Libraries and list of prescribed books, etc., see the October JOURNAL OF EDUCATION for 1903, pages 152 to 165.

### RURAL SCHOOL LIBRARIES OF NOVA SCOTIA.

Section 77 (e) of "The Education Act," Chapter 52, R. S., 1900, authorized the ratepayers to vote funds for "books for the school libraries" at any regularly called school meeting.

Prior to 1903 the Council of Public Instruction published in the "Manual of School Law, 1901," and in the "JOURNAL OF EDUCATION," from year to year) the following regulations which still continue to remain in force:

172. In the Revised Statutes of 1900, Chapter 52, Section 77 (e), authority is given for the raising of funds for books for the school library by assessment. Until the Council has prepared and published a list of books for such libraries, trustees purchasing such books with school funds should first send a list of proposed books, their publishers, sizes and prices if possible, to the Secretary of the Council for its approval.

173. In some schools among those fully graded, the prescribed Readers may be thoroughly mastered before the other portions of the course; so that additional reading may profitably be undertaken by the pupils. Such readings are known as "supplementary" and may be authorized by the Council for any section making application; but only on the conditions: (a) that the prescribed Readers have first been thoroughly mastered, and (b) that the "supplementary" Readers authorized be the property of the school section, so that no parent or pupil shall be required to purchase any such Reader.

Regulations 51, 52, 53, 69 and 70, referring to the equipment of "Superior" Schools, High Schools and County Academies, make the school library an essential part of the legal equipment of these public schools which Inspectors can have enforced by the withholding of public funds under the conditions specified.



Chapter 24 of the Statutes of 1903, is as follows:—

AN ACT FOR THE ENCOURAGEMENT OF RURAL SCHOOL LIBRARIES.

Be it enacted by the Governor, Council, and Assembly, as follows:

1. The Council of Public Instruction may pay annually out of the Provincial Treasury, to any teacher acting as the librarian of the school library of the school section, the sum of five or ten dollars, according as the equipment of the school, the value and use of the library, and the general management of the school and library, attain the standards prescribed by the regulations of the Council for the smaller or larger library grant respectively.

2. Nothing in this Act shall apply to the schools in any incorporated town, or in any school section employing a Class A teacher drawing a superior school grant, or a teacher drawing an Agricultural or Manual Training grant.

Under the authority of this Act the Council of Public Instruction has made the following:—

REGULATIONS FOR RURAL SCHOOL LIBRARIES.

(1)

THE GRANTS.

The Rural School Library grants, authorized by statute (quoted above) are intended to stimulate the formation and use of libraries in school sections other than those in which Class "A" Agricultural and Manual Training grants are drawn—which grants are already conditioned to some extent by the existence of appropriate libraries.

For the five dollar grant the books belonging to the library in the year 1904 must be worth at least twenty dollars, and at least 150 issues of books must have been made during the year to readers.

For the ten dollar grant the books belonging to the library in 1904 must be worth at least fifty dollars, and at least 300 issues must have been made to readers during the year.

Each year subsequent to 1904 the minimum value of the smaller library must be five dollars greater than on the previous year until it becomes fifty dollars, when the minimum shall remain constant. [After 1909 Fifty Dollars.]

In like manner, each year subsequent to 1904 the minimum value of the larger library must be ten dollars greater than on the previous year until it becomes one hundred dollars, when the minimum shall remain constant. [After 1908 one hundred dollars.]

(2)

THE BOOKS.

The books reckoned as library books qualifying for the grant shall be as far as possible adapted to the wants (1) of the pupils, and (2) of the residents of the school section, and shall be selected from a catalogue recommended by the Council of Public Instruction. "Blue books," reports, and any documents published by the Dominion Provincial or Municipal governments for the information of the public should also find a place in the library; but their value shall be reckoned at the price paid for them, and they should be numbered as the other volumes or pamphlets.

The books shall be the property of the school section, no matter whether the funds have been raised by sectional assessment, by school entertainments, subscription or donation; and shall therefore be primarily in charge of the School Board and their secretary as an asset of which they shall present the inventory at each annual meeting; and for the loss or injury of which through lack of efficient management or care, they shall be personally liable to the section.

The prices given in the "catalogue" are taken from the publishers' lists and are subject to change from time to time. They are given merely as the probable approximate cost. Books may be purchased directly from the publishers or from local dealers, and as large discounts are often made, it is always advisable to ascertain their cost before purchasing.

Trustees are cautioned not to buy books from agents who may offer full sets of books at a "bargain". Such sets, as a rule, are not the most useful selections for children or even adults. Nor should cheapness always determine what editions should be

purchased; for bad type, poor paper or defective binding should not be imposed upon children any more than on adults.

Books imported into Canada for school libraries are entered free of duty.

(3)

## THE BOOKS—HOW KEPT.

The books shall be kept (when not loaned to readers) in a proper book case under lock and key. Under the direction of the secretary of the school board the teacher acting as librarian shall be responsible for the loaning, collecting and safe keeping of the books to the school trustees. The librarian at the close of his period of service shall deliver up to the secretary the library and its whole equipment in good order and in good condition except for reasonable wear and tear or accidents not due to his lack of intelligence or care. The loss of any volume or material through the librarian's fault will be chargeable against his salary, and shall be replaced at his expense by the secretary. In the case of a conflict of opinion the secretary shall arbitrate the case.

The Secretary shall on the retiring of any librarian acknowledge by his signature the correctness of the inventory of the library thus given up; and on the assumption of the duty of librarian by another teacher, the said teacher shall in like manner acknowledge the correctness of the inventory of the library handed over to him. If a book is lost or injured by any one to whom it has been issued, the secretary of the trustees shall promptly take the necessary legal action for its recovery or the cost of its restoration on the report of the librarian, who shall not be responsible for the loss, provided he has followed the instructions of the secretary in a reasonable manner, and reported the injury or loss promptly.

A book loaned to a member of a family in which infectious disease has broken out should not be returned to the library; but its value should be promptly paid and a new book obtained.

Local regulations not inconsistent with the regulations of the C. P. I., may be authorized by the school board, fixing the time of loan, fines for holding books over time, methods of assessing and collecting damages to books, and all other local matters of management; but all books must be called in at the close of the school term. During the vacation period and the absence of the teacher, the secretary may on the written order of the school trustees issue books as librarian, all of which must be replaced by him when the library is handed over to the new librarian.

(4)

## THE SCHOOL DICTIONARY.

There must be an English dictionary in the school room; and all pupils above Grade III must be taught how to use it, and must be accustomed to use it freely.

(5)

## THE LIBRARY CASE.

There must be a library case, under lock and key, for the safe keeping of the books.

(6)

## THE ACCESSION BOOK.

There must be an accession book kept, in which all the books of the library are entered as they are procured, so as to show all the details specified below.

This book should be not less than seven by nine inches (which is the size of the "return," a duplicate of which is to be annually pasted into it) with good stiff cover and well bound back, and at least 48 leaves. Books of 72 leaves are more common, and are a good size for even the smallest library; for they will be large enough to keep the record of books added to the library for many years.

A uniform label for such books, somewhat as follows, will be supplied by the publisher of the other library blanks.

ACCESSION BOOK  
of  
RURAL SCHOOL LIBRARY,

..... School Section,  
No. ...., District of .....  
County of ....., Nova Scotia.

The two pages will be used as a single folio, 14 inches wide and 9 inches deep, containing 20 or more horizontal blue lines; and should be neatly ruled in red ink by the librarian as follows.

1st. A double horizontal line near the top of the page under which the titles of the vertical columns shall be neatly written. Underneath these titles rule a single red line.

2nd. Vertical lines in red from the double horizontal line to the bottom, forming columns of the following breadth under each of the following headings:

(Left Page.)				
No. ( $\frac{3}{4}$ inch.)	Class. ( $\frac{1}{2}$ inch.)	Author. (2 inches.)	Title. (2 $\frac{1}{2}$ inches.)	Date Received. (1 $\frac{1}{4}$ inches.)
(Right Page.)				
Publisher. (2 $\frac{1}{2}$ inches.)	Year Pub. ( $\frac{1}{2}$ inch.)	Source. (1 inch.)	Cost. ( $\frac{1}{2}$ inch.)	Remarks. (2 $\frac{1}{2}$ inches.)

All the entries must be in ink. Books should be numbered consecutively from No. 1. The class indicated by a letter, should also for convenience be given near the number, which should be on the inside of the front cover. A general label may be provided for this purpose—somewhat as follows:

RURAL SCHOOL LIBRARY.

No ..... Class.....  
..... School Section.  
..... Co., Nova Scotia.

- Give surname of author first followed by his initials if necessary.
- Give short title sufficient to distinguish the book—omitting the article
- Give date when book is entered in the "Accession Book."
- Give short title of publisher and place, thus: "Macmillan's, London."
- Give date of publication—the year.
- Under "Source," use any brief expression to indicate from whom the book was obtained. Put a letter "g" (gift) under the head of "cost" when necessary.
- Under "Remarks," make such entries as the following: "Lost, 3 Jan., 1903"; "Missing 18 Apr., 1903"; "Given in ex. for No. 47"; "Rec'd in ex. for No. 12"; "Worn out and withdrawn (date)" "Replaced by No. 123," etc.

(7)

THE CARD CATALOGUE AND LOAN RECORD.

There must be a record of the loans of books, and each book must be loaned by the librarian to a reader (not by one reader to another), so that the library may receive due credit for the number of readings or issues of the books.

The system of loan records prescribed is the "Card system," briefly described as follows:

There must be a card cut exactly three by five inches for each book in the library, having on the five inch top line a place for the "No." ( $\frac{1}{2}$  inch), "Class" ( $\frac{1}{4}$  inch), "Author or" (2 inches-surname first), "Title" (2 $\frac{1}{4}$  inches).

Under this line may be nine or ten horizontal lines, which should be divided into two equal parts by a strong vertical line, each part to be again divided into three columns under the following heads; "Date lent" ( $\frac{1}{2}$  inch), "Borrower's name" (1 $\frac{1}{2}$  inches), "Date returned" ( $\frac{1}{2}$  inch). This will give room for 18 or 20 records of borrowing, and as the lines can be continued beyond the bottom of the card to the other side, it will contain space enough for about 40 borrowings of the books, one nearly for each week of the school year. In dating, the months should be indicated by only one or two letters, Ja.—January, Je.—June, Jl.—July, etc.

If the book is borrowed so seldom that the card will do for two school years a real line should be ruled to separate distinctly the record of the previous school year from that of the current year. This will enable the librarian to count up the number of the "issues" of each book for the yearly return, readily and accurately.

The card will look somewhat like this:—

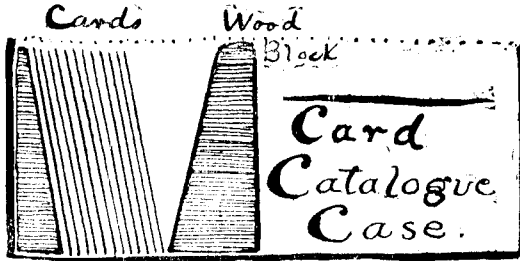
Book. 47.	Class. E.	Author: Dickens, C.		Title: Christmas Carol.	
Date lent.	Borrower's Name.	Date returned	Date lent.	Borrower's Name	Date returned
1903					
Jan. 18.	John Smith .....	Jan. 25.			
Feb. 3.	Alice Jones .....	Feb. 10.			
Mar. 1.	Fred Adams .....				
.....	Jane Clark .....				

This card shows that Charles Dickens' "Christmas Carol" was issued to John Smith for a week, from January 18th to 25th, when it was returned; issued to Alice Jones from February 3rd to 10th; and to Fred Adams on March 10th not yet returned. Jane Clark's name is entered to show that the book was promised her when returned by Fred Adams, the "date lent" not to be filled in until it is issued to Jane Clark.

The cards should be kept in a neat wood or pasteboard box, five inches wide and about three inches deep, with the Author and Title uppermost, arranged always strictly in the alphabetical order of the names of the authors, and the books of each author likewise arranged in the alphabetical order of the Title.

While the breadth of the inside of the card box should be five inches, or just a little more, in order to allow the cards to be moved without friction, the length will depend on the number of cards which might in the future be expected to be required.

It is recommended to have the card box several inches long, if a large library is expected in a few years, the vacant space of which can have a neat block of wood, which can be moved up to the cards so as to keep them standing. It will be an advantage to have the face of such block against the cards slightly sloping instead of vertical, so that when in contact with the base of the card, the finger can tilt the top of the card half an inch forward so as to expose the name of the author and title to view. It is also preferred to have a similar wedge-like block at the back of the cards so that they will not be resting vertically on edge, but tilted back slightly, thus making the "author and title" more easily visible when fingering for the required card. Side view of such a box.



Neat card catalogue boxes containing 100 cards and the prescribed labels are being prepared by a Halifax publisher at a retail cost not to exceed twenty-five cents.

Whenever a book is given out the entry is to be made on the card as already indicated; and when it is returned care must be taken to mark the card before the book is placed in the case, where it should be arranged in the same alphabetical order as the card in its box.

An asterisk or star should be placed over the name of each adult borrower, so that the number of these may be readily picked up by running the eye over the cards. The teacher, parents and ratepayers of the section shall have the privilege of using the library; and the number of issues of books to adults will therefore be an interesting and important item of information for the educational authorities as well as for the general public. This information has to be given in the "annual return."

(8)

CLASSIFICATION.

The books shall be divided into the following twelve classes, the statistics of which must be given separately in the annual return. To make such a report possible and easy the letter indicating the class should be entered on each book and card near its number:

- Class A.—Scientific (including all books ranging from elementary nature study to the application of science to the arts and industries, such as Agriculture, Forestry, etc.)
- B.—Travel and Description.
- C.—Biography.
- D.—History.
- E.—Fiction.
- F.—Poetry.
- G.—Fine Arts (Music, Drawing, Painting, etc.)
- H.—Miscellaneous (Literature which cannot come under the foregoing or following classes, such as Mythology, Children's Stories, etc.).
- J.—Books of Reference (Dictionaries, Cyclopedias, Gazetteers, Atlases, Year Books, School Law, Journals and Reports on Education, etc.).
- K.—Blue Books (all government and municipal reports, publications, etc., not in J.).
- L.—Periodicals.
- M.—Readers for Supplementary Reading in School.

(9)

ANNUAL RETURN.

BOOK AND CIRCULATION STATISTICS.

Class.	No. Books at beginning of school year.	No. Books added during school year.	No. Books lost or withdrawn during school year.	No. Books at end of school year.	Circulation (No. of issues) during school year.
A.....					
B.....					
C.....					
D.....					
E.....					
F.....					
G.....					
H.....					
J.....					
K.....					
L.....					
M.....					
Total.....					

\*No. of issues to others than pupils in this total.....  
 Books added during year, by purchase....., by gift....., by exchange..... Total.....  
 Books withdrawn during year, by wear....., by loss....., by exchange..... Total.....  
 Number of borrowers (readers), children....., adults....., Total.....

ANNUAL FINANCIAL STATEMENT.

RECEIPTS.

EXPENDITURES

Balance from last year.....\$.....  
 From School Funds.....  
 From Donations.....  
 From Contributions of pupils.....  
 From School entertainments.....  
 From Fines for damage to books.....  
 From Other courses.....  
 Total.....\$.....

For Library, case and equipment.....\$.....  
 For books.....  
 Balance on hand unexpended, if any, at end of school year.....  
 Total.....\$.....

[It is recommended that no balance be left UNEXPENDED at the end of the school year. The TOTALS will then show the exact expenditure on the Library during the school year.]

SUMMARY FINANCIAL STATISTICS.

Total expenditure on Library since year 1900 (from last Annual Return).....\$.....  
 Expended this school year on Library case and accessories.....  
 Expended this year on Books.....\$.....  
 Total expenditure to end of this school year.....\$.....  
 Estimated present value of Library case and accessories.....\$.....  
 Estimated present value of Books.....\$.....  
 Estimated present value of total Library equipment.....\$.....

CERTIFICATE.

This is to certify that to the best of our knowledge and belief the Library has been conducted during this school year as required by law; that all the blanks in this return are filled in correctly, and that an exact duplicate of this return over our signatures is fixed securely into the "Accession Book."

Signed this ..... day of ..... Teacher and Librarian.  
 A. D. .... at .....  
 County of ..... Nova Scotia ..... Sec. School Trustees.

(10)

HOW TO GET THE LIBRARY GRANT.

The teacher should give notice of the intention to compete for the larger or smaller library grant when intimating the opening of the school to the inspector. Where no library has yet been organized, such intimation should be given as early as possible; but the equipment should be complete at the end of January, and the facts fully stated and certified on the blank half sheet of the semi-annual return of the school in February. An informal statement of the competition for the smaller or larger grant should be made by every teacher competing, as a notification to the Inspector. Without such notice endorsed on the semi-annual return no claim for the grant can be maintained.

The Library grants shall be paid with, and in addition to, the regular Provincial Aid at the end of the school year, provided the foregoing regulations and the instructions issued from time to time from the Education Department have been fully complied with, provided the special Library Return accurately made out has been sent to the Inspector with the regular annual returns of the school; and provided the Inspector whose special duty it shall be to examine and vouch for the correctness of the returns and the deserving character of each school library in his jurisdiction, endorses the Library, and other returns of the school with his approval and recommendation

(11)

PROVISIONAL CATALOGUE.

The catalogue of October, 1903, is merely provisional. It contains the titles of books suitable for pupils, parents, teachers and students. The Superintendent of Education will be glad to receive suggestions from teachers, students, publishers, etc. as to additional books to be put on the list as well as to the withdrawing of those superseded by better publications; so that a more complete and better classified catalogue may be issued.

No Supplementary Readers—class M—are at present recommended. Regulation 173 will cover any possible demand for them, as Regulation 172 will cover any demand for other books not on this catalogue.

Books recommended in the course of study, and to teachers in regulation 170, and in the JOURNAL OF EDUCATION specially, are also to be considered as authorized for school libraries.

MANUAL TRAINING. 1903.

Ordered, that under section 71 of Chapter 52, of the Revised Statutes of 1900, no public money shall be paid to school boards for the instruction of pupils in Manual Training Schools, who have not advanced as far as Grade VI. of the Public School Course; except when specially authorized by the Education Department, for pupils over thirteen years of age; and that the grants on account of the Domestic Science departments of such schools shall not exceed one-half of the maximum grant allowed under the law of the school board of Manual Training in the Mechanic and Domestic Sciences.

REGULATIONS FOR THE STRENGTHENING OF SCHOOL SECTIONS, &c.

(Passed the 4th March, 1904.)

Reg. 10 (a). No school section, although regularly placed on the list of "poor sections" shall be deemed qualified to participate in the extra allowance provided for "poor sections," unless the sectional assessment voted, levied and collected, shall be at least equal to the average rate of sectional assessment in the county.

Reg. 10 (b). Two adjacent school sections which cannot afford to employ a qualified teacher for the whole year, may arrange with the Inspector of schools, to be associated together as a "double-section," the teacher to be employed in the school house of one section for one half of the year, and in the other school house for the other half of the year.

Reg. 10 (c). When an enlarged school section has one or more settlements considerably beyond two miles from the school house, the Inspector may arrange with its Trustees to recommend to the Council of Public Instruction the granting of a portion of the Provincial Aid and Municipal Fund, which can be assumed to be saved by the enlargement of the section and the reduction of the number of schools, to subsidize the conveyance of pupils from such settlements to the school house, say for instance, in the morning, allowing them under ordinary conditions to return to their homes without conveyance.

Reg. 15 (e). It shall be the duty of each Inspector to classify the school sections within his division into first, second and third class sections, which in order to enjoy the full regular grants of public money, should employ respectively teachers having at least the corresponding classes of license. Such classification may be revised annually any change being intimated to the secretary of the school board affected before the date of the regular annual meeting of the section. Any section shall be free to employ a teacher of higher class than its ranking, but not free to employ a teacher of lower class than its ranking except on the express authorization of the Inspector for sufficient reasons, such as the lack of teachers of the class required.

### UNIVERSITY GRADUATES

(Passed the 20th August, 1904.)

Ordered that regulation 23 (b) be amended by the addition of the following sentence: In an emergency and on the special recommendation of the Inspector, a University graduate in Arts or Science, who holds a teacher's license of a class lower than First (class B) may be provisionally employed as a principal of any school for a period not exceeding one year, after which he will cease to be eligible for any such position without an advance in class of license, until he is regularly qualified.

### REGULATIONS OF C. P. I., OCTOBER, 1907.

FOR CONSOLIDATED SCHOOL SECTIONS WHICH ARE BENEFICIARIES UNDER CHAPTER 22 OF THE STATUTES OF 1903.

#### Ordered:

(1) That in the case of consolidated school sections which received the special Provincial Grant under Chapter 22 of the Statutes of 1903, the conveyance of pupils shall be from points more than two and one-quarter miles from the school house, to a point which will afford such pupils the advantages as to distance enjoyed by those not more than two miles distant, and must be satisfactory to the Inspector of Schools.

(2) Under no circumstances shall it be deemed necessary to convey such pupils further than to and from a point within one and a half miles of the school, or the same distance towards the school in the morning, or the same distance towards the pupils' homes in the evening, as can be most economically arranged.

(3) The Trustees of the Section will endeavor, as far as compatible with the regulations of the C. P. I., to meet the reasonable desires of parents and pupils in the arrangements and equipment for the said conveyance, any point of difference to be referred to the Inspector for decision.

(4) The Trustees in making arrangements for conveyance, shall take the ordinary precautions to have as satisfactory service as possible, at the most economical rate of cost to the section. It is recommended when it may be found expedient to grant allowances to parents or guardians for the conveyance of their children or their neighbors' children, in which cases the sectional school tax or any portion of it may be remitted to such persons by the Trustees, as a part of such allowance agreed upon.

(5) Generally it may be found most convenient for Trustees to call for tenders for conveyance along certain definite routes at definite times, with a definite equipment, under the oversight of responsible drivers or other persons, in order to ascertain



the cost; but Trustees should keep themselves free to make cheaper arrangements when possible, with equally satisfactory conveying—all arrangements for which are subject to the approval of the Inspector.

(6) That the power conferred upon Boards of School Commissioners by Section 17 of the Education Act, with respect to ordinary school sections, be recommended to be applied to distant and isolated ratepayers in Consolidated sections, due regard, however, being paid to the object for which Consolidated sections have been established.

(7) Only resident pupils of the school section from 7 to 14 years of age are to be conveyed free, but other pupils may be carried on the payment of a reasonable fee which will not allow their conveyance to be at the cost of the school section, unless provision had been made for conveying such pupils at the annual meeting of the school section.

(8) All previous regulations inconsistent with these are hereby repealed.

DECISIONS ON SOME LIMITATIONS OF THE POWERS OF SCHOOL TRUSTEES.

1. School trustees have power to rent temporary school rooms when there is not sufficient accommodation in the public school rooms; but they cannot use for public schools, rooms which are not, for the time, completely under their control for school purposes, so that they can be held responsible for the character of the accommodation which must be in accordance with law.

2. School trustees cannot vacate a public school room for any other room except in order to have it repaired, providing it should be deemed capable of repair; or for some sufficient reason affecting the school section as a whole, such as to secure better grading, but not to suit the desires of individual parties or sects.

3. Any arrangement of school rooms which may (1) prevent the exercise of supervision by the principal teacher of the school section; or (2) prevent the efficient grading of the departments in charge of such teacher, is not compatible with the spirit of the school law. If either of these irregularities exist, and continue after notification by the Inspector, the schools cannot participate in the public grants.

4. It is legal for pupils in a section with only a few departments, which cannot have, therefore, more than one series of grades, to meet for devotional exercises in another room than the one in which they are registered for the work of the grade, the arrangements for exchange to be co-ordinated by the principal so that there may be no confusion or unnecessary loss of time. Separate devotional exercises may thus be held simultaneously to suit the desires of different pupils who during the rest of the day will be in their regularly graded class-rooms.

SCHOOL THROUGH SUMMER VACATION.

Ordered, That on the recommendation of the Inspector, the Superintendent of Education may allow schools closed during the earlier portion of the school year on account of the impossibility of obtaining a regularly qualified teacher, to continue the school during the summer vacation, so as to make up any portion of the time of teaching lost, provided a special return be sent in to the Inspector for the time taught during the said vacation period, and that the public grants shall become due on the said special return at the end of the following half-school year.

REGULATIONS OF C. P. I., 1908.

MID-SUMMER AND WINTER VACATION.

Hereafter the regular midsummer vacation in all schools may be eight weeks, in July and August, or as intimated from year to year in the April JOURNAL OF EDUCATION. In rural sections, on previous arrangement with the Inspector, this vacation time may be taken wholly or partially in winter. In such cases there may be authorized teaching within the regular midsummer vacation time after the regular close of the schools near the first of July, the returns of which shall be sent in for the half year ending near the first of February following.

## SEMI-ANNUAL ADVANCE OF CLASS OF LICENSE.

The semi-annual payment of Provincial Aid to teachers shall be paid on the basis of the class of license held at the opening of the school each half year.

## ACADIAN SCHOOL REGULATIONS, 1908.

Ordered By the C. P. I.

1. That a bilingual visitor of schools in French-speaking school sections throughout the Province be appointed, who shall be known as the Bilingual Visitor of Acadian Schools, and whose duties will be supplementary to those of the regular Inspector of each inspectorial division. It shall be his special duty to aid the Inspectors and Superintendent in making the schools in French settlements more efficient in every respect authorized by law, his command of the French language being intended to enable him to supplement as circumstances require, the work of the Inspectors.

In carrying out these general directions he shall, as far as possible, co-operate with the Inspectors, and like them also report monthly on his work to the Superintendent; and at the end of the year present a report on the state and progress of education in the Acadian schools in the different parts of the Province, with reasoned recommendations for such improvements as he may be able to specify.

2. A bilingual course of a few weeks shall be given free each year during vacation time in the Provincial Normal College at Truro, to French speaking teachers to prepare them to teach English colloquially to French pupils coming to school without a knowledge of English; in order that by the time the pupils have completed the first four grades of the public school program, all work of instruction can be carried on effectively thereafter in English. Travelling expenses to and from this course shall be paid at the rate of five cents per mile.

3. In schools where a large number of pupils attend who cannot understand English, the trustees are authorized to allow the use of the prescribed French Readers for such pupils, provided the teacher is capable of giving colloquial instruction in English, as specified in the foregoing regulation, and is giving it so effectively that by the end of the fourth year, the pupils can henceforward be effectively instructed through the medium of the English language. But no language except English shall be imperative on any pupil.

4. As many educational authorities believe a colloquial system (such as the Berlitz) to be the most expeditious and economical method of acquiring a new language, school trustees shall continue to be free to employ English speaking teachers under any such conditions as specified in the foregoing regulations.

## THE ACADIAN COMMISSION.

The origin of these regulations, was the desire to carry out the recommendations of the Acadian Commission which sat in the month of April, 1902.

On the 18th April, 1902, it was recommended to His Honour the Lieutenant-Governor:—

‘That the following gentlemen be appointed as Commissioners under the provisions of Chapter 12, Revised Statutes, 1900, for the purpose of investigating the best methods of teaching English in the schools situate in the French districts of the province and generally to make any suggestions to the Educational Department which would have the effect of bringing about greater educational progress in such districts.

- 'Rev. P. Dagnaud, of Church Point.  
'W. E. Maclellan, of Halifax.  
'Prof. A. G. Macdonald, of Antigonish.  
'Rev. W. M. LeBlanc, of Arichat.  
'Alexander McKay, Supervisor of Schools, Halifax.  
'Hon. A. H. Comeau, of Meteghan River.  
'Rev. A. E. Mombourquette, of East Margare'.  
'M. J. Doucet, M. P. P., Grand Etang."

The Commission was promptly appointed, and after examination of witnesses and due deliberation, the following report was made, and afterwards presented to the Council of Public Instruction:—

To The Honourable

ALFRED GILPIN JONES,  
Lieutenant-Governor of Nova Scotia.

May it Please Your Honour :

We, the undersigned members of the Commission appointed by your Honour ' for the purpose of investigating the best methods of teaching English in the schools situated in the French-speaking districts of the Province, and generally to make any suggestions to the Educational Department which would have the effect of bringing about greater educational progress in such districts, under the provisions of Chap. 12, of the Revised Statutes of 1900," beg leave to report as follows:—

Your Commission have devoted twelve long sessions, extending over more than a week to enquiries concerning and the consideration of this highly important subject. They have had before them and carefully examined a number of witnesses from the various parts of the Province coming directly within the scope of their Commission. They have summoned and heard the testimony of expert language-teachers, both English and French. They have listened to and weighed the statements of Government Inspectors having the supervision of French-speaking schools, and of teachers in such schools. They have thoroughly discussed and most faithfully considered the problem set before them in all its bearings.

Their investigations and deliberations have been marked throughout by the greatest harmony and by the conspicuous absence of any mere sectional, partisan or racial spirit. They have been able to reach the conclusions which they are about to submit to your Honour not only unanimously but without friction or unpleasantness of any sort.

The first enquiries of your Commissioners were naturally directed towards determining the relative standing of French and English-speaking schools, with a view to discovering whether the former are being or have been subjected to any considerable disadvantage under our educational system as compared with the latter. All the evidence before your Commissioners goes conclusively to show that, while there is no appreciable difference in intellectual capacity between French and English-speaking pupils or between French and English-speaking districts, the average rate of progress of the former is considerably less than that of the latter. Weighty testimony was forthcoming to show that while this is the case, French-speaking pupils are generally more regular school attendants and often more eager learners than English-speaking pupils in the same Inspectorial Districts.

Your Commissioners have unanimously reached the conclusion, that the French-speaking sections of the Province have been and continue to be at a very serious disadvantage in the matter of education. They believe a measure of that disadvantage to be incident to and inseparable from their position as small French-speaking communities in the midst of larger English-speaking ones. They believe further, however, that a considerable part of that disadvantage is due to misconceptions on the part of more or less incompetent teachers and to lack of understanding on the part of officials and others of the aim and spirit of the school law of the Province and to some extent to certain remediable defects in the School Law and Regulations themselves.

Your Commissioners find that the fundamental error in dealing with the French Schools, which must be held responsible for many of their short-comings, has been the assumption that they must be taught exclusively in English. They find that with startling uniformity and persistency attempts have been made and are being made to educate children from French-speaking homes and with none but French-speaking playmates by means of the English language alone, sometimes from the lips of teachers who can speak nothing but English. They find from the testimony of experts that even were such teachers masters of the most approved modern methods of teaching a foreign language but meagre results could be anticipated from their best efforts under such conditions. They find that with the inexperienced, ill-taught and often otherwise incompetent teachers ordinarily available for employment in such schools the efforts, however conscientious, made to teach the children to speak English are, as might be anticipated, largely a failure. They find also that, while futile attempts to teach them English are thus being put forth, the general education of French-speaking pupils is being more or less seriously or sometimes even totally neglected.

With a view to remedying these defects and redressing serious grievances which they believe should be removed as speedily as possible, your Commissioners have unanimously reached the following conclusions which they submit to your Honour, in the hope that they may be approved by you and by your Council of Public Instruction, and that due effect may be given to them in the future regulations and directions of the Educational Department of the province. Your Commissioners are unanimously of the opinion,—

**First**, "that English can be best and most effectively taught in the French-speaking school-sections of Nova Scotia by the daily use in speaking and writing of that language, taught according to the most approved methods, from the pupils' first entrance into school, to be followed by the use of the prescribed English readers as soon as they can be intelligently used by such pupils, not later than the 3rd or 4th grades.

**Second**, "that the general education of French-speaking pupils should be carried on concurrently with their acquisition of the use of English, and that this can be successfully accomplished only by the use of their vernacular; that, therefore, as long as necessary they should, while learning English, be taught the other subjects of the curriculum in French, provided however, that the use or study of French shall be optional with every pupil.

**Third**, "that, as far as practicable, in the French-speaking schools of this Province, only bi-lingual teachers should be employed."

Your Commissioners have been forced to this last conclusion because they are convinced that only French-speaking teachers are ordinarily competent to manage and properly instruct French-speaking pupils from French-speaking homes in French-speaking communities during the earlier years of their school attendance or until they have acquired a working knowledge of the English language. They believe that the difficulties of teaching the use of English under the conditions prevailing in our French-speaking sections are so greatly increased that it would be not far from impossible for even the most expert of language teachers to carry on the primary education of the pupils by means of it alone.

Your Commissioners have, further unanimously agreed upon the following recommendations which they make to your Honour as the logical outcome of their above conclusions:—

**First**, "that a special series of French reading books suitable for grades one to four should be prescribed for use in French-speaking school sections.

**Second**, "inasmuch as the evidence given before your Commissioners shows conclusively that the majority of schools in French-speaking sections are not making satisfactory progress, largely in consequence of faulty methods in teaching English, that the Council of Public Instruction should provide a short course, of some weeks' duration, during the summer holidays in the Normal School, for the purpose of imparting to bi-lingual teachers the most approved methods of teaching English in such sections, and that teachers attending such course be treated in the matter of travelling expenses in the same manner as is now provided for those attending the regular sessions of the Normal School.

Third, "that, for the future, Inspectors of Schools be required to make a special annual report to the Department of Education on the general progress of such schools, but particularly on the progress made in the study and use of English and on the methods adopted in teaching it."

All of which is dutifully and most respectfully submitted by your Commissioners who have the honour to be,

Your Honour's obedient servants.

W. E. MACLELLAN, Chairman.  
 A. H. COMEAU.  
 A. G. MACDONALD, A. M.  
 P. M. DAGNAUD.  
 W. M. LEBLANC.  
 M. J. DOUCET.  
 A. E. MOMBOURQUETTE.  
 A. MCKAY.

Halifax, April 28th, 1902.

The finding of the commission, it appears, was unanimous; and in view of that fact the Council of Public Instruction authorized the carrying out of its recommendations in the most careful manner.

REGULATIONS OF C. P. I., APRIL, 1909.

PROVINCIAL EXAMINATION OF HIGH SCHOOL STUDENTS.

82. "High School Students" shall be held to mean all who have passed the County Academy Entrance Examination and are studying the subjects of any high school grade, or who are certified by a licensed teacher as having fully completed the Common School course of study, and are engaged in the study of subjects beyond Grade VIII.

83. A terminal examination by the Provincial Board of Examiners shall be held at the end of each school year on subjects of the first, second, third and fourth years of the High School Program, to be known also as Grades IX, X, XI and XII respectively of the Public Schools.

84. The examinations shall be held during the first week of July, according to the time tables given in 98, for Grades XII, XI, X and IX, and the "Minimum Professional Qualification" of public school teachers, at each of the following stations, viz:—  
 1, Advocate; 2, Amherst; 3, Annapolis; 4, Antigonish; 5, Arichat; 6, Baddeck; 7, Barrington; 8, Bear River; 9, Berwick; 10, Bridge-town; 11, Bridgewater; 12, Canso; 13, Chester; 14, Church Point; 15, Digby; 16, Glace Bay; 17, Great Village; 18, Guysboro; 19, Halifax; 20, Inverness; 21, Kentville; 22, Liverpool; 23, Lockeport; 24, Lunenburg; 25, Maitland; 26, Margaree Harbor; 27, Middle Musquodoboit; 28, Middleton; 29, New Glasgow; 30, North

Sydney; 31, Oxford; 32, Parrsboro; 33, Pictou; 34, Port Greville; 35, Port Hawkesbury; 36, Port Hood; 37, River John; 38, Sheet Harbor; 39, Shelburne; 40, Sherbrooke; 41, Springhill; 42, Stellarton; 43, St. Peter's; 44, Sydney; 45, Tatamagouche; 46, Truro; 47, Upper Stewiacke; 48, Westport; 49, Westville; 50, Willowdale; 51, Windsor; 52, Wolfville; 53, Yarmouth.

85. (a) Application for admission to the Provincial High School examination must be made on the prescribed form to the Inspector within whose division the examination station to be attended is situated, not later than the 24th day of May.
- (b) Candidates applying for the Grade IX examination, or for the next grade above the one already successfully passed by them, shall be admitted free. But a candidate who has not passed Grade IX must have his application for X accompanied by a fee of one dollar; if he has passed neither IX nor X the application for XI must be accompanied by two dollars; and if he has passed neither IX, X nor XI the application for XII must be accompanied by three dollars. The candidates who are entitled to free examination are only those who pass the different grade examinations in consecutive order.
- (c) For the Teachers' Minimum Professional Qualification Examination a fee of two dollars is required; but it should not be forwarded with the application, for it has been found more convenient to have it paid to the Deputy-Examiner on the Saturday when the candidate presents himself for examination. The Deputy-Examiner shall transmit the same to the Superintendent with his report.
- (d) The prescribed form of application, which can be obtained free from the Education Department through the Inspectors, shall contain a certificate which must be signed by a licensed teacher having at least the grade of scholarship applied for by the candidate whose legal name must be fully and plainly written out on the application form.
- (e) When a candidate presents himself for examination, and his name is not found on the official list as having made regular application in due time, the Deputy-Examiner may admit him to the examination provisionally on his written statement that application was regularly made in due time which with a fee of one dollar, is to be transmitted with the Deputy's report to the Superintendent. If such candidate's statement is verified the dollar shall be returned. Providing there is sufficient accommodation, the Deputy-

Examiner may admit any candidate on the payment of one dollar for any Grade in addition to the regular fees required under Reg. 85 (b).

(f) The prescribed form of application is given in schedule B.

86. Each Inspector shall forward, to the Superintendent of Education, *not later than June 1st*, a list of the applications received for each grade of examination at each station within his division, on the prescribed form supplied from the Education Office. The said forms properly filled in, together with all fees duly credited shall be promptly forwarded to the Education Office.

87. The Deputy-Examiner, when authorized by the Superintendent of Education, shall have power to employ an assistant or assistants, who shall each receive two dollars per day for the time so employed.

88. The Superintendent of Education shall cause to be prepared and printed suitable examination questions for each examination in accordance with the regulations of the Council, and shall forward to each Deputy-Examiner a sufficient supply of the same together with copies of such rules and instructions as may be necessary for the due conduct of the examination.

89. The maximum value of each paper shall be 100; the questions being made as nearly as possible equal in value. Should the values of questions be unequal, they shall be stated near the margin of each question.

90. Each examiner shall mark distinctly by coloured pencil or ink at the left hand margin of each question on the candidate's paper its value, placing the sum of the marks on the back of the folded sheet. From this sum the number of misspelled or obscurely written words is to be deducted to show the net value of the paper; provided, however, that from one to three may be added by the Examiner for specially good writing.

91. The "High School Pass" on all grades shall be as defined under Reg. 154—the "High School Program"—from year to year.

92. The "Teachers' Pass" shall be as defined under Reg 154—the "High School Program"—from year to year.

93. (a) Candidates failing to make a High School pass in the grade applied for shall be ranked as making a High School pass in the next grade below, provided an average of 40 per cent with no mark below 25 be made; and as making a pass on the grade second below, provided an average of 30 per cent. be made with no mark below 20.

(b) Candidates failing to make a Teachers' Pass in the grade applied for shall be ranked as making a Teachers' Pass in the next grade below, provided an average of 50 per cent. be made with no mark below 30; and as making a Teachers' Pass on the grade second below, provided an average of 40 per cent be made with no mark below 25.

94. Each candidate, provided no irregularity has been reported, shall receive from the Superintendent of Education a certificate containing the examination record in each subject. If the candidate has made a "High School Pass," the certificate will bear the title "HIGH SCHOOL CERTIFICATE," and show the grade obtained under the arms of the Education Department; but candidates failing to pass shall receive an equally detailed statement of their examination record on the various subjects.

95. Candidates passing the various grades in consecutive order shall be admitted free to the regular Provincial High School Examinations, provided their application and procedure have been regular. In all other cases a scale of fees as given in 85 (b) and (c) has been fixed to cover the cost of examination and extra labor likely to be incurred.

96. The subjects, number and values of the papers for the different examinations, and the general scope of examination questions, are indicated generally by the texts named in the prescribed High School Program. Examination may demand description by drawing as well as by writing in all grades of High School and M.P.Q.

#### PROVINCIAL EXAMINATION RULES.

97. No envelopes shall be used to enclose papers. *Two hours* is the time allowed for writing each paper, except in the case of the M. P. Q. examinations, where the time allowed for each paper shall be one hour. The following rules must be exactly observed:—

(1) Candidates shall present themselves at the examination room punctually half an hour before the time set for the first paper of the grade for which they are to write, at which time the deputy examiner shall give each candidate a seat. The candidate's name shall be represented by a number, and must be therefore neither forgotten nor changed. Candidates who present themselves shall be numbered from 1 onwards in consecutive order (without hiatus for absent applicants, who cannot be admitted after the deputy). Candidates for "Supplementary" examinations need not present themselves until the hour fixed for their papers in the regular timetable, provided they have sent in their applications and the titles of the papers on which they intend to write.



(2) Candidates shall be seated before the instant at which the examination is fixed to begin. No candidate late by the fraction of a minute has a right to claim admission to the examination room, and any candidate leaving the room during the progress of any examination must first hand in his or her paper to the deputy examiner, and not return until the beginning of the next paper.

(3) Candidates shall provide themselves with pens, pencils, mathematical instruments, rulers, ink, blotting paper, and a supply of good, heavy foolscap paper of the size thirteen inches by eight.

(4) Candidates may write upon both sides of their paper. When more sheets than one are used they must be fastened together. Each sheet should bear the Candidate's grade and number. In order to secure high values from examiners neat writing and clear, concise answers are much more important than extent of space covered or the number of words used.

(5) Each such paper must be *exactly* folded. First, by doubling, bottom to top of page, pressing the fold (paper now  $6\frac{1}{2}$  by 8 inches); next, by doubling again in the same direction, pressing the fold flat so as to give the size of  $3\frac{1}{4}$  by 8 inches.

(6) Finally the paper must be exactly indorsed as follows:— A neat line should be drawn across the end of the folded paper one-half an inch from its upper margin. Within this space,  $3\frac{1}{4}$  inches by  $\frac{1}{2}$  inch, there must be written in very distinct characters, 1st, the letter indicating the grade; 2nd, the candidate's number, and 3rd, a vacant parenthesis of at least one inch, within which the deputy examiner shall afterwards place the private symbol indicating the station. Immediately underneath this space and close to it should be neatly written the title or subject of the paper.

For example, candidate No. 18 writing for Grade XI on Algebra should endorse his paper as shown below:—

XI ( . . . ) 18	Algebra.
-----------------	----------

(7) The subject title, grade and candidate's number may be written within, over the commencement of the paper also; but any sign or writing meant to indicate the candidate's name, station or personality may cause the rejection of the paper before it is even sent to the examiners.

(8) Any attempt to give or receive information, even should it be unsuccessful, the presence of books or notes on the person of a candidate, or within his reach during examination, will constitute a violation of the examination rules, and will justify the deputy examiner in rejecting the candidate's papers, and dismissing him from further attendance. No dishonest person is entitled to a provincial certificate or teacher's license. And where dishonesty at examination is proven, provincial certificates already obtained and licenses based on them will be cancelled.

(9) It is not necessary for candidates to copy papers on account of erasures or corrections made upon them. Neat corrections or cancelling of errors will allow a paper to stand as high in the estimation of the examiner as if half the time were lost in copying it. Answers or results without the written work necessary to find them will be assumed to be only guesses, and will be valued accordingly.

(10) Candidates are forbidden to ask questions of the deputy examiner with respect to typographical or other errors which sometimes occur in examination questions. The examiner of the paper alone will be the judge of the candidate's ability as indicated by his treatment of the error. No candidate will suffer for a blunder not his own.

(11) Candidates desiring to speak with the deputy examiner will hold up the hand. Communication between candidates at examination, even to the extent of passing a ruler or making signs, is a violation of the rules. Any such necessary communication can be held through the deputy examiner only.

(12) Candidates should remember that the deputy examiner cannot overlook a suspected violation of the rules of examination without violation of his oath of office. No consideration of personal friendship or pity can therefore be expected to shield the guilty or negligent.

(13) Candidates intending to apply for license upon a record made at this examination, should fill in a form of application for such license as is expected. The deputy examiner is provided with blank forms for those who do not already have them. The applicant should have his certificate of age and character correctly made out and signed, and should fill in the number, station and year

of any previous examination he has taken, whether he has been successful in obtaining a certificate thereon or not. He should also fill in his number, station, etc., and grade of certificate or rank of M. P. Q. expected. This latter should be placed in *brackets*, which will be understood to mean that it is not yet obtained but is *expected* to be obtained.

(14) All candidates will be required to fill in and sign the following certificate at the conclusion of the examination, to be sent in with the *last* paper:—

CERTIFICATE.

Examination Station . . . . . Date . . . . . July, 190. . .

Candidate's No. (        )

I truly and solemnly affirm that in the present examination I have not used or had in the Examination Room, any book, printed paper, portfolio, manuscript, or notes of any kind, bearing on any subject of examination; that I have neither given aid to, nor sought nor received aid from, any fellow-candidate; that I have not wilfully violated any of the rules, but have performed my work honestly and in good faith.

Name in full) |

.....

(Without any contraction in any of its parts).

P. O. to which memo. or certificate is to be sent.

98 (a). TIME TABLE.

REGULAR PROVINCIAL HIGH SCHOOL EXAMINATION, JULY, 1909.

Day of Week	Grade.	Examinations 9 a. m., to 11 a. m.	Examinations 11 a. m., to 1 p. m.	Examinations 3 p. m., to 5 p. m.
Monday	XII. XI. X. IX.	German German German	Greek (a)	Chemistry

Tuesday	XII. XI. X. IX.	Trigonometry Pract. Math. Arithmetic Arithmetic	Greek (b) Greek Greek	French. French. French. French.
Wednesday	XII. XI. X. IX.	Geometry Geometry Geometry Drawing	Ancient History	Physics. General History. English History Geography.
Thursday	XII. XI. X. IX.	Algebra Algebra Algebra Algebra	Latin (a)	Botany. Physics. Chemistry. Science.
Friday	XII. XI. X. IX.	Latin (b). Latin. Latin. Latin.	English (b)	English (a) English English English

## 98 (b). TIME TABLE.

M. P. Q. EXAMINATION, JULY, 1909.

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 Practice.	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.

## GRADE XII EXAMINATIONS, 1909.

There will be no grade "A, Preliminary" examination in 1909. There will be (1) the new grade XII examination, (2) the old "A Final" and (3) the old "A." The following regulations 98 (c), (d), (e), and (f) are republished from the April, 1908, Journal. 98 (g) is a new regulation, passed October, 1908.

98. (c) Candidates completing their old "A" examinations may do so according to the regulation 98 (c), September, 1907. The program of examination shall be the same as in 1908.

98 (d) Candidates who have passed grade XII "Preliminary," may complete their course in July, 1909, under the regulations of September, 1907, by taking the "Final" on the program of that year.

98 (e) Candidates entitled according to the foregoing Regulations to complete their old "A", or take their "Final" grade XII, must report their purpose, the subjects of examination, and the station desired, to the Superintendent of Education, on or before the 15th of January, so that provision may be made for the examinations. Regular application must also be made before the 24th of May to the Inspector.

98 (f) Candidates who made a "partial" pass, or a pass on the "preliminary," of Grade XII, who elect to take the new regular examinations of Grade XII in 1909, (and for 1909 only), can have placed to their credit, any marks, 50 or above, made previously on subjects corresponding to those of the new regular Grade XII, in order to complete the course.

Also, candidates may complete their old "A" or Grade XII course, by making the required pass on the corresponding subjects or papers of the new (regular) grade XII, so far as they are on the new program.

98 (g) Teachers of at least five years service who have written for the "A Preliminary," or who have been employed in doing high school work, may take the "Old A" examination in 1909, the pass to be 1000 on twenty papers, none to be lower than 25. It is not proposed to give any further opportunity for passing the "the old A" or the "A Final."

99.

OPTIONAL EXAMINATION IN MUSIC, ETC.

(a) At the County Academy Entrance Examination and the Teacher's Minimum Professional Qualification Examination, candidates who have taken London Tonic Sol-Fa certificates can for the question in music *substitute* their certificates for which values will be given as follows:—For "Junior" certificate, 10; for "Elementary" certificate, 15; and for "Intermediate" certificate, 20—the last two for M. P. Q. only.

(b) The candidate will enter in a parenthesis as an answer to the No. of the question on music in his examination paper, the words, "Junior Certificate," or "Elementary Certificate," or "Intermediate Certificate," as a reference to the fact that such a certificate has been handed to the deputy examiner, bearing on its back the name, and address, and examination number and station of the candidate plainly endorsed upon it.

(c) The certificates will be received by the deputy examiner, compared with his list to verify the correctness of the endorsement by the candidates, then enclosed in one envelope addressed, in the case of the Academy Entrance, to the Principal, and in the case of the M. P. Q. to the Superintendent of Education, who, after perusal, shall return them to the respective candidates

- (d) The Principal or the Superintendent, as the case may be, shall then endorse 10, 15, or 20 points (according to *a*) on the examiner's report on the candidate's paper below the general valuation number and add the two together for the total value of the paper.
- (e) To prevent the possibility of two values being given by accident, the examiner of a paper in which a certificate is substituted for the question, shall mark the general value of the paper with an asterisk, both on the paper and on his report.
- (f) No certificate from any local examiner of the London Tonic Sol-Fa College shall be accepted, unless the examiner has previously given a satisfactory proof to the Principal or Superintendent that he or she has been duly appointed as local examiner for the grade of certificate in question by the authorities of the said College.
- (g) At the County Academy Entrance Examination the certificate of Attendance for a year at a Mechanic Science school, or a Domestic Science school, can be accepted for the answer to a question on the subject in like manner as the "Junior" Tonic Sol-Fa certificate—value from 0 to 20, according to the character of the candidate's worth.

LICENSING OF TEACHERS.

100. No person can be a teacher in a public school entitled to draw public money without a License from the Council of Public Instruction. Before obtaining a license a candidate must obtain, *first*, a certificate of the prescribed GRADE of Scholarship; *second*, the prescribed certificate of professional RANK as a teacher, either from the Provincial M. P. Q. Examination (which must be supplemented for all classes higher than *third class*, by the prescribed certificate of ability to give effective physical training to pupils), or the Provincial Normal College; and *third*, the prescribed certificate of age and character from a minister of religion or two Justices of the Peace. The value of a license is distinguished by the term CLASS; of scholarship by the term GRADE; of professional skill by the term RANK. Full information as to the licensing will be found in Regulations 101 to 114 inclusive, but the following collocation of the terms used will help to explain their significance and relation:—

Generally,

	(1)	(2)	(3)
	"Teacher's Pass Scholarship,"	Normal Diploma.	Age & Character.
Academic Head Master . . . . .	University Graduation	Academic . . . . .	22 years, etc.
Class A requires . . . . .	Grade XII . . . . .	Academic Rank . . . . .	20 years, etc.
Class B " . . . . .	Grade XI . . . . .	First Rank . . . . .	19 years, etc.
Class C " . . . . .	Grade X . . . . .	Second Rank . . . . .	18 years, etc.
Class D " . . . . .	Grade IX . . . . .	Third Rank . . . . .	17 years, etc.
Class D (Temp.) " . . . . .	Grade IX . . . . .	(M. P. Q.) . . . . .	16 years, etc.

The following are the exact requirements for the licensing of teachers:—

101. No diploma of the Provincial Normal College shall be awarded any candidate who is found defective (below 40%) in the scholarship of any of the subjects of the Provincial Program taken in the corresponding grade, until the Faculty is satisfied that creditable proficiency has been made in each such subject.

102. When a candidate obtains a teacher's license without graduation from the Provincial Normal College, it can be only of a *class* one degree lower than the "teachers' pass" *grade* of scholarship.

103. Graduation from the Provincial Normal College will include the prescribed certificate for Physical Training. No permanent license higher than third class shall be awarded without this qualification after 1908.

104. No certificate, combination of certificates, nor any other qualification except the possession of a lawfully procured License gives a person authority to teach under the law in a public school. The regulations governing the issuance of licenses are as follows:—

105. The permanent Licenses of Public School teachers shall be under the SEAL of the Council of Public Instruction signed by the Secretary of the Council, shall be valid for the whole province during the good behaviour of the holder, and shall be granted on the fulfilment of the three conditions more fully specified in the succeeding regulations, namely: the presentation of the prescribed proof of (1) age and character, (2) scholarship, and (3) professional skill.

106. There shall be five classes of such licenses, which may be designated as follows:—

- Academic Class—Academic Headmaster.
- Class A—High School Master.
- Class B—First Class.
- Class C—Second Class.
- Class D—Third Class.

107. The certificate of professional qualification of skill shall be (a) the academic, first, second or third RANK classification by the Normal College, or (b) the *minimum* (which shall rank one degree lower than the *normal*), and shall be the academic, first, second or third rank pass on the following papers written on the Saturday of Provincial Examination week.

## MINIMUM PROFESSIONAL QUALIFICATION EXAMINATION.

The questions set for the minimum professional qualification examinations shall be on the following syllabus, and may require free hand drawing in any question when desirable:—

### 1. *School Law and Forms.*

- (a) The acts of the Legislature and Regulations of the Council of Public Instruction bearing on public education, with their latest amendments, and a knowledge of the way in which the law is to be administered.
- (b) The proper keeping of the School Register, the making out of neat and accurate school Returns, and a knowledge of all the ordinary forms required by school boards in administering the affairs of the section.

### 2. *Theory and Practice of Teaching.*

As in Calkin's "Notes on Education," or any equivalent.

### 3. *Hygiene and Temperance.*

As in Lyster's "School Hygiene," (Univ. Tutorial Press), the education Act and Regulations, and the text books prescribed for the public schools.

### 4. *School Management.*

As in *Lectures on Teaching*, by Sir Joshua Fitch.

### 5. *History of Education,*

As in Monroe's "*Brief Course*" (MacMillan Co.)

### 6. *Pedagogy.*

As in Bagley's *The Educative Process*.

For *Third Rank M. P. Q.*—An aggregate of 150 on 1, 2 and 3, with no subject below 30 per cent.

For *Second Rank M. P. Q.*—An aggregate of 250 on 1, 2, 3, 4, and 5, with no subject below 40 per cent, and with the prescribed certificate of physical training.



For *First Rank M. P. Q.*—An aggregate of 300, on 1, 2, 3, 4, and 5, with no subject below 50 per cent, and with the prescribed certificate of physical training.

For *Academic Rank M. P. Q.*—An aggregate of 360 on 1, 2, 3, 4, 5, and 6, with no subject below 50 per cent, and with the prescribed certificate of physical training.

108. The Provincial Normal College at Truro is recognized as the appropriate source of certificates of professional qualification for public school teachers; but the certificates of other Normal or teachers' training schools whose *curricula* may be satisfactorily shown to the Council to be at least the equivalent of those of the Provincial Normal College, may be accepted when qualified by the addition of the three following conditions: (a) a pass certificate of the Provincial "minimum" professional qualification examination of the corresponding rank, (b) a certificate of a Public School Inspector, before whom or under whose supervision the candidate has demonstrated by the test of actual teaching for a sufficient period his or her qualifications for the class of license sought, (c) and the prescribed certificate for Physical Training.

In the case of candidates whose course of professional training had been completed before the grade of scholarship necessary for the class of license afterwards applied for was obtained, no license shall be issued until after the lapse of a year from the date of the certificate of high school grade required for the said license.

109. The prescribed certificate of age and character is given in the following blank form of application for license, which will be supplied to candidates by the Education Department, through the Inspectors or the Principal of the Normal College:—

FORM OF APPLICATION FOR A TEACHER'S LICENSE.

To.....

Inspector of Schools, Division No.....Nova Scotia.

I hereby beg leave through you to make application to the Council of Public Instruction for a Teacher's License of Class..... and herewith I present evidence of compliance with the conditions prescribed, namely:—

I. The prescribed certificate of age and character hereto attached, which I affirm to be true.

II. My certificate of Scholarship.....obtained at..... Examination Station as No....., in the year 190... (Further information below.)

III. My certificate of professional qualification of .....  
Rank No. .... obtained at ..... 190... in the month of  
.....

IV. The prescribed certificate for Physical Training, ob-  
tained at ..... from ..... dated .....

(Name in full) .....

(Post Office address) .....

Date ..... (County) .....

CERTIFICATE OF AGE AND CHARACTER.

I, the undersigned, after due inquiry and a sufficient knowledge  
of the character of the above named candidate for a Teacher's  
License, do hereby certify:—

That I believe the said candidate ..... (name  
in full), was born on the ..... day of .....  
in the year .....; and is apparently in good  
health and physically fitted for effective teaching; and

That I believe the moral character of the said candidate is good,  
and such as to justify the Council of Public Instruction in assuming  
that the said candidate will be disposed as a teacher to "inculcate  
by precept and example a respect for religion and the principles  
of Christian morality, and the highest regard for truth, justice, love  
of country, loyalty, humanity, benevolence, sobriety, industry, fru-  
gality, chastity, temperance and all other virtues."

..... (Name and title.)

..... (Church or Parish),

..... (P. O. Address).

Date .....

(When the certificate given above is signed by "two Justices of  
the Peace" instead of a "Minister of Religion," the word "I"  
should be changed by the pen into "we", and after the signature  
on the second line the words "Church or Parish" should be can-  
celled by a stroke of the pen.)

The correct *quotation* of the High School certificates in II, above  
will be considered as equivalent to its presentation. When the  
candidate makes application at the High School Examination Sta-  
tion, the *grade* or *rank* of certificate *written for and expected* may be  
entered, but shall be enclosed in a parenthesis, which will be under-  
stood to indicate the *expected* result of the Examination.

The correct *quotation* of the Provincial M. P. Q. Certificate or the Provincial Normal College Diploma in III and the Physical Training Certificate in IV above, will be considered as equivalent to its presentation.

Any certificate from Normal Schools, etc., which are not regularly recorded in the Education office, must *accompany* this application as evidence of the correctness of the statement.

FURTHER INFORMATION FROM APPLICANT.

1. Class of license already held.....No.....Year....
  2. University Degrees, Scholarship, Professional Training, experience, or any other information candidate may wish to state.  
.....  
.....
  3. Provincial High School Examinations taken in addition to that specified in II above, whether a "High School Pass" certificate was obtained or not (necessary to prove that the candidate made a "Teachers' Pass" in the lower grades).  
.....  
.....
- |  |          |          |
|--|----------|----------|
| Recognized University Work at Examination Station..... | No ..... | Year.... |
| On Grade XII.  | " .....  | " .....  |
| " XI.  | " .....  | " .....  |
| " X.   | " .....  | " .....  |
| " IX.  | " .....  | " .....  |

GENERAL OR SPECIAL INDORSATION OR REMARKS BY INSPECTOR  
(OR PRINCIPAL OF NORMAL COLLEGE.)  
.....  
.....

..... Inspector.

Place and date .....

ACADEMIC HEADMASTER'S LICENSE.

[Regulations 110 (a), (b) and (c), as published on page 137 of the JOURNAL OF EDUCATION, April, 1908, are repealed and the following substituted.

110 (a). For an Academic Headmaster's License, the following are the requirements:—

1. A certificate of moral character signed by a Minister of Religion or two Justices of the Peace, as in the prescribed form, to the effect that the candidate is of the full age of twenty-two years, and presumably likely to perform the duties required by law.

2. A recognized degree from a recognized University (no degree or University shall be recognized unless the course is proven to be one of at least four years following a Provincial High School Pass of Grade XI., or a matriculation standard shown to be its virtual equivalent); and a pass\* on a testing post-graduate examination of University grade.
3. A certificate of Academic rank from the Provincial Normal College. (In the awarding of this certificate, the Faculty of the Provincial Normal College may accept at their true value the certificates of Normal training schools, of the Education Faculties of Universities, and of Inspectors, in lieu of a portion of the minimum attendance prescribed by the Council, provided (i) the candidate has made an Academic pass on the M. P. Q. syllabus, (ii) has obtained the prescribed Physical Training Certificate, (iii) has taught successfully for at least two years, one of which must be as a full teacher in a department of high school grade, and (iv) has demonstrated satisfactory professional proficiency in the art of teaching before the Normal College Faculty by whom the candidate shall also be examined *viva voce*.)

110 (c). For a Class A. or High School Master's License (ranking as the equivalent of Class A3 of the regulations of the Council in 1908) the following are the requirements: (1) A certificate of the full age of twenty years, and moral character as in the foregoing regulation. (2) A pass certificate of Grade XII. (3) A certificate of Academic rank professional qualification from the Provincial Normal College.

111. For a Class B or First Class License, the following conditions are necessary: (1) A certificate of the full age of nineteen years, and moral character as in the foregoing regulation. (2) A teacher's pass certificate of Grade XI. (3) A teacher's certificate of first rank professional qualification from the Provincial Normal College; or a Teachers' Pass certificate of Grade XII, with a first rank M. P. Q., including the prescribed Physical Training certificate.

112. For a Class C or Second Class License the following conditions are necessary:—(1) A certificate of the full age of eighteen years and moral character as in the foregoing regulation. (2) A Teachers' Pass certificate of Grade X. (3) A certificate of second rank professional qualification from a Normal College; or a Teachers' Pass certificate of Grade XI, with second rank M. P. Q., and the prescribed Physical Training.

\*Regulation 110 (b) showing the detailed syllabus of this post-graduate examination will be found following the High School Program on subsequent pages.

113. For a Third Class or D License the following conditions are necessary:—(1) A certificate of the full age of seventeen years and moral character as in the foregoing regulation. (2) A Teachers' Pass certificate of Grade IX. (3) A certificate of third rank professional qualification from a Normal College; or a "Teachers' Pass" certificate of Grade X with third rank M. P. Q.

#### TEMPORARY LICENSE.

114. A Third Class (Temp.) or D (Temp.) License, *valid only for one year*, may be granted (but not previous to the 15th day of September in any school year) on regular application when the following *four* conditions are fulfilled:—(1) A certificate of the full age of sixteen years and moral character as in the foregoing Regulation. (2) A pass certificate of at least Grade IX as in the foregoing Regulation. (3) The Third rank minimum professional qualification. (4) A recommendation of the candidate as a temporary teacher for a specified school by the Inspector who must previously be assured by the trustees of the said school that, although reasonable effort was made to employ a regular teacher of permanent class, one could not be obtained, and that the candidate would be acceptable to the school section as a teacher for the year. Such License can be re-issued for another year when the candidate has demonstrated an advance of *grade or rank* in his qualifications at a *subsequent* Provincial Examination.

#### SPECIAL SCHOOL DAYS.

139. It has been found very inspiring to devote certain days entirely to some special object the demonstrative effect of which can be made much more intensive than that of the same time broken up into a routine of short fragmentary lessons spread over a few weeks. Such occasions when managed properly, are of more value in teaching effect than the ordinary routine day. In fact, they can accomplish in some cases what could never be accomplished so effectively in any other way. They are by no means holidays. Far otherwise, for they involve extra labor on the part of the teacher, and generally also on the part of the pupil.

140. *Arbor Day.*—To call special attention to the importance of the proper management and cultivation of our forests, to the value of the afforestation of lands which cannot be so productive in any other manner, and to the bearing of forestry on the rainfall, drainage, climatic and industrial condition of the province, to encourage the proper adornment of the school grounds, to cultivate a taste for the beautiful in nature, and to give some practical and

objective lessons in tree planting, and the study of tree growth,— for such objects the following directions are given:

- (a) On such day of May as according to season, weather or other circumstances may be deemed most suitable, trustees are authorized to have substituted for the regular school exercises of pupils, the planting by the latter of trees, shrubs and flowers, on the grounds surrounding the school house. The day devoted to this purpose shall be known and entered in the register as "Arbor Day", and when duly observed full credit will be given for it in the apportionment of public funds, on the basis of the actual attendance of pupils as ascertained by roll call at the beginning of the exercises or other convenient time during their progress. Additional value and interest should be imparted by mingling with the practical duties of the occasion short addresses from the teacher and other competent persons on the æsthetic and economic importance of arboriculture. During their summer visitation, inspectors shall take note of all schools in connection with which "Arbor Day" has been observed.
- (b) Teachers who have been able to observe this day in a useful manner are recommended to make a special report on the same within a week to the inspector, specifying the work done on the occasion, and its prospective influence on the section. From these statements inspectors can have all the details necessary for their annual reports to the Superintendent of Education.
- (c) There will be found subjoined some practical suggestions which will be serviceable to those who wish to make the occasion a really profitable one.

1) In selecting trees, it is well to avoid those that bear flowers or edible fruits, as such in the flowering and fruiting seasons are apt to meet with injury from ignorant or mischievous passers-by, and to offer temptation to the pupils. Butternuts and horse chestnuts are not to be commended as shade trees. The balsam fir is objectionable from the liability of its balsam to stain the hands and clothing. Deciduous or broad leaved trees are easily grown, their fibrous roots rendering transplanting a comparatively simple operation. If care is taken, the young saplings of the elm, maple, and ash, as found in the undergrowth of the forest, can be transplanted without difficulty.

(2) No school grounds should be without a suitable number and variety of the standard deciduous trees. However, during the winter season these are bare and unattractive, and afford little or no shelter. On the other hand, evergreens, such as spruces, pines, hemlocks and cedars, retain their foliage and provide a shelter as useful in winter as it is grateful in summer. Trees should always be planted according to definite plan, being arranged either in curves or in straight lines, according to circumstances and with an obvious relation to the building and fences. They should not be placed so near the school house as to interfere with the free play of light and air.

(3) Our native trees grow so freely in the woods that we are apt to suppose they are merely to be taken up by the roots and transplanted, to start at once into a vigorous growth as before. This is a mistake. Great care should be taken in digging up the

trees to preserve the fibrous roots; long runners should be cut across with a sharp knife, and not torn. All trees thrive best in well-drained soil, varying from sandy loam to clay. A clay loam suits all descriptions. The holes for the trees should always be made before the trees are brought to the ground, and should be too large rather than too small. In filling in, the better soil from near the surface should be returned first, so as to be nearer the roots, but where the soil is at all sterile, and generally, there should be put below and round the roots some well-rotted compost, mixed with sand, and sandy loam, in order to promote the growth of the rootlets. In setting the tree it should be placed a little deeper than it stood before, and the roots should be so spread out that none are doubled. When finally planted the tree should be tied to a stout stick in such a way as to prevent chafing the bark. Some mulch or stable litter should then be thrown around the stem to prevent the roots from drought. Stirring the ground is preferred by some cultivators to mulching. In transplanting evergreens, the roots should not be exposed to air or light—especially the heat of the sun—more than can be helped.

Several varieties of shrubs planted together in clumps produce a very pleasing effect, while the care of judiciously arranged flower beds will be to the children an important means of education.

#### 141. *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 immediately 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.**—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 for the day before Victoria Day, the 24th of 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.

(c) The exercises should not be directed to develop boastfulness in 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 reinforce 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.

### PUBLIC SCHOOL SANITATION.

(FROM JOURNAL OF EDUCATION, OCTOBER, 1905.)

#### PROVINCIAL HEALTH OFFICER'S CIRCULAR TO PUBLIC SCHOOLS.

##### To the Teacher:—

The poisons of some of the common and also of some of the most loathsome diseases are frequently contained in the mouth. In such cases anything which is moistened by the saliva of the infected person may, if it touches the lips of another, convey disease. The more direct the contact the greater the danger.

It is the purpose of health officials to keep in isolation all persons having communicable disease during the time that they are infectious. But in many cases this is impossible. Little restraint is put on certain mild diseases as measles, whooping cough, chicken pox and mumps, and even such diseases as diphtheria, scarlet fever and tuberculosis are frequently so mild as to be unnoticed, and children affected with them mingle freely with others. It is probable that in such cases one of the chief vehicles of contagion is the secretion of the mouth and nose. It is believed that much can be done to prevent contagion by teaching habits of cleanliness. But if such instruction is to be effectual it must be continuous. The teacher must notice and correct violations of these rules as habitually as the violation of the more formal school rules are corrected.

When the floors are swept, wet sawdust (not wet enough to wet the floor,) should be sprinkled on the floor in front of the broom, as it will collect the dust and prevent it from rising, leaving the floor clean and dry. The custom of sprinkling water on the floor before sweeping is to be avoided, because where the drop of water falls the dirt is fixed to the floor and is very imperfectly removed by the broom. When the floor dries it is but little better than it was before it received attention.



The janitor or caretaker should at least once a week go over the walls, window and door casings, ledges, corners, etc., with a cloth DAMPED (preferably in any disinfecting solution), even with plain water, so as to remove all the adhering dust. Cloth wants to be very damp.

Even if the question of disease and contagion did not enter into the matter at all, the subject ought to be given more attention by teachers. Our schools should not only teach reading, writing and arithmetic, but it is perhaps quite as important that they should inculcate cleanliness, decency, refinement and manners. Cleanliness should be taught for its own sake, even if it had no relation whatever to health.

CHILDREN SHOULD BE TAUGHT

to wash the hands and face often, and keep their persons and clothing clean; for if one should then be taken down with a communicable disease there will be less danger of infecting other pupils or things.

They should also be taught the reasons of the following rules, and carefully watched and directed until all objectionable habits are lost and replaced by good habits. This duty is really the most important work of the teacher, and should be done even should the teaching of the book lessons be delayed.

TO BE PLACED IN EVERY CLASS ROOM AND GIVEN TO EVERY PUPIL.

Remember These Things.

- Do not spit if you can help it. Never spit on a slate, floor, or sidewalk.
- Do not put the fingers into the mouth.
- Do not pick or wipe the nose on the hand or sleeve.
- Do not wet the finger in the mouth when turning the leaves of books.
- Do not put pencils into the mouth or wet them with the lips.
- Do not put money into the mouth.
- Do not put pins into the mouth.
- Do not put anything into the mouth except food and drink.
- Do not swap apple cores, candy, chewing gum, half eaten food, whistles or bean blowers, or anything that is put in the mouth.
- Do not drink out of the common drinking cup before allowing some of the water to run over the edge of the cup that is to be applied to the lips.
- Never cough or sneeze in a person's face. Turn your face aside.
- Keep your face and hands clean; wash the hands with soap and water before each meal.

A. P. REID, M. D.,  
Provincial Health Officer.

TO SCHOOL TRUSTEES.

(DUST AND DIRT IN THE SCHOOLROOM.)

Physicians and scientific men have for years been studying dust, and its effect in causing disease. They have gathered it in schools, public buildings and dwelling houses, have examined it under the microscope, added it to substances in which germs will grow, have compared these germs with those known to cause different diseases, and have found it to be one of the great disease carriers.

The finest and lightest dust which cannot be seen by the naked eye, or can only be seen as motes when a beam of sunshine passes through the room, is by far the most dangerous.

Many scores of times the dust collected in various places has been administered to animals (fed to them, injected into the lungs or under the skin), with the result that sickness or death followed—according to the germs present.

It is well-known that consumption of the lungs (tuberculosis), that great scourge of the human race, is spread by means of dust, and in hardly any other way. The dust of a room in which a consumptive has been spitting about the floor is more deadly

than arsenic or strychnine, and injected under the skin of an animal causes it to die of tuberculosis in a few weeks. If the dust is breathed by a human being, he is very likely to contract the disease and die.

Other disease germs are carried in the same way, and it has very often happened that dust carried to a child's mouth by his fingers or breathed in from the air has formed the starting point to a case of fatal illness without the parents, or perhaps even the physician, suspecting the true origin.

Nor is this all. Dust in any form, breathed in day after day for years, irritates and inflames the delicate tissues of the child's lungs, until like a well-ploughed, well-manured field, they become a favorable growing ground, so that when germs are inhaled, instead of being starved out as they often are in healthy tissues, they flourish exceedingly and the child sickens, suffers and dies.

These are not dreams but facts, proved many times over by men whose whole lives are given to studying and fighting disease, and I would earnestly ask your sympathy and help in seeing that the following rules are observed, and if we succeed in preventing even a little sickness, and in saving even one life, we shall have had our reward.

#### DIRECTIONS FOR THE CLEANLINESS OF THE SCHOOLROOM.

##### I. *Have the Schoolroom, Halls and Entries swept every day.*

NOTE.—Every good housekeeper sweeps her house every day. How much more necessary is it in a building where many children are crowded together for six hours a day, and into which dirt and germs are dragged from every part of the section.

##### II. *Raise the windows while sweeping, and keep them raised for some time afterward.*

NOTE.—By keeping the windows open much of the dust will blow out.

##### III. *Before sweeping sprinkle the floor with damp sawdust; don't use water.*

NOTE.—Sawdust is the best substance, and can generally be easily obtained and kept in barrels. It keeps the dust from rising and settling again after the room is swept. Sprinkling with water simply binds the dust to the floor, ready to rise again as soon as dry.

##### IV. *At least an hour before school opens the schoolroom should be carefully dusted, especially the tops of desks, seats, window ledges, etc.*

##### V. *The schoolroom should be thoroughly scrubbed at least every month.*

NOTE.—If scrubbing, perhaps every week, is necessary in our homes, how much more so in our schoolrooms, where there are so many to drag in dirt. Besides, dust is even more dangerous to children than to grown persons.

VI. *Once a year the walls, floors, desks, etc., should, after being scrubbed, be wetted over with a mixture of carbolic acid and water, four teaspoonfuls of the acid to a pint of water.*

NOTE.— Such a cleansing of the schoolroom would kill all germs, and if this could be done at the Christmas vacation (germs are more virulent in winter) it would go far toward the health of the school.

TO TEACHERS.

Post a copy of the "Health Rules" for Pupils where it can be easily read.

Give a series of short lessons on these rules and the reasons for them.

Check the practices therein condemned. Make frequent reference to them and, as far as possible, see that they are observed.

Read carefully the "Circular to Trustees"—talk it over with them and assist in carrying it out.

Try and persuade the physician of the section to impress upon the ratepayers the connection of dust and dirt with disease, and to advocate the more frequent scrubbing and sweeping of the schoolroom.

See that the water bucket is thoroughly scrubbed every week. Get a cover for it in order to keep out the dust.

NOTES ON "HEALTH RULES FOR PUPILS."

The following brief notes are given so that the teacher can explain and apply the rules more intelligently.

The germs which cause tuberculosis (consumption), pneumonia, lagrippe, diphtheria and many other diseases are found in the saliva, especially when mixed with secretions or discharges from the nose, throat or lungs. It is not uncommon for these diseases to exist in so mild a form that the child is hardly sick and yet such cases are capable of spreading the disease. The spit mixes with the dust on the floor, becomes dry, the germs are set free, rise in the air, enter the lungs and cause the disease.

Children are not careful as to what they handle and their chances of acquiring disease are much increased by putting their fingers into their mouths.

The long passage from the nostrils to the lungs gives off and is constantly wet with a sticky secretion, the object of which is to strain the dust, disease germs and other foreign substances from the air before it reaches the lungs. It will be readily understood that this secretion, even from a healthy person, might contain disease germs.

Both paper money and coins are capable of carrying dangerous germs. Remembering that money is frequently handled by persons affected with the most loathsome diseases, the necessity of this rule will be at once understood.

The intelligent teacher will be able to apply the principles given above to all the rules, and show the pupils the great necessity of observing them.

**TO THE TEACHER**—The carrying out of the directions for the cleanliness of the schoolroom and the health of the pupils depends almost entirely on you. Let your own desk be a model of cleanliness and neatness. Put into practice yourself the rules given for pupils. Your example in these respects will carry more weight with the pupils than anything else.

Should your schoolroom become dirty, or the outbuildings and premises be in an unsanitary condition, through the neglect of the trustees or those in charge, do not fail to report to your Inspector at once.

*[From the Journal of Education, October, 1903.]*

#### THE DUTIES OF THE SCHOOL TEACHER IN THE COMBAT OF TUBERCULOSIS AS A DISEASE OF THE MASSES.

The following paragraphs are taken from a lecture delivered before the Teacher's College of the Columbia University of the city of New York, 25th February, 1903, by S. A. Knopf, M. D., of New York City, Hon. Vice-President of the British Congress on Tuberculosis, etc., etc.

The subject is so important, and the authority so weighty, that the full lecture would be republished, were the JOURNAL not already too large.

These extracts are full enough, however, to give an outline view of the subject as a whole, and special directions which every teacher should observe, as well as the other instructions published in the JOURNAL respecting the health of the schools.

Candidates for the M. P. Q. examination, or preparing for graduation from the Normal College may be examined upon them. And all teachers are expected to be able to demonstrate their knowledge of the subject before the Inspector on the occasion of his inspection.

As to the prevalence of tuberculosis, particularly in its pulmonary form, I cannot say anything which is not known to every intelligent man and woman. In fact, we have accustomed ourselves to the high death-rate from pulmonary tuberculosis, considering it as something inevitable. The recent great disaster at Martinique, in which 30,000 people died almost in an instant, caused the deepest sympathy and a just commotion throughout the civilized world, yet the annual tribute of the United States in pulmonary tuberculosis is over 100,000. Each year the world yields up 1,095,000.

each day 3,000, each minute two of its people, as a sacrifice to this plague. Of the 80,000,000 individuals now peopling the United States more than 10,000,000 must inevitably die of this disease if the present ratio is kept up. According to some statisticians every sixth, and according to others, every seventh death is due to tuberculosis.

Pulmonary tuberculosis, or consumption, is a chronic, infectious and communicable disease, caused by the presence of the tubercle bacillus, or germ of consumption in the lungs. It is locally characterized by countless tubercles, that is to say, small rounded bodies, visible to the naked eye. The bacillus of tuberculosis is a minute organism in the shape of a cylindrical rod, visible with a high power microscope only after certain staining reagents have been applied to it. This microorganism, belonging to the order of schizomycetes or fission fungi, in the lowest scale of vegetable life is the specific microbe of tuberculosis; without its presence there is no tuberculous disease. This parasite not only gradually destroys the lung substance through ulcerative processes, but at the same time gives off certain poisonous substances called toxins, which give rise to various, and often serious symptoms.

The important symptoms of pulmonary tuberculosis are cough, expectoration, fever—especially in the evening hours—difficulty in breathing, pains in the chest, night-sweats, loss of appetite, hemorrhages, and emaciation. In the matter expectorated it is often possible to find the tubercle bacillus.

How may this germ of tuberculosis enter the human system?

There are really three methods whereby this germ may enter, namely, by inhalation, that is, being breathed into the lungs; by ingestion, that is being eaten with tuberculous food; and by inoculation, that is, the penetration of tuberculous substance through a wound in the skin. Let us treat first the most frequent method of the propagation of tuberculosis, namely, that arising from the indiscriminate deposit of tuberculous sputum. A consumptive individual, even at a period when he is not confined to his bed, may expectorate enormous quantities of bacilli. By careful observers it has been estimated to amount in some individuals to about 7,000,000,000 per day. Now, if the expectoration, or spittle, is carelessly deposited here and there, so that it has an opportunity to dry and become pulverized, the least draught or motion in the air may cause it to mingle with the dust, and the individual inhaling this dust-laden atmosphere is certainly exposed to the danger of becoming tuberculous if his system offers a favorable soil for the growth of the bacilli. By "favorable soil for the growth of the bacilli" must be understood, any condition in which the body is temporarily or permanently enfeebled. Such a condition may be inherited from parents, or acquired through alcoholism or drunkenness, or other intemperate habits, through privation or disease.

Beside the danger arising from carelessly deposited sputum or spittle the inhalation or ingestion of the small particles of saliva which may be expelled by the consumptive during his so-called dry cough, when speaking quickly or loudly, or when sneezing, must also be considered as dangerous for those who come in close contact with the invalid.

Alcoholism must be considered the greatest enemy of the welfare of a nation, the most frequent destroyer of family happiness, too often the cause of the ruin of mind and body, and certainly the most active co-operator of the deadly tubercle bacillus.

To combat alcoholism (drunkenness or intemperance) education is required above all. Extreme prosecution and fanatical laws will do little good. From early childhood the dangers of intemperance and its fearful consequences should be taught. In schools and at home the drunkard should be pictured as the most unhappy of mortals. Alcohol should never be given to children, even in the smallest quantities.

In families in which there is a fear of hereditary transmission of the desire for strong drink, even the mildest alcoholic drinks should be absolutely avoided. It would also be best if all people so predisposed, or who may have acquired only the occasional desire for drink, should never smoke, for experience has taught that attacks of dipsomania (periodic spasms) are often caused by an excessive use of tobacco. The young man starting out in life should take with him the moral training which will enable him to be a gentleman, and be considered a polite gentleman, though he absolutely refuses ever to enter a liquor saloon in order to treat or be treated to drink. It is this treating habit—alas! so prevalent in our American society—which has ruined

many a young man and made him a moral and physical wreck. Think of it, young ladies and gentlemen, you the future teachers of our boys and girls, what a glorious mission you have in thus combating two diseases of the masses—alcoholism and tuberculosis—at the same time.

There is another point I wish to emphasize in regard to alcohol and tuberculosis, and that is the idea that alcohol is a specific, or even a remedy for consumption. There has never been a greater mistake made. Alcohol has never cured and never will cure tuberculosis. It will either prevent or retard recovery. It is like a two-edged weapon; on one side it poisons the system, and on the other side it ruins the stomach and thus prevents this organ from properly digesting the necessary food. Truly pathetic are the results of this erroneous doctrine in the families of the poor, where instead of procuring good nourishment for the invalid, liquor has been bought in far too large quantities, so that often there was not enough money left for food for the sufferers nor for the other members of the family.

The individual enfeebled by disease, such as typhoid fever, grip, etc., should lead a particularly careful life and avoid crowded meeting places and all localities where the air is vitiated and where he is in danger of coming in contact with careless or ignorant individuals who expectorate everywhere. The man who has a trade, such as the printer, tailor, bookkeeper, or other workers whose occupations are more or less predisposing to tuberculosis, can counteract this tendency by leading a sober life, and when not at work, spending as much time as possible in the open air, by breathing deeply and keeping the body in a thoroughly good condition through regular bathing and judicious exercise.

What I have said so far of the causes and prevention of tuberculosis is knowledge which seems to me should be possessed by every person, but you future teachers should be particularly posted on the minute details, so that you may not only practise them for your own self-protection but also preach them, not only as teachers but also as friends of all the unfortunate.

Thus, if you are perchance in the presence of a consumptive who is not yet under medical care, teach him what you know of the prevention of the disease, and advise him to seek the counsel of a competent physician. No tuberculosis invalid, no matter in what stage of the disease, whether living in a palace or in the poorest tenement house, should be without a medical adviser. If you meet a consumptive who is ignorant of the precautions he should take, do not shun him like a leper, but treat him with kindness and convince him that whatever he does to prevent the spread of disease among others will also improve his own condition and increase the chances of his recovery. Let me tell you that a clean conscientious consumptive is as safe a person to associate with as anybody.

Now let me come to some of the particular duties devolving upon you as teachers in the combat of tuberculosis as a disease of the masses. You should teach and practise love for fresh air. Your pupils should learn to love fresh air as much as you do and take this love for fresh air home with them.

There should always be ample ventilation in your classrooms. The vitiated atmosphere in the classroom is as pernicious to you as it is to the children under your charge. There is too great a tendency in the present age to develop the intellect of our children to the detriment of their physical welfare. While all the organs of the body should be developed, the lungs particularly should be given opportunity to develop to a greater advantage. I would suggest that breathing exercises should not only be given now and then, but that they should form an important item in the curriculum of all the schools. I do not believe that there is any better, greater, and more efficacious barrier to becoming consumptive than a good pair of lungs, and it would seem to me that it should not only be a great duty but also a great privilege and pleasure to make out of a weak-lunged child, who may be predisposed to tuberculosis, a strong and vigorous man or woman.

I do not know what system of breathing exercises you have been taught, but if you will permit me I will demonstrate to you those which I have found most valuable.

In front of the open window, or out of doors, assume the position of the military "attention," heels together, body erect, and hands on the sides. With the mouth closed take a deep inspiration (that is, breathe in all the air possible), and while doing

to raise the arms to a horizontal position; remain thus holding the air inhaled for about three to five seconds, and while exhaling bring the arms down to the original position. This act of exhalation or expiration, should be a little more rapid than the act of inspiration. When this first exercise is thoroughly mastered and has been practised for several days, one may begin with the second exercise, which is like the first, except that the upward movement of the arms is continued until the hands meet over the head.

The third breathing or respiratory exercise, which requires more strength and endurance, should not be undertaken until the first two have been practised regularly several times a day for a few weeks, and until an evident improvement in breathing and general well-being has been observed. Take the same military position of "attention," and then stretch the arms out as in the act of swimming, the backs of the hands touching each other. During the inspiration move the arms outward until they finally meet behind the back. Remain in this position a few seconds, retain the air, and during exhalation bring the arms forward again. This somewhat difficult exercise can be facilitated and be made more effective by rising on the toes during the act of inhalation, and descending during the act of exhalation.

Of course, when out of doors one cannot always take these exercises with the movement of the arms without attracting attention; under such conditions raise the shoulders, making a rotary backward movement during the act of inhaling; remain in this position holding the breath for a few seconds, and then exhale while moving the shoulders forward and downward, assuming again the normal position. This exercise can easily be taken while walking, sitting or riding in the open air.

Young girls and boys, and especially those who are predisposed to consumption, often acquire a habit of stooping. To overcome this the following exercises can be recommended. The child makes his best effort to stand straight, places his hands on his hips with the thumbs in front, and then bends slowly backward as far as he can during the act of inhaling. He remains in this position for a few seconds, while holding the breath, and then rises again some what more rapidly, during the act of exhalation.

Few people have a just estimation of the value of these exercises. From your studies in physiology you will remember that the amount of tidal air—that is to say, the volume which is inspired and expired in quieter spiration—is only 500cc., the complimentary air, the volume which can be inspired after an ordinary respiration, 1,500cc., and the supplemental air or reserve air, the amount which can be forcibly expelled after an ordinary respiration, amounts from 1,240 to 1,800 cc. Thus one can readily appreciate the effect of these exercises on the physiologic action of the lungs by increasing the supply of oxygen (O), and more effectually removing the carbonic acid (CO<sub>2</sub>). You will remember that these interchanges of gases in the lungs result in the conversion of venous into arterial blood. The scientific name for this process is hematosiis.

The following general rule concerning breathing exercises should always be remembered: Commence with the easier exercises and do not begin with the more difficult ones until the former are completely mastered. For healthy school children I would suggest to take from six to nine deep respiratory exercises, either of one kind or the other, every hour.

A second general rule is never to take these exercises when tired, and never to continue them so long as to become tired. It is, of course, self-understood that these exercises should always be taken in an atmosphere as pure, fresh and free from dust as possible, and that no restricting garments around the waist or neck should be worn. You as teachers should know that constricting the chest or abdomen will often leave lasting injuries to the vital organs incased in the thoracic and abdominal cavities.

Mouth-breathing in children, and sometimes in adults, is often caused by certain growths in the throat (adenoid vegetation), by enlarged tonsils, or by growth in the nose (polypi, etc.) The removal of these obstructions by surgical aid is perhaps the only rational method to assure natural breathing. Incidentally, we may be permitted to say that these operations are not at all dangerous; but by the presence of these vegetations in the throat (retropharynx) the hearing and the intellectual and bodily development of the child may become seriously impaired. The early removal of such growths should be earnestly recommended. If you observe among your pupils a chronic mouth-breather call the attention of the school physician or the parents to the child's condition,

and explain to the parents the danger of neglect in this matter. The respiratory exercises just described are particularly useful for such children after operations, other wise they often retain the habit of imperfect breathing which they had acquired.

In teaching the children under your charge how to breathe, sit, stand and walk properly, you teachers do perhaps more toward the prevention of tuberculosis than all we physicians together. I would love to see singing and outdoor recitations at proper seasons incorporated in the curriculum of every school in city or country, and city schools should have commodious roof-gardens for the purpose. Wherever there is a play ground it should be kept clean, as free from dust as possible, and be daily strewn with clean sand or gravel. Children should be warned not to expectorate on the play-ground, and adults should be severely punished by law for so doing.

The breathing exercises at school should, of course, be supervised by teachers. Modern school hygiene is far superior to what it has been in the past, yet there is still room for improvement, so far as the prevention of tuberculosis is concerned, permit me to suggest to you the advisability of giving the children leaflets of instruction. I know this practice to be in vogue in some schools in this and other States, but those I have seen seemed rather incomplete. Let me give you here a tentative leaflet which I have written with the particular view of preventing consumption.

Every child and adult can help fight consumption. School children can be helped by complying with the following rules:

Do not spit, except in a spittoon or a piece of cloth or a handkerchief used for that purpose alone. On your return home have the cloth burned by your mother, or the handkerchief put in water until ready for the wash.

Never spit on a slate, floor, sidewalk or play ground.

Do not put your fingers into your mouth.

Do not pick your nose or wipe it on your hand or sleeve.

Do not wet your finger in your mouth when turning the leaves of books.

Do not put pencils into your mouth or wet them with your lips.

Do not hold money in your mouth.

Do not put pins in your mouth.

Do not put anything into your mouth except food and drink.

Do not swap apple cores, candy, chewing gum, half eaten food, whistles, bean blowers or anything that is put in the mouth.

Peel or wash your fruit before eating it.

Never cough nor sneeze in a person's face. Turn your face to one side and hold a handkerchief before your mouth.

Keep your face and hands and finger-nails clean; wash your hands with soap and water before each meal.

When you don't feel well, have cut yourself, or have been hurt by others, do not be afraid to report to the teacher.

#### MEDICAL EXAMINATION OF CHILDREN.

(From an address on the 22nd of last December in Melbourne, Australia, by Sir John Gorst, late vice-president of the Council of Education, Great Britain).

Another great question is the regular medical examination and inspection of school children. In Victoria, with your compulsory attendance laws, you have assembled in your classes the whole of the next generation of your people. You have a rare, a unique opportunity to test and examine the health of your people. No way in the world could be more accurate or more timely. If there is anything in your social order which tends to the deterioration of the race, here you find it out directly. If there is any remedial measure to be taken to improve your race, here you can apply it. Many diseases, many ailments, which after full growth are incurable and irremediable, can be cured in childhood. Besides this care of your rising generation, you can prevent the spread of infectious diseases. The bodies of ill-fed, ailing and weakly children are the great nurseries of the microbes which are the source of almost all diseases. Take in particular tuberculosis which, turning into phthisis, carries off so many young men and women. Its microbe is developed more easily and freely in the bodies of ill-to-do young children than in any other place. An examination of such children would insure their segregation until cured, and would do more than anything else to stamp out the disease. What an economic advantage is thus to be gained! Do not fall into the error, because the population of Victoria is well-to-do and parents can feed and clothe their



children sufficiently, that that shuts out the necessity for examination. Examinations made in Britain and elsewhere have shown that there is an immense amount of hidden disease among the children of well-to-do people.  
 (From "The Doctor in the Public School," by John J. Cronin, M. D., in the American Monthly Review of Reviews for April).

We have shown beyond peradventure that physical defects exist in about sixty per cent of all school children in New York; that in most cases these defects are remediable by proper treatment, and that the early discovery of these defects is the prime factor in the maintenance of the health of the school children and in enabling them to pursue their studies.

We have shown, furthermore, that backward, mentally deficient truant children can be vastly improved by the early recognition of physical infirmities which underlie their mental or moral defects, and that by appropriate treatment, if applied early enough, we can save these children from illiteracy, from drudgery in factories at small wages, or from an almost inevitable criminal career.

In view of these facts, what can be more important than a systematic individual physical examination of every school child, at stated periods, and what can be of more lasting benefit than the early application of the proper treatment in all cases in which physical defects are found?

## A CATECHISM ON TUBERCULOSIS.

### AN URGENT APPEAL TO THOSE IN AUTHORITY.

To the Clergy:

To the Mayors of Towns and Municipalities:

To the Professors and Teachers of Colleges and Schools:

It is universally admitted by medical authorities that, while tuberculosis is contagious, the causes of this contagion can readily and easily be avoided by the use of proper means of protection

The spread of the disease is due very largely to ignorance of the proper means of protection, and there is very little doubt but that a general knowledge and the use of the simple and effective methods known would practically eliminate the disease in one or two generations.

Those who are entrusted with the care of children, more particularly clergymen and school teachers, are urgently requested to aid in the spreading of the knowledge contained in this catechism by meetings and lectures. By instilling into the young a proper knowledge of the dangers of this disease and of the simple methods by which it can be avoided, those in authority can do very much—in fact, more than even the medical profession—towards its elimination.

## A CATECHISM UPON TUBERCULOSIS FOR SCHOOL CHILDREN

1. What is Tuberculosis? (1)

A very common and often fatal disease, met with in all parts of the world, attacking both man and animals.

2. Where is it most frequently met with?

In the crowded parts of cities where the houses are packed together, and the streets narrow; where the air cannot circulate freely, and the sunlight does not enter.

**3. What is the cause of this disease?**

It is due to the presence of tiny living germs or bacilli (2), visible only by the microscope, which as they grow and multiply, tend to destroy the affected parts of the body.

(1) Pronounced 'Tew-ber-kew-lo'-sis.

(2) Pronounced Bass-sill'-eye.

**4. How large are these bacilli of Tuberculosis?**

They are so minute that 400,000,000 placed side by side would be required to cover one square inch; placed end to end it would take 7,000 to make a line an inch long.

**5. What parts of the body are the most frequent sites of growth of the tubercle bacilli?**

First and foremost the lungs; but the bones, the joints, the glands of the neck, the membranes covering the brain, the intestines, and other regions, may be attacked.

**6. What is the most rapid and fatal form of tuberculosis?**

That in which the membranes of the brain are attacked, causing meningitis (3).

**7. What is the most common form?**

Tuberculosis of the lungs, also known as pulmonary tuberculosis, consumption, and phthisis (4), and sometimes spoken of as the white plague.

(3) Pronounced Men-inge-eye'-tis.

(4) Pronounced Thigh'-sis.

**8. What are the ravages of tuberculosis?**

Besides untold suffering, and great loss from sickness, about two millions die from it every year throughout the world.

**9. What is the death rate from tuberculosis in Canada?**

About nine thousand Canadians die every year from this disease.

**10. And in the Province of Nova Scotia?**

From 900 to 1,000. In every twelve deaths one is from tuberculosis.

**11. At what time of life does consumption most often show itself?**

Most commonly between fifteen and forty, though it may develop at all times of life from infancy to old age.

**12. Are the well-to-do free from this disease?**

No; it may attack all classes of people, rich as well as poor.

**13. Can tuberculosis be passed from one person to another?**

Yes; it is a contagious disease.

**14. What favours the spread of the disease?**

Impure air and deficient sunlight, which favour the development of the bacilli.

15. Where do the bacilli come from?

Being of the nature of plants they cannot be parts of our bodies; they must come from outside.

16. How, then, do they gain entrance?

They are taken into the air passages and the digestive canal through the mouth.

17. Why are the lungs most often affected?

Because in the first place the bacilli are easily inhaled into the air passages, along with particles of dust; and in the second place, these minute plants find the conditions for growth better in the lungs than in any other parts of the body.

18. Where do the bacilli that are in the air come from?

They come from the dried particles of sputum or spittle of those already suffering from the disease.

19. Does this sputum contain any large number of the bacilli?

It has been found that a consumptive may expectorate more than a million bacilli per day.

20. How does this sputum lead to the spread of the disease?

If not destroyed, it becomes dried up and converted into dust, and this dust, containing the live bacilli, may be inhaled by others: or, again, flies feeding on the sputum may carry the bacilli to articles of food.

21. Can the disease, then, be introduced along with food?

Yes, if that food contains the bacilli. A frequent source of infection is the milk of tuberculous cows.

22. Is there any danger from a consumptive who does not expectorate, or from those whose sputum is properly destroyed?

None, provided he takes the requisite precautions, and does not sputter into the faces of other people when talking, coughing, or sneezing, for the fine droplets of saliva may also convey infection.

23. Can tuberculosis be avoided by those exposed to infection?

Yes; but much depends upon the power of resistance of the individual. Some people are much more resistant than others. The lungs of healthy people can resist or destroy small numbers of bacilli.

24. Are there any causes tending to lower these powers of resistance?

An exhausting illness such as typhoid, insufficient or poor food, intemperance, overwork and fatigue, prolonged residence in closed-in and badly lighted rooms, and in workshops where there is poor ventilation and much dust.

25. How does intemperance favour tuberculosis?

Not only does it lower the resisting power, but it brings in its train poverty, unhealthy surroundings and misery.

26. Is consumption hereditary?

Strictly speaking, no; but rarely the mother may convey it to her child. Usually the children of tuberculous parents are less resistant to the disease than are the children of healthy parents.

27. Why do we speak of tuberculosis as a family disease?

Because several members of one family often fall victims, partly from hereditary low resistance, and partly because careless patients make the home a continual danger.

28. Mention the chief symptoms of the disease?

Afternoon fever, continued cough, progressive weakness, loss of flesh, and loss of appetite.

29. Are there other symptoms?

Yes; night sweats, expectoration of blood, loss of voice, and acute pain in the chest.

30. Are all these symptoms constant?

By no means, although generally several of them are present.

31. May a person be consumptive without the fact being recognized by those around?

Yes, particularly in the early stages.

32. What are usually the first symptoms?

A persistent cough, fatigue upon slight exertion, and loss in weight.

33. Is there any means of making quite sure that a person has the disease?

The discovery of tubercle bacilli in the expectoration is positive proof.

34. Does the disease progress rapidly?

Not as a rule.

35. Does his health permit a tuberculous patient to continue at work?

Usually it does not; it depends on the stage and severity of the case and the nature of the work.

36. Can the disease be cured?

Yes, when not too far advanced. The number of cures is increasing every day, particularly of cases taken in hand at the very start.

37. Can it be cured without treatment?

No; cure is a matter of weeks and months of constant carefulness.

38. Is any particular remedy known, which is a sure or recognized cure?

No; though possibly the future may furnish such.

39. What, then, is the method of treatment which gives the best results?

Life in the open air, sunlight, strengthening food in abundance, and rest under medical supervision.

40. What is a sanatorium?

It is a "place for healing;" an establishment devoted to the open-air treatment of tuberculosis under proper medical supervision; where patients are taught proper care of themselves, and how to avoid communicating the disease to their families and friends.

41. How may consumption be guarded against?

By avoiding all sources of infection by the microbes, and avoiding everything that weakens the body, and lowers the resisting powers.

42. What are the chief measures necessary to stamp out the disease?

Stopping the habit of careless spitting, and carefully destroying the sputum of those known to suffer from the disease.

43. How can the sputum be destroyed?

It should be burnt. The patient must be provided with a "sputum cup," or failing this, he should expectorate into the folds of a newspaper, or into an ordinary cup containing water, used for this purpose alone, the contents of which, like the sputum cup and the newspaper, are thrown into the fire after use.

44. Is there any danger in a patient swallowing his sputum?

Certainly there is; for the contained bacilli may plant themselves in the intestines or elsewhere, and set up new spots of disease.

45. What are the precautions which a patient should take when he coughs?

He should cover his mouth with a piece of paper, or a clean rag, which should then be burnt.

46. Are there any other ways by which a patient can transmit the disease?

Everything that comes in contact with his mouth is a possible carrier for the microbe—spoon, fork, cup, glass, etc.

47. What are the necessary precautions to take against infection by those means?

The patient should, if possible, have his own set of utensils, and everything put to his mouth should regularly be boiled after use.

48. Is it dangerous to kiss a tuberculous patient?

The tuberculous patient should not kiss others, and should never be kissed on the lips.

49. What rules should be observed regarding the patient's bedroom?

The window should be open day and night; no one else should occupy the same room; the window curtains should be of washing material; the floor should have no carpet; at most a small rug; sheets and body linen should be often and well boiled.

50. How should the room be dusted?

With a damp cloth or damp broom in order to prevent dust from rising.

51. What, to sum up, are the most powerful enemies of tuberculosis?

Thorough cleanliness, care of the health, temperance in all things, sunlight, fresh air, and abundance of good food.

52. What are the best districts and surroundings for the tuberculous patient?

The country, especially the mountains, where the air is of great purity. He should not live beside dusty roads, because dust irritates the lungs.

53. What should be done when the disease comes to an end?

The house, or at least those rooms which the patient has occupied, should be disinfected, along with everything which the patient has used; articles that can be destroyed should be burnt.

54. What should children more especially keep in mind so as to protect themselves, and those around, from possible infection?

They should not expectorate either on the floor or on the pavement.

They should not spit on their slates.

They should not lick or suck their fingers.

They should not stick odds and ends in their mouths; pencils, pens, and so on, which may have been lying about.

They should not "swop" chewing gum with their school friends, or eat things which another has already bitten.

They should not use pea-shooters belonging to others.

They should not lick things in order to gum them; there are plenty of taps about.

They should make a habit of guarding their mouth with a handkerchief when they cough or sneeze.

They should get into the habit of never taking food without first washing their hands with soap and water.

They should keep body and hands as clean as they reasonably can.

## REPORTS ON PHENOLOGICAL OBSERVATIONS.

(Year Ended June 30th, 1908.)

### NOVA SCOTIA.

The following extracts from the reports of the specialists to whom the observation schedules sent in were referred for minute examination, study, compilation, criticism and suggestion, will be of interest to all teachers who took part in this work and to all who propose to continue in the future, as well as to others interested in the development of the practical study of the conditions and resources of our country. The study of these notes, it is hoped, may do much to prevent the introduction of errors into future work and to suggest improvement in both the schedules and the methods of observation.

The Province is divided into its main climatic slopes or regions not always coterminous with the boundaries of counties. Slopes, especially those to the coast, are sub-divided into belts, such as (a) the coast belt, (b) the low inland belt, and (c) the high inland belt, as below:—

No.	Regions or Slopes.	Belts.
I.	Yarmouth and Digby Counties.	(a) Coast, (b) Low Inlands, (c) High Inlands
II.	Shelburne, Queens & Lunenburg Counties	" " " " " " " "
III.	Annapolis and Kings Counties	(a) Coast, (b) North Mt., (c) Annapolis Valley (d) Cornwallis Valley, (e) South Mt.

IV.	Hants and Colechester Counties,	(a) Coast,	(b) Low Inlands	(c) High Inlands.
V.	Halifax and Guysboro Counties,	"	"	"
VI. A,	Cobequid Slope (to the south),	"	"	"
VI. B,	Chignecto Slope (to the northw't),	"	"	"
VII.	Northland Sts Slopes (to the N'h)	"	"	"
VIII.	Richmond & Cape Breton Co's	"	"	"
IX.	Bras d'Or Slope (to the southeast)	"	"	"
X.	Inverness Slope (to Gulf, N. W.),	"	"	"

These observations are especially valuable as furnishing a stimulus for a portion of the Nature Study work in the public schools of the Province. It is, no doubt, starting very many young pupils on the beginning of an observant course which will make them specially useful citizens; while it substitutes an enjoyable occupation for otherwise monotonous hours spent on the road to and from school. The work has also some scientific value, so that the schedules are bound up in annual volumes to be preserved in the archives of the Province for future students of our climate.

CRITICAL NOTES BY THE STAFF OF PHENOLOGISTS.

REGION I.—YARMOUTH AND DIGBY.

A. W. HORNER, PRINCIPAL, SEMINARY SCHOOL, YARMOUTH.

The number of schedules is decreasing every year, and many of them are from new observers. This may account for a greater number of errors than usual.

As every teacher will have a copy of the April JOURNAL for 1909, I am noting some errors that have been written about by the compilers throughout the different regions, with the hope that each observer will take enough interest to observe his or her own error. I am also giving the day of the month, with the day of the year, for some errors are evidently due to carelessness in changing from one to the other.

No. 3.—Mayflowers found on 69, or March 9, are SPORTS.

No. 4.—117, or April 26, is very early for Scouring Rush to shed spores, while 143, May 22, is too late.

No. 6.—110, or April 19, and 112, or April 21, are early for White Violet.

No. 7.—106, or April 15, is too early for Blue Violet (When First Seen); 109, or April 18, for When Becoming Common, is a blunder.

No. 9.—116 and 117, or April 25 and 26, are too early for the flower of the Red Maple to shed pollen.

No. 10.—105, or April 14, and 112, or April 21, are too early for Strawberry blossoms

No. 12.—110, or April 22, is too early for the Common Dandelion. Possibly this flower is confused by the pupils with Coltsfoot. Ask them to bring the leaves or to look at the scape.

No. 16.—155 (June 3) and 178 (June 26) are very late for Ground Ivy.

Nos. 23 and 24.—The Tall Buttercup is a later flower than the Creeping Buttercup.

No. 25.—Painted Trilliums seen on 124, or May 3, are SPORTS. Look for them about Victoria Day.

No. 29.—123, 124, 140, (May 2, May 3, May 19), are too early for Starflowers. No doubt the Goldthread has been mistaken for these flowers.

No. 30.—137, 148, (May 16 and May 27) are too early for Blue-eyed Grass.

No. 36.—138, or May 17, 142, or May 21, 143, or May 22, 148, or May 27, are about one month too early for Lambkill. Teachers should not confuse this plant with Rhodora.

No. 40.—Observers who report Field Daisies in blossom the last of May or the first of June should look at the leaves of the plant. Doubtless the blossoms belong to the Mayweed.

No. 45.—143, or May 22, is too early for the Common Blackberry to be in blossom.

No. 49.—154, or June 3, is too early for the Wild Rose. Look for it the last of June.

No. 53.—100 and 120 (April 9 and April 29) are too early for Black Currant blossoms.

No. 69.—People who shear sheep the middle of April should be reported for cruelty to animals, unless the sheep are kept in barns.

No. 88.—73 (March 13), 84 (March 24), 109 (April 18), are too early for the Kingfisher, which is more likely to be seen the first of May.

No. 89.—119, or April 28, is too early for the Yellow-Crowned Warbler; while 160 (June 8) or 174 (June 22) is too late.

No. 90.—80 (March 20), 84 (March 24), and 85 (March 25) are too early for the Summer Yellow Bird, while 156 (June 4) is very late.

No. 91.—86, or March 26, is too early for the White-throated Sparrow.

No. 92.—113, or April 22, and 115, or April 24, are too early for the Hummingbird.

No. 93.—120, or April 29, is too early for the Kingbird.

No. 94.—108 (April 17) is too early for the Bobolink, while 171 (June 19) is too late.

No. 96.—178 (June 26) is too late for the American Redstart.

No. 97.—123 (May 2) is too early for the Cedar Waxwing.

No. 100.—66 (March 6) is very early for the appearance of Snakes.

Many of the observers have noted additional observations which are very interesting. Miss Purney deserves special mention; she has always sent in a schedule and each one has been better than the preceding one.

## REGION II. QUEENS COUNTY.

MISS MINNIE C. HEWITT, SCIENCE TEACHER, ACADEMY, LUNENBURG.

The schedules received this year show the usual neatness and accuracy on the part of the observers. Many of the mistakes made in them are repetitions of those made on former occasions. Each year, however, there are new observers who have not paid the same attention to the suggestions and critical notes, as those who report regularly. For their benefit, I again call attention to some of the more common mistakes.

Four teachers omit OX-EYE DAISY, while they report WHITE DAISY among the additional observations. Evidently CHRYSANTHEMUM LEUCANTHEMUM is not known by the name of OX-EYE DAISY in their sections.



Other common plants are omitted or reported at incorrect dates. If teachers lack confidence in their ability to identify these plants from the analytical key given in the botany text books, they should not hesitate to ask the county compiler for assistance in determining them.

Will observers kindly make more accurate note of the bird reported by them as Meadow Lark? It seems strange that every year dates are given for the appearance of the Meadow Lark which is considered very rare in Nova Scotia, while the Yellow-Crowned or Myrtle Warbler, the White-throated Sparrow and other birds which are commonly seen and heard, are not reported.

A few mistakes indicate carelessness on the part of the observers; e. g., "closing of lakes—369," "potato digging, first seen—371." The teacher, too, who reported apple blossoms and lilacs as becoming common thirty days after their first appearance cannot be complimented on her powers of observation.

Two of the teachers who sent in reports noted that assistance had been given them by their pupils. One teacher marked with an asterisk the dates given by pupils for plants which bloom during vacation. As these dates were correct in every case, I used them in making up my compilation.

The teachers of Queens county deserve great credit for the interest shown in this important work. It is to be hoped that many more will realize that a great deal of pleasure and profit may be derived from careful observation of the plants and birds of their locality.

In conclusion I must voice the general regret of the teachers of my district in the death of that enthusiastic and gifted naturalist, R. R. MacLeod, who both by his writings and his personal assistance, aroused a deep interest in the flora and birds of our province.

**REGION II.—LUNENBURG COUNTY.**

B. MCKITTRICK, B. A., PRINCIPAL, LUNENBURG ACADEMY.

Forty observation schedules were received from the different belts of Lunenburg county.—Coast (a) 8; High and Low Inlands, (b) and (c) 32. There are so few Low Inlands in the county that practically all the schedules may be classified under belts (a) and (c).

The majority of the sheets received show correct observations, carefully and neatly recorded. Many gave additional and valuable observations which are worthy of notice.

I have in the past so frequently pointed out errors that I have decided this year to mention none. I am pleased to report that the sheets, though less than in previous years, were quite as satisfactory.

**REGION II.—SHELBURNE COUNTY.**

C. STANLEY BRUCE, INSPECTOR OF SCHOOLS, SHELBURNE AND YARMOUTH COUNTIES.

I beg to report as follows on Phenological Observations during the school year ended July, 1908.

There was a small increase in the number of schedules sent in, and I think they were, as a general thing, more carefully prepared.

The following notes and criticisms may help some of the compilers next year.

1. One teacher gave June 2nd as the date of Alder first shedding pollen. The average date for the province is about April 10th.
4. The Field Horsetail, though very common, had only four observers.
- 5, 8, 13, 15, 31. These five plants, Blood-root, Hepatica, Adder's Tongue, Spring Beauty and Marsh Calla, have never been found in this county, so far as I know.

25. Acquaintance with TRILLIUM is becoming more general. It was correctly reported from six sections.

26. RHODORA is now correctly reported on almost every schedule.

29. A few years ago Star Flower was often confused with Gold Thread. This rarely occurs now.

35, 36. Half the teachers confused the Kalmias. This is almost incredible when we consider the marked differences between the two species.

K. GLAUCA has OPPOSITE leaves with REVOLUTE margins, its inflorescence being a TERMINAL corymb.

K. ANGUSTIFOLIA has its leaves in THREES, edges NOT REVOLUTE, and its corymbs LATERAL.

In Shelburne I generally find the former about the last week of May, and the latter about the middle of April.

Bird observations show no improvement.

### REGION III.—KINGS AND ANNAPOLIS.

ERNEST ROBINSON, B. A., PRINCIPAL, HORTON ACADEMY.

Many of the reports from this region were above the average of previous years. This work can be taken up as Nature Work and will be found of great value both to pupil and teacher.

Errors:—

There are many mistakes in copying. One report gives Pigeon Berry blossoming 149, and fruit ripe 140. This is, of course, a slip, but it throws doubt on the entire report.

Blue Flag 143, Common Rose 161, Ox-Eye Daisy 157 are all to early. "When first seen," means under ordinary conditions.

One observer forgot to add the extra day occasioned by a leap year.

It is apparently useless to point out the difference between Pale Laurel and Lamb-kill.

The Hepatica is only reported once. It can be found all along the side of the South Mountain.

One observer used "day of month" instead of "day of year."

Will some observer kindly mail me what they call the "Star Flower"? Give date "when found."

More reports from "North Mountain" are required.

### REGION IV.—HANTS AND SOUTH COLCHESTER.

GEO. W. MACKENZIE, B. A., ACADEMY, TRURO.

The schedules for Hants and South Colchester were on the whole satisfactory particularly those of South Colchester, being quite full and accurate.

Several of the schedules had a large number of added observations. The most common among insects and birds being bumble bee, June bug, firefly, grasshopper, swallow, blackbird, loon, and crane. The dates given for the bee varied by only a couple of days.

Considering the mild and early spring the observations for this portion of the province, I felt, were usually a few days late.

Of the 34 schedules examined, four gave the day of the month rather than the day number of the year. Singular, too, that one of these was otherwise among the most accurate.

A matter that is troublesome is the dates between "when first seen" and "when common." The first 12 or 18 spring observations would appear to be correct but as the season advances a constant is introduced either of 3 or 4 days or 4 or 5, both too near. These may technically be true; but if "when common" is correct "when first seen" is tardy. In a complete schedule 80 such duplicate questions may be answered. In one case the constant of 3 or 4 days was recorded in 22 out of 40 observations, another 27 out of 45. No doubt the difference has been selected arbitrarily by the observer, making one of the records wrong thus likely to result in having both cancelled by the compiler. About six of the schedules used the above constants.

Would it not be more valuable in many ways to have the schedules sent in half-yearly to the inspectors and they compile them. They are familiar with the regions. When visiting the schools they could be of material assistance to the teacher in answering portions that may at present be obscure to the teacher. By having one of those late attention might be called to neglect in recording certain observations that might easily have been done; thus not only assisting but stimulating the teacher to make accurate observations.

In towns the Principal might be held responsible for a single complete schedule or one as complete as he could conveniently secure both by himself and his staff. The extent of a single town section being no larger usually than a rural section. It would mean about four days extra labor though I firmly believe the labor would bring forth fruit many fold.

In country sections, where observations are most easily made the character of the schedule should be an index of the teaching. Hence the Inspectors should be familiar with the schedules of each teacher.

#### REGION V.—HALIFAX AND GUYSBORO COUNTIES.

GEO. R. BANCROFT, B. A., SCIENCE MASTER, HALIFAX ACADEMY.

Forty-four schedules for the year ending July, 1908, were received from Region V, viz., twenty-eight from Halifax county and sixteen from Guysboro. Seventeen of those received from Halifax county and ten of those from Guysboro were averaged and compiled.

A marked improvement was to be noted in the neatness of the reports, and also in the number and accuracy of the observations. Three schedules gave the day of the month instead of the day of the year. Among the best records prepared were those by Miss Butler, of Hackett's Cove; Miss Horne, of Oakfield; Miss Sutlis, of Still Water; Miss Ferguson, of East Roman Valley; and Miss Corkum, of Woodside.

Twenty-eight schedules had appended to their lists additional observations, one paper having as many as ninety-six of such observations, giving the dates for "first seen" and "becoming common". The lists of bird observations were more complete than those of last year, but still in too many cases were they left altogether without record or carelessly filled.

SANGUINARIA CANADENSIS was reported from Aspen and East Roman Valley in Guysboro county, and from Landels, Sibley and Sedgewick in Halifax county.

HEPATICIA TRILORA was reported from Dutch Settlement, Halifax county; and Cella Palustris from East Petpeswick, Halifax county, and from East Roman Valley, Guysboro county.

A great many failed to make any records of the meteorological phenomena, specified in Nos. 73 to 79 inclusive on the schedules.

Many observers seem to have forgotten that the year 1908 was a leap year, and that in transferring from the monthly date to the annual date one day was to be added in all cases after the 60th day of that year.

## REGIONS VI A, VI B, AND VII.—CUMBERLAND AND COLCHESTER COUNTIES.

E. J. LAY, PRINCIPAL COUNTY ACADEMY, AMHERST.

There were summarized in above extent of country the following:—VIA, Col. Co., 3 reports, VIIa, Cum., 8, —VIIb, Col., 6,—VIIIb, Cum., 10,—VIIc, Cum., 7,—VIA,a, 5,—VIA,b, 6,—VIB,a, 5,—VIB,b, 6,—or a total of 56. With one exception, all gave the year day, and the majority were fairly accurate. Old mistakes, however, were repeated, and some new ones crept in, but these were generally from new teachers. The mistakes may be classified as resulting (a), from want of knowledge, (b), from lack of close observation, (c), from dishonest work and guessing. To the first belong the wrong dates given for *KALMIA ANGUSTIFOLIA* and *COPTIS*, and also, of little known birds. To take the *KALMIA*, out of 31 dates given, 14 were three weeks too early. The *COPTIS* is confused with a later plant, and the observer has got the wrong name attached to the bird. To the second belong the divergence of dates for shedding of pollen, etc., and to the third the teachers who add the constant number, 1 or 2 or 3, to "when first seen" for "becoming common." One teacher, with exceptional advantages in nature study, put a difference of one and two days between the dates for such well known shrubs as the Apple and Lilac. In no other way, either, can we account for the "first seen" of *ROSA LUCIDA* in October, the shearing of sheep the first of April, the arrival of the Humming Bird the middle of April, or snakes in early March.

I should like to suggest again the propriety of taking the date of one reliable observer from each belt for the arrival and departure of birds. When in adjoining sections the migration north of Wild Geese is given as 83 and 53, an actual case. I believe both observers honest, but I have no doubt that the early flock flew over the late observer, without attracting attention. One teacher is on the watch for the Song Sparrow, and hears its note ten days before her neighbour, who only hears it when brought suddenly into such close proximity to the song that it cannot escape the attention of the most careless.

In a new edition of the "Observation" sheets could not common blunders be pointed out, and detailed information given as how to avoid them? This would be much surer than giving the information through the JOURNAL.

Very full schedules were sent in by Miss Charman, of Wallace, and Miss Soley, of Masstown, while those and the Misses Stiles, Patton, Slade, Robertson and Chapman sent in from 20 to 50 additional observations. Miss Charman's were of much interest as showing the sudden and violent changes of the winter.

## REGION VII.—PICTOU AND ANTIGONISH COUNTIES.

W. P. FRASER, B. A., SCIENCE MASTER, ACADEMY, PICTOU.

Forty-one schedules were received altogether, five less than last year. Thirty-nine were from Pictou county and two from Antigonish.

The schedules were generally more accurate than those of last year, but few were as full as they might easily be. The most complete schedule was sent in by Miss Ada McDonald, of Hopewell. In addition a large number of observations not asked for on the schedule were given, some of much interest as the nesting of birds, etc. An accurate and neat schedule was sent by Miss Katherine Grant of French River.

The reports of the migration of birds show an improvement in accuracy, but there should be more records.

The Song Sparrow is not generally reported. It is the first of the "graybirds" to arrive in spring, usually about the last week in March. This with its characteristic song should identify it.

A January date for the Robin indicates that one has wintered here. This is rare in this country, but occurs. The same may be said of January and February dates for the Junco. Juncos frequently winter; but they are very abundant during the spring migration, so the "becoming common" record can be accurately made. They usually arrive in large numbers about the same time as the Song Sparrow.

The Kingfisher, Sandpiper and Bobolink must be generally known, yet there are few records.

The Meadow Lark is not reported. It is not found in this country, as far as I am aware.

There was only one report of the Myrtle Warbler, and the date given was during the last week of April, which is correct. It is perhaps the most common warbler in Nova Scotia.

Such a date as 114 for the Summer Yellow Bird must be the Yellow Palm Warbler. The migration of the warblers is very regular, occurring about the same date year after year, so that the Summer Warbler seldom arrives till the 15th of May.

The Goldfinch being a sparrow and not dependent on insect food may arrive much earlier. It is somewhat irregular in its migration.

A large percentage of errors occurred in the reports of the Night Hawk. It does not usually arrive till after the middle of May.

It may be added for the benefit of beginners, that the list of bird observations in the October JOURNAL, 1907, was evidently not intended by the author as a guide to the dates of migration. Regarded as such it would in many cases be very misleading.

REGIONS VIII, IX AND X.—CAPE BRETON ISLAND.

C. L. MOORE, M. A., COUNTY ACADEMY, SYDNEY, N. S.

Forty-seven observation schedules were received this year being five more than last year. Thirty-two schedules were from Cape Breton county and fifteen from Inverness and Victoria.

The observations on bird migrations are noticeably incomplete, very few schedules having more than three or four entries under this head. The report of Mr McInnes from Big Interval, Victoria county, is an exception to the general rule, his schedule being nearly complete in this respect and carefully made up.

The dates given for the arrival of the Summer Yellow Bird are, I think, in many instances incorrect. A number of observers report its arrival during the first week in May, e.g. 124. It would be well if these teachers would assure themselves that they have not mistaken the Yellow Palm Warbler for the Summer Yellow Bird. The former arrives in the latter part of April or the first week in May in exceptional seasons. The latter did not put in an appearance in Sydney last year until May 25 (146).

A remarkable date for the arrival of the Humming Bird is that given from Big Brook, viz., 128, and it is difficult to see how this bird could be confused with any other.

The Meadow Lark is reported from one station, namely, Goose Cove. Considerable doubt exists as to whether this bird ever appears in Cape Breton. The Shore Lark is undoubtedly with us in March and April, and might be mistaken for the bird in question.

Ragwort is reported along road sides at West Middle River, Victoria county, and as overrunning vacant farms at Upper S. West Inverness county.

With regard to the plant observations, the common errors are those which have been repeatedly pointed out in previous reports. A careful perusal of a number of these should considerably reduce the number of inaccuracies. If the compilation and criticism of the schedules were placed in the hands of the Inspectors who are in close touch with the teachers in the various sections, it would seem that much might be done to eliminate these perennial errors. The intimate acquaintance of the Inspectors with the natural history of the different parts of their districts, and their close connection with all of the schools would render their services invaluable in this connection if they were more closely associated with the work.

(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.**

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 or 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 characters 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 compilations 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 annual school returns in July, containing the observations made during the whole school year and back as far as the preceding July (if possible) when the schedule of the previous school year was necessarily completed and sent in.

A duplicate copy of the schedule of observations should be securely attached to the school register for the year, so that the series of annual observations may be preserved in each locality. The new register has a page for 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 for 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.

(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.

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 or 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 a desirable 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 characters 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 season 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 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 annual school returns in July, containing the observations made during the whole school year and back as far as the preceding July (if possible) when the schedule of the previous school year was necessarily completed and sent in.

A duplicate copy of the schedule of observations should be securely attached to the school register for the year, so that the series of annual observations may be preserved in each locality. The new register has a page for 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 July, 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 for 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

(1909 SCHEDULE.)

For the year ending July, 190 .

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.	Twinsflower ( <i>Linnaea borealis</i> ),	.....			
35.	Pale Laurel ( <i>Kalmia glauca</i> ), flowering	.....			
36.	Lambkill ( <i>Kalmia angustifolia</i> ), "	.....			
37.	English Hawthorn ( <i>Crataegus oxyacantha</i> ), flowering	.....			
38.	Scarlet-fruited Thorn ( <i>Crataegus 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.....

(a)

(b)

(METEOROLOGICAL PHENOMENA.)

- 73. Opening of (a) Rivers, (b) Lakes without currents.....
- 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. 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.

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 (*Melospiza fasciata*).....
- 84. American Robin (*Turdus migratorius*).....
- 85. Slate coloured Snow Bird (*Junco hiemalis*).....
- 86. Spotted Sand Piper (*Actitis macularia*).....
- 87. Meadow Lark (*Sturnella magna*).....
- 88. Kingfisher (*Ceryle Aleyon*).....
- 89. Yellow Crowned Warbler (*Dendroeca coronata*).....
- 90. Summer Yellow Bird (*Dendroeca aestiva*).....
- 91. White Throated Sparrow (*Zonotrichia alba*).....
- 92. Humming Bird (*Trochilus Colubris*).....
- 93. King Bird (*Tyrannus Carolinensis*).....
- 94. Bobolink (*Dolychonyx oryzivorus*).....
- 95. American Gold Finch (*Spinus tristis*).....
- 96. American Redstart (*Setophaga ruticilla*).....
- 97. Cedar Waxwing (*Ampelis cedrorum*).....
- 98. Night Hawk (*Chordeiles Virginianus*).....
- 99. Piping of Frogs.....
- 100. Appearance of Snakes.....

(OTHER OBSERVATIONS AND REMARKS.

PHENOLOGICAL OBSERVATIONS, CANADA

(1909 SCHEDULE.)

For the year ending July, 190 .

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..... and if so name the main river  
 Does the region include lowlands or intervals?..... 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.

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 ]  
 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.]

When First  
Seen

When becom-  
ing Common.

- 28. Pigeon Berry (*Cornus Canadensis*), fruit ripe .....
- 29. Star Flower (*Trientalis Americana*), flowering .....
- 30. Clintonia (*Clintonia borealis*), flowering .....
- 31. Marsh Calla (*Calla palustris*), flowering .....
- 32. Lady's Slipper (*Cypripedium acaule*), flowering .....
- 33. Blue-eyed Grass (*Sisyrinchium ang.*), flowering .....
- 34. Twinflower (*Linnaea borealis*), " .....
- 35. Pale Laurel (*Kalmia glauca*), flowering .....
- 36. Lambkill (*Kalmia angustifolia*), " .....
- 37. English Hawthorn (*Crataegus oxyacantha*), flowering .....
- 38. Scarlet-fruited Thorn (*Crataegus coccinea*), " .....
- 39. Blue Flag (*Iris versicolor*), flowering .....
- 40. Ox-eye Daisy (*Chrysanthemum Leucanthemum*), flowering .....
- 41. Yellow Pond Lily (*Nuphar advena*), flowering .....
- 42. Raspberry (*Rubus strigosus*), flowering .....
- 43. " " " fruit ripe .....
- 44. Yellow Rattle (*Rhinanthus Crista-galli*), flowering .....
- 45. High Blackberry (*Rubus villosus*), flowering .....
- 46. " " " fruit ripe .....
- 47. Pitcher Plant (*Sarracenia purpurea*), flowering .....
- 48. Heal-All (*Brunella vulgaris*), " .....
- 49. Common Wild Rose (*Rosa lucida*), " .....
- 50. Fall Dandelion (*Leontodon autumnale*), " .....
- 51. Butter-and-Eggs (*Linaria vulgaris*), " .....
- 52. Expanding leaves in spring made trees appear green— (a) first tree, (b) leafing trees generally.

(CULTIVATED PLANTS, ETC.)

- 53. Red Currant (*Ribes rubrum*), flowering .....
- 54. " " " fruit ripe .....
- 55. Black Currant (*Ribes nigrum*), flowering .....
- 56. " " " fruit ripe .....
- 57. Cherry (*Prunus Cerasus*), flowering .....
- 58. " " " fruit ripe .....
- 59. Plum (*Prunus domestica*) flowering .....
- 60. Apple (*Pyrus Malus*), flowering .....
- 61. Lilac (*Syringa vulgaris*), flowering .....
- 62. White Clover (*Trifolium repens*), flowering .....
- 63. Red Clover (*Trifolium pratense*), " .....
- 64. Timothy (*Phleum pratense*), " .....
- 65. Potato (*Solanum tuberosum*), " .....

(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. 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.	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>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>Dolychonyx 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 AND REMARKS.)

## THE PHENOLOGICAL OBSERVATIONS.

The foregoing criticisms should prove useful to young observers. It shows that careless recording or incorrect observations are likely to be found out, with the consequent rejection of the whole schedule containing them. Those making the blunders referred to are evidently unaware of them. So that a careful scanning of their own work in the past, will enable them to become more accurate in the future.

The critical work of the very able compiling staff is invaluable not only in securing the correct observations for compilation of the averages, but for the training of both old and new observers. The list of observers and their observations criticized are published in the October JOURNAL, pages 212 to 216, and are discussed in the preceding pages of *this* JOURNAL.

The numbers of observations generally indicate the interest taken in the work by the respective schools. Even a few accurate observations are of value; and some of the schools sending in schedules of a low number of observation are appreciated highly as documents of scientific value. But accurate and full schedules are not only more valuable from a scientific point of view, but indicate generally more intense educational interest in the study of Nature in the school.

The teachers of Nova Scotia have already acquired a reputation beyond that of any other part of America for their voluntary devotion to and success in the cultivation of the observing faculties of the pupils under their charge. And already its first line of biologists has made its appearance with credit to the province.

## VERY HIGH COMPLIMENTS.

Those interested in this phenological work will be pleased to learn, that last spring in a treatise on "*Agricultural education in the public schools of America*," published by the Bureau of Education of the United States at Washington, the Nova Scotian system is described and very highly praised; and in the Appendix our Schedule with its directions are reprinted and recommended to the schools of the United States. This treatise, Bulletin No. 368, is a very able document of 148 pages by Dr. James Ralph Jewell, of Clark University.

This fall the English Board of Education in London issued "for official use" *Educational Pamphlet No. 13*, on "The Problem of Rural Schools and Teachers in North America" in which Nova Scotia receives perhaps more notice than any other state or province on the continent. In the Appendix are also reprinted

(1) the schedule of Local "Nature Observations," and the heading of the Phenological tables; (2) the regulations for the Rural School Libraries of Nova Scotia; and (3) the Macdonald Consolidated Schools—10 or 12 pages out of 32 in the Appendix referring to work in this province. A large part of this pamphlet was published in a series of articles in the *London Times*.

The English pamphlet is by one of the ablest educationists in England, Miss Ethel Spalding of a Teachers' Training College in London, who visited America for the purpose. Her report was first published as a series of articles in the *London Times*.

#### WEEDS AND INFECTIOUS PLANT DISEASES.

In every rural school the teacher should make a point of seeing that the pupils can recognize the injurious weeds, and the more common infectious diseases of trees and plants, such as the Black Knot of the plum or cherry trees, club-root of cabbages and turnips, etc. The Nature Study lessons on such subjects will have a very special additional interest beyond those involving no economic questions. The Provincial Statutes should direct the destruction of infected trees and weeds along fences and waste lands. This should be made the subject of oral lessons to pupils, who would thus be making an acquaintance with what should be laws of the province, together with the reasons for their enforcement.

#### THE SENECIO CATTLE DISEASE.

This disease might be called the Ragwort Cattle Disease. It has hitherto been known as the "Pictou Cattle Disease," on account of its place of origin. It is now no longer the *Pictou* cattle disease, for it is spreading into the neighboring counties. Up to 1881 nearly 1400 cattle are estimated to have perished from this infection. And since then, it is estimated that about 200 a year, on an average, die from the same cause.

#### WHAT IS THE CAUSE?

For many years at very great expense, the Department of Agriculture at Ottawa has been endeavoring to exterminate the disease, and to discover its cause. The experiments at Cloverville, Antigonish, during the last few years, under the charge of Dr. W. H. Pethick, appear at last to definitely prove, that if the disease is not caused by the eating of the St. James ragwort, it is at least caused by something so intimately associated with the weed, that it may provisionally be considered to be the specific cause. The experiments are clearly described in a special report on "Pictou Cattle Disease," published by the Department of Agriculture at Ottawa in 1906, to which those seeking exact information are referred.

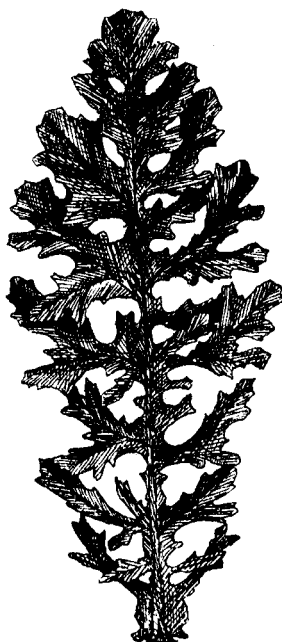
#### SENECIO JACOBÆA L.

is the botanical name of the plant, known in Scotland, from which it came to Pictou about sixty years ago, as the *Common Ragwort*; in

Quebec as *Herbe de St. Jacques*; and generally in America and Europe, under such various names as *Tansy Ragwort*, *Staggerwort*, *St. Jameswort* or *weed* (which like the French name is a translation of the botanical name), *Staverwort*, *Cankerweed*, *Kettle-dock*, *Felon-weed*, *Fairies Horse*, *Stinkin Willie*. It has already spread through Antigonish county, and is rapidly invading Colchester and Halifax counties and even Prince Edward Island. It was not reported to be specially poisonous in Scotland, perhaps because it was not allowed to grow so abundantly. There are a few other species of *Senecio* in Nova Scotia, which are not known to be specially dangerous, such as: *S. vulgaris* L., *S. viscosus* L., *S. sylvaticus* L., *S. Aureus* L., *S. Balsametae* (Hook) Britton, *S. obovatus* Muhl, and *S. Pseudo-Arnicae*. Another species of *Senecio* is suspected of being the cause of the Winton Disease in New Zealand, which attacks horses as well as cattle and sheep. And a similar disease in South Africa has been traced to the agency of *Senecio Burcheli*. It is therefore proposed to call this disease by the generic name of the plant with which it appears to be associated in Nova Scotia, New Zealand and Cape Colony in South Africa.

#### SPECIAL WORK FOR SUMMER OF 1909.

In order to determine the exact extent to which the weed has spread, all schools and individuals sending in Phenological Observations, are asked to note the *presence* or *absence* of *Senecio Jacobaea* in the blank for remarks at the end of the schedule. The abundance or variety of the weed should also be indicated, with an intimation of the action being taken in the community to have it exterminated.



A CHARACTERISTIC LEAF OF *S. Jacobaea*.





New figures showing the general appearance of the plant, and another showing a characteristic form of the full leaf of the stem, are given here as an aid to the identification of the plant.

DESCRIPTION OF THE WEED (FROM "SPOTTON.")

*Senecio Jacobœa* L. Belonging to the Composite Family (Order Compositæ) Flowers golden yellow, the heads forming a spreading corymb. Stem erect, 2-3 feet high, branching, glabrous or somewhat cottony. Leaves numerous, lyrate, bipinnatifid, the lower with broad segments, the upper with linear divisions, all glabrous.

(NOTE ON THE FLOWERS FROM "BRITTON AND BROWN")

The yellow-rayed heads are very numerous and from one-half to two-thirds of an inch broad. The involucre is narrowly bell-shaped, nearly one-quarter of an inch high, its bracts linear-lanceolate, acute, green, or tipped with black; the rays from 12 to 15, the achenes of the disk flowers pubescent, those of the rays glabrous. The pappus white.

From the schedules sent in next July, it is hoped we can plot exactly the portion of the province affected, and have an accurate idea of the magnitude of the problem. The longer the weed is allowed to spread without an attempt at extermination the more extensive and difficult the problem becomes. If it is not at least kept reduced, it is likely to make cattle raising in all the provinces into which it spreads an impossible industry.

### THE BROWN-TAIL MOTH.

The history of the brown-tail moth is as old as the history of economic entomology. When the early scientists began to record the habits of insects injurious to fruit trees this pest was one of the first to be described. It found its way to Somerville, Mass., in the late nineties, probably on rose bushes imported from Holland, and has now spread throughout eastern Massachusetts, southern New Hampshire and southwestern Maine.



FIG. 1.— Winter web of brown-tail moth

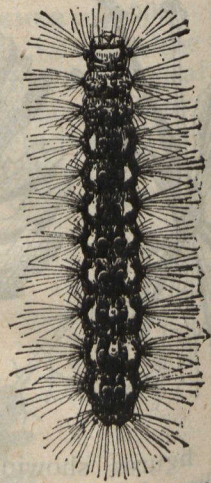


FIG. 2.— Full-grown caterpillar.

The first outbreak of the brown-tail moth covered only a few square miles in Somerville and Cambridge. It was sufficient, however, to yield a swarm of moths which flew, or were drifted by a high wind over a wide territory. As the female moth is a strong flyer its spread has been rapid. In addition to the effect of the wind, the insects are also strongly attracted to light. It results, therefore, that a swarm of moths arising from any infested spot and being drifted by the wind out of their immediate environment fly to the nearest mass of lights. Thus the centres of cities and towns become first infested, and here are established the colonies from which a more general infestation takes place. Electric cars, railroad trains, and even steam-boats, serve to transport the moths. The writer has repeatedly seen them, attracted by the lights, enter into the street or steam cars and be carried for miles. The rapid spreading of the insect indicates that within a few years it will be well distributed throughout New England.



LIFE HISTORY.

The brown-tail moth lays from two hundred to four hundred small globular eggs, thickly covered with a mass of brown hairs from the tip of the abdomen of the moth.

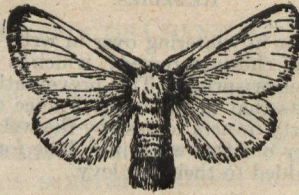


FIG. 3.—Female brown-tail moth.

The typical egg mass is about two-thirds of an inch long and about one-quarter of an inch wide. While the eggs are occasionally deposited on branches or trunks of trees; or even on lamp posts or house walls, a very large majority are laid on the under surfaces of the leaves of fruit and shade trees. The moths show a strong liking for pear trees, and will apparently seek out trees of this species in preference to any others. At the same time the apple, elm, wild cherry and white oak are very commonly infested by the insect, while other trees suffer to some extent.

The eggs, laid in July, hatch the following month, and the young caterpillars, feeding in the mass, soon commence their work of spinning their winter webs. In making this web, a number of leaves in the vicinity of the egg clusters are drawn together and are carefully spun in with a tenacious silken web. With the approach of cold weather the caterpillars enter the web and close the exit holes. We then have the strange phenomenon of a caterpillar wintering over when only one-quarter grown and emerging the following spring to complete its life history. Whatever extremes of cold we have in Massachusetts do not seem to affect these insects adversely. They emerge early in the spring, eat first the buds, then the blossoms, and attack the foliage of fruit trees as soon as it develops. The full grown caterpillar is light brown with a white stripe on either side and about two inches in length. Stripping the foliage of one tree they march to another, and so continue until full grown, when the cocoons are spun within the leaves at the ends of the branches, or sometimes on the tree trunks. The pupation usually takes place the latter part of June, and the moths emerge from the first to the twentieth of July. The snow-white female moth is conspicuously marked with an enlarged tuft of brown hair, which gives to the insect its common name.

NETTLING BY THE CATERpillARS.

The damage by the caterpillars to the fruit trees is only a part of the story. Whenever these insects come into contact with human flesh they produce a most severe



FIG. 4.—Pruning shears suitable for removal of winter webs.

and painful nettling. This is apparently not due to any poisonous material in the hairs, but rather to the finely barbed and brittle hairs themselves. So severe is this affec-

tion that in many cases people have been made seriously ill by it. The best remedy for it is the liberal use of cooling lotions, or, what is more satisfactory, even if less pleasant, the free use of common vaseline.

#### REMEDIES.

The habit of the caterpillar in wintering over in webs at the tips of the branches gives a key to the simplest and cheapest remedy, which is merely to cut off and burn the webs during the fall, winter or spring. This preventative means is most effective, and gives such excellent results that in Germany, France and Belgium there is a law making it obligatory on property owners to destroy the webs during the winter season. Where citizens neglect to carry out this work it is done for them by local authorities and the sum thus expended added to their tax levy.

**Winter Work.**—The work of removing the webs is best done by the use of a long-handled tree pruners or similar device. Particular care should be given to gathering the webs and burning them, as any left on the ground will yield caterpillars and continue the infestation locally.

**Spraying.**—Spraying is very effective against these insects; in fact they are much less resistant to the action of poison than is the gypsy moth or elm leaf beetle. To secure best results, spraying should be done as soon as the foliage develops in the spring. Five pounds of the arsenate of lead paste to one hundred gallons of water is sufficient, or, if preferred, one pound of good Paris green kept well stirred may be applied in one hundred and fifty gallons of water.

Where the caterpillars swarm from trees along fences or on house walls the use of kerosene emulsion or strong soap suds is advisable. Fall spraying with arsenate of lead is also effective, but the feeding of the caterpillars at that time of the year is usually of minor importance.

Little good can be done in the way of collecting the eggs or trapping the moths by light, although many of the mature insects are destroyed by arc lamps. There is no method of combatting the brown-tail moths that will give better results for the outlay than the destruction of the webs in the winter season. Cases will arise where the caterpillars swarm from adjoining estates, and where this occurs banding the trees with some sticky material, as heretofore described, will protect the foliage from harm.

#### NATURAL ENEMIES.

Like the gypsy moth the brown-tail moth is attacked by numerous parasites and by certain birds, but the latter do not appear to take to it as readily as to the former insect. Of the birds, the cuckoos, vireos and orioles are most helpful, while English sparrows eat many of the winged moths. The garden toad also does its part in feeding first on the migrating caterpillars and later on the moths as they fall injured from the street lights.

A. H. KIRKLAND.

Boston, March 1, 1905.

(From 'Nature Leaflet No. 26,' published by the State Board of Agriculture of the commonwealth of Massachusetts, U. S. A.)

## THE BROWN-TAIL MOTH

(EUPROCTIS CHRYSORRHAEA LINN).

The Brown Tail Moth is one of the most troublesome insect pests which have devastated fruit and shade trees in America. Public efforts to control its ravages have, since 1895, cost the New England States several millions of dollars. Its presence in Nova Scotia was first discovered two years ago this spring. Profiting by the disastrous experience with this pest in the New England States, the Nova Scotia Department of Agriculture, as soon as the presence of the Moth was known, took active measures, publishing articles, holding meetings, sending out inspectors, and spraying badly infested trees. Also, a bounty of three cents for every nest picked and destroyed was declared. In this way, during the three weeks campaign, carried on in the spring of 1907, hundreds of nests were destroyed by the inspectors and a bounty was paid on some two thousand nests, collected for the most part by school children and identified and vouched for by teachers. The following winter and spring, the same methods were pursued, the bounty, however, being increased to ten cents per nest. During this season, in addition to the nests destroyed by inspectors and citizens who did not report, bounties were paid on four thousand nests. From the very first it was announced that the bounty system was an emergency one. Therefore, lest it might lead, if continued in, to such an unfortunate result as has transpired in connection with the bounty system in other countries, the Department decided this year to depend first upon the united efforts of the citizens, now thoroughly enlightened as to the danger from the invasion of this insect, and secondly, upon inspectors sent out from the Agricultural College. At the time of writing, six inspectors are carefully examining areas in the western part of the province and will continue until vegetation begins.

## DISTRIBUTION.

By far the greater number of nests have been collected in Digby county, in the area between Digby town and Bear River. A considerable number have been taken in western Annapolis county and a few scattering ones in east Annapolis, Kings and Yarmouth counties. While a careful search has been made in, and a large number of specimens sent for identification from other counties of Nova Scotia, not a single Brown Tail Moth has yet been discovered outside of the areas described above. However, there is always a possibility of it spreading and, hence, the Department would urge school teachers and others to encourage the sending to Truro for identification of any insect forms, the nature of which

is not known. In this way, the members of the Department can be kept posted in regard, not only to the Brown Tail Moth, but other insect pests that may, from time to time, gain access to the Province.

During the summer of 1908, thousands of Brown Tail Moths were seen flying over boats and congregating in the vicinities of light houses. Many of these were examined, but none but male moths or female that had already laid their eggs were discovered. As, up to the present time, there has been a marked decrease in the number of nests taken during the present spring, it is thought that these moths, which must have flown across the Bay from some point in the New England States, have not been the means of further infection. Up to the date of writing (April 21) only 504 nests have been reported in the same area in which over 4000 were taken during the previous year.

#### LIFE HISTORY.

In the colored plate opposite, will be found pictures of the Brown Tail Moth in different stages of its life history. It is recommended that every teacher preserve this plate to assist in identifying specimens which may be brought in by school children and citizens in the vicinity of the school house.

The eggs are deposited in masses on the under-side of leaves in July. These egg masses usually from 200 to 300 eggs each. (Plate Fig. 1). The eggs hatch early in August and the young caterpillars feed upon the upper surface of the leaves. Soon they begin to fasten a number of leaves together with silken threads, forming a nest on the ends of the small branches. (Plate Fig. 7.)

On the approach of cold weather, the caterpillars enter the nests and remain there during the winter. Upwards of 300 caterpillars are sometimes found hibernating in a single winter nest. The caterpillars, at this stage, are from  $\frac{1}{4}$  to  $\frac{1}{3}$  of an inch in length. (Plate Fig. 2). In the warm days of spring they leave the nest to feed on the buds and young leaves, returning to the nest at night. As they increase in size they feed downward from the tips of the branches, forsaking the nest entirely.

The caterpillars are full grown about the last of June and are from one to one and a half inches long. (Plate Fig. 3). The most striking characteristics of the full grown caterpillars are the row of elongated white spots along each side and the two bright red dots on the posterior end of the body. The caterpillars pupate about the end of June. The cocoons are frequently formed in a bunch of leaves at the end of a branch and sometimes in crevices in the bark. The pupal stage lasts about two weeks and the





**THE BROWN TAIL MOTH.**

*Euproctis chrysorrhoea* LINN.

1. Egg Mass on the under side of leaf.
2. Young Caterpillars or larvae as they appear in early spring.
3. Full grown Caterpillars.
4. Pupae in portion of a web mass, also a few cast larval skins.
5. Male Moth with wings fully extended.
6. Female Moth with wings fully extended.
7. Nests in which the winter is passed.

moths emerge about the third week in July. The Moth is pure white with golden brown hairs on the end of the abdomen, from which characteristic it has received its name (The Brown-Tail Moth). Both sexes are very much alike, except that the female is slightly larger. (Plate Figs. 5 & 6).

#### FOOD PLANTS.

Apple, pear, and wild cherry trees have been the favorites thus far in Nova Scotia, but specimens have also been taken on maples, elms and oaks.

#### BROWN-TAIL MOTH RASH.

The hairs of the caterpillars are easily broken off and, when they come in contact with the human skin, cause a rash and intense itching, becoming serious in some cases.

#### REMEDIAL MEASURES.

The most effective remedy is the destruction of the caterpillars in their winter nests, which may be accomplished at any period between the time when the leaves fall and when vegetation begins the following spring. The nests are easily detected during the winter, when the foliage is off the trees. They may be clipped off the points of the branches with a long handled tree pruner. The nests should be gathered and burned. If allowed to remain on the ground, the caterpillars may live, and, in the spring, find their way back to the trees.

The usual Paris Green or Lead Arsenate sprays will effectively kill any caterpillars on the trees. This spraying should be done when the caterpillars are quite small, as they can be much easier destroyed at that time than when they have become fully matured.

Teachers are urged to familiarize themselves with this moth in its various stages, to interest their pupils in thier destruction and, wherever they are at a loss as to its identification, to forward specimens to the Agricultural College, Truro, N. S.





RURAL SCIENCE SCHOOL AFFILIATED WITH THE PROVINCIAL NORMAL AND AGRICULTURAL COLLEGES AT TRURO, 6th JULY TO 12th AUGUST 1909.

The next Session of the Rural Science School will be held from July 6th to August 12th, 1909. The work of the first week, July 6th to July 13th, will be for those who have been in attendance at former classes or new students who may wish to supplement any lines of the regular school studies in which they may be deficient, or who may wish to begin private investigation. The regular classes will formally open on July 13th, so that those taking the mid-summer examinations may have an opportunity to enter. All, who can, are advised to report on July 6th, but it is anticipated that perhaps the larger number will enter on July 13th.

The syllabus of the Rural Science Diploma Course is presented below. The Daily Time Table will be so arranged that students in attendance may take also the classes in Physical Training and qualify for the Physical Training Certificate. In addition, optional classes will be provided in Music and Photography, and it is contemplated that, for the benefit of those who may not have attended the Normal School, classes in Pedagogy will be arranged.

#### RURAL SCIENCE DIPLOMA COURSE.

Courses will be offered in the Principles and Applications of Nature Study, General Biology, Botany, School Gardening, and Horticulture, Agriculture, Physics, Chemistry, Bird and Insect Study, Geology and Mechanic Science.

These Courses, one or all, will be free to teachers or intending teachers, and may be taken by:—(a) those who merely wish to extend their knowledge for teaching purposes; (b) those who wish to proceed to the full qualification required for a Rural Science Diploma.

The work is so arranged that it will be possible for almost any teacher to complete the requirements for this Diploma in three summers, or for one already proficient in the subjects to do so in one term.

During the term, as a rule, the time in the forenoons—six days in the week—will be devoted to class work. The afternoons—five days in the week—to field excursions and individual work in the laboratories.

The tests required for the Rural Science Diploma will be regular attendance at the class instruction and in the laboratories; a satisfactory report by the instructors on the class, laboratory and field work of the student, and the passing of an examination at the close of the term upon the topics of the following syllabus. Due allowance will be made for reading and study along the lines of the course, which a student may prove that he has done, between terms. In this connection books of reference are mentioned under each subject.

## SYLLABUS.

### NATURE STUDY.

Aims and purposes of Nature Study.

Distinction between Nature Study and information about nature on the one hand and formal science on the other.

Stages in Nature Study lessons:—(1) observation (as active experience), (2) reasoning upon the material observed or actions performed, and (3) expressing the observations, actions, judgments, applications, in the most suitable or by different modes.

Observation in the limited sense distinguished from experiment.

Nature Study, a method of teaching by environment and experience, rather than a mass of knowledge about nature.

Environment and experience considered and analyzed as the field of Nature Study from the point of view of subject matter.

How geography (in part), physiology (in large part), arithmetic (in part), may be taught as Nature Study.

The correlations of Nature Study with literature, the expressive arts, arithmetic, mechanic and domestic science, and agriculture.

The preparation of the Teacher:—Proficiency in heuristic (investigational) as distinguished from informational or memoriter methods of instruction; elementary knowledge of the sciences; knowledge of the use of manuals and books of reference with a view—not to acquire knowledge to restate to the pupils, but—to guide them in their investigations.

The place of Nature Study in the Time Table.

Tests of the results.

Nature of aids and proper methods of using them:—Books, pictures, microscopes, aquaria, terraria, museum, etc.

The use and abuse of collections.

Text Book:—*Nature Study*, Dearness, (Copp, Clarke Co.), Toronto.

#### GENERAL BIOLOGY.

Organization as a product of life.

Organic versus inorganic matter.

Protoplasm.

Cell, tissue, organ; a plant, an animal as biological units.

Chief distinctions between plants and animals.

Nutrition, reproduction, sensation and volition as groups of vital activities.

Parasitism.

Characteristics of large divisions of plants and animals:—one-celled plants, algae, fungi, mosses, ferns, conifers, seed-plants one-celled animals, radiates, neuropods (bi-lateral invertebrates), haemapods (vertebrates), and of the large divisions of the vertebrates:—fishes, amphibians, reptiles, birds and mammals.

Text Book:—See under Botany.

#### BOTANY.

Life history of a typical dicot, monocot, conifer, fern and fungus.

Nature and significance of plant societies and associations.

Characteristics of annual, biennial, perennial; herb, shrub, tree.

Organography of seed-bearing plants; form and function of chief parts of plant-body, shoot, bud, root, flower and seed. Seed dispersion.

Pollination, fertilization, germination.

Carbon-foods of plants, respiration, transpiration; chlorophyll, starch, sugar.

Use of a systematic key to identify flowering plants, including composites, grasses and ferns.

Sufficient acquaintance with the following to recognize them:—common weeds, useful plants and trees of the gardens, fields, orchards and woodlands of the neighborhood.

Phenology of common native plants.

Since the "Seed Control Act" has come into force, farmers throughout the Dominion of Canada have become greatly interested in weeds and weed seeds. Teachers will, accordingly, find that a knowledge which will enable them to identify all plants, whether beneficial or injurious to the farmers' interests, will not only be valuable, but will be greatly appreciated by farmers whose children will engage in this study in the common schools. The same may be said in regard to a knowledge of such plant diseases as Black Knot, Apple Scab, Wheat Rust, or Smut, etc., all of which will be studied in the course in Biology and Botany.

Text Books:—The Principles of *Botany*, Bergen and Davis, (Ginn & Co., Boston).  
*Biology*, Bailey and Coleman. (MacMillan & Co., New York).  
 Gray's New Manual of Botany, 7th Edition. (American Book Co., New York).  
 Farm Weeds (Department of Agriculture, Canada.)

#### SCHOOL GARDENING AND HORTICULTURE.

The educational uses of the cultivation of plants; mental, moral, physical and economic values. The school garden a nature study laboratory.

Indoor gardening:—The preparation of the soils for potting and seed-planting; putting plants and seeds in pots and window boxes and their care and management.

Study of the germination of seeds and the transplanting, potting and re-potting of plants. Testing the vitality of seeds.

The Outdoor School Garden:—Consideration of the situation, size, preparation and fertilization of the soil; selection of suitable kinds of flowers and vegetables; planning and laying out the garden; planting and seeding the plots and borders; subsequent cultivation and care of the garden.

Study of the propagation of plants by seeds, cuttings, budding and grafting.

The Home-Garden plot as supplementary to the School garden or as a substitute for it when the latter cannot be had.

Relation of insects to the plants of field, orchard and garden. Fungous diseases of economic plants.

Arbor Day. Tree raising, tree planting, care of trees.

Text Book:—*The Nursery Book*, Bailey. (MacMillan & Co).

#### INSECTS.

The economic phases of insect life such as the relation of mouth structures to insecticides will receive special attention.

Mutual relations of insects and plants.

Study of at least five insects in respect to metamorphoses and foods.

Study of certain insects, beneficial or injurious, in field, garden, orchard, forest and home.

Structure of mouth, wing, legs, body; adaptations to environment.

Classification so far as to enable a student to place the common insects in their natural orders and the study of a collection representative of the common orders. In connection with this work the class will study means of combatting insect pest.

Text Book:—*Manual of Insects*, Comstock. (Comstock Pub. Co., Ithaca, N. Y.)

#### BIRDS.

In this course emphasis will be placed on the study of birds as living animals.

Methods of bird-study in the field.

The careful field-study—appearance, song, flight,—of several birds of economic interest, our game birds and their protection.

The complete life-history of at least two quite different species of bird.

Nesting habits, song, migration and economic values of birds.

Structure of bill, wing, leg, feathers and adaptations to environment.

Recognition of our common birds.

Classification:—The characters of the orders represented in Nova Scotia,—the perchers especially.

Text Book:—*Birds of Eastern North America*, Chapman. (D. Appleton & Co.)

## AGRICULTURE.

The types of farming suited to Nova Scotia with a consideration of the underlying principles. Comparison of the methods pursued by farmers in the various parts of the Province. Observation of the methods practised at the College Farm.

Field Crops:—The characteristics of the different crops; the methods of successful cultivation of each.

Fertility of the Soil:—Its development and maintenance; the principles of the various tillage operations, drainage, rotation of crops, fertilizers.

Implements and labor-saving machinery

Animal husbandry:—The economic principles involved; types and breeds of farm animals including poultry; the necessity of an ideal and the methods of realizing it; principles of feeding and management. Observational study of the animals on the Experimental Farm.

Text Books:—*Agriculture, Vol. I, II*, Brooks. (King-Richardson. Springfield, Mass.)

*Types and Breeds of Farm Animals*, Plumb. (Ginn & Co.)

## GEOLOGY.

The study of the soil as disintegrated rock:—silicates, limestone, gypsum, etc. The rocks to be studied from specimens and, as far as possible in their native situation.

Typical geological formations; examination of the local ones; illustration of strata, folds, dip, fracture, weathering, etc.

Formation of river-valley, intervale, salt-marsh, springs.

Study of the nature and significance of some of the common fossils found in our coal and limestone beds.

Review of the geological map of the Province,—each student to study particularly the part of the map treating of his own neighborhood.

Text Book:—*Introduction to Geology*, Scott. (MacMillan & Co. N. Y.)

## PHYSICS.

Making and recording observations upon the elements of weather:—temperature, moisture, pressure, wind, cloud, etc.

The principles and the methods of using instruments to measure temperature, moisture, etc. Methods of improvising simple forms of some of these instruments.

Practice in making deductions from the various records kept.

The causes and movements of storms.

The study of the principles of mechanics, pressure, force,—lever, wheel, screw, etc.—as applied to farm machinery, pumps, etc.

(Note.—Students are supposed to begin this course with a fair knowledge of the elementary principles of physics, heat, electricity).

Text Books:—*Practical Physics*, Chute. (D. C. Heath & Co.)  
*The Story of the Atmosphere*, Douglass. (Appleton & Co.)  
*Any good Elementary Treatise on Mechanics*.

#### SOIL PHYSICS.

The methods of taking samples of soil.

Mechanical analysis of three typical soils.

Determination of the percentage of air and water in soil.

Temperature of soil and its modifying factors.

The effects on clay of lime, salt, gypsum and humus.

The relation of size of particles of soil to water-holding power.

The capillarity of at least two kinds of soil and the rate of percolation through them. Power of air-dry soils to absorb water. Texture of soils—  
 heavy and light.

Soil Solutions.

Text Books:—*The Soil*, King. (MacMillan & Co.)

#### CHEMISTRY.

A laboratory course in the chemistry of the farm and home based on the facts and laws of the science as mastered in the high school course.

The chemistry of lime as used in whitewash, disinfectant, Bordeaux mixture and cement.

The chemistry of carbon; combustion; comparison of fuels.

Water,—qualities of different kinds, testing purity and hardness.

Soap-making.

Plant and animal products,—testing for potash, phosphoric acid, nitrogen, iron, carbon, calcium in bone, seeds, etc. The chemistry of starch, sugar, fat, proteid, milk.

Fermentation.

Ultimate and proximate composition of soil.

The chemistry of fertilizers,—testing for elements as above, in plant and animal products. Examination of a few commercial fertilizers.

A few simple experiments to illustrate the chemistry of fungicides, insecticides, paint, dyes, food-preservatives.

Text Book:—*Chemistry of Plant and Animal Life*, Snyder. (Mac-Millan & Co.)

#### BACTERIOLOGY.

An introductory study of bacteria.

Relation to health and disease.

The bacteria of the soil; nitrification; denitrification; nitrobacteria in their relation to leguminous plants: conditions favorable to growth of desirable soil-bacteria.

Bacteria in relation to dairying.

Methods of disinfection.

Text Book:—*Bacteria in Relation to Country Life*, Lipman. (Mac-Millan & Co.)

#### MECHANIC SCIENCE.

Brush Drawing:—Materials, their preparation and use. A short course in impression work and brush drawing proper. Applications to nature work in the other courses.

Paper and Cardboard Modeling:—The necessary drawings for the development of models. The manipulation of tools and materials. Students to make, at least, ten flat and six solid models and one exercise in book-binding.

Wood-work:—The use of the tools. Students to make plant-press, insect-box, and spreading board, or equivalent models.

Text Book:—*The Theory of Educational Sloyd*, Otto Salomon. (Geo. Philip & Son, London, Eng.)



FACULTY OF THE RURAL SCIENCE SCHOOL, WILL BE  
AS FOLLOWS:

M. CUMMING, B. A., B. S. A., *Director and Lecturer in Agriculture and Bacteriology,*

Assisted by the members of the Faculties of the Provincial Normal and Agricultural Colleges.

J. DEARNESS, M. A., NORMAL SCHOOL, LONDON, ONTARIO,  
*Lecturer in Botany and Nature Study.*

F. G. MATTHEWS, *Lecturer in Machanic Science, Music and Photography.*

C. L. MOORE, M. A., PRINCIPAL OF ACADEMY AND SUPERVISOR OF PUBLIC SCHOOLS, SYDNEY, *Lecturer in Biology.*

Should there be a large enrolment of students, a further number of lecturers will be secured, whose names will be announced later. IN THIS CONNECTION, IT WILL GREATLY ASSIST THE MANAGEMENT IF INTENDING STUDENTS WILL MAKE APPLICATION FOR ENTRANCE ON OR BEFORE JUNE 15TH. Students can, however, apply for entrance up to and including the opening day of the course.

In order to minimize the expenses of teachers attending this course, the Provincial Government will pay transportation charges (railway, steamer and coach fares), of all teachers who complete the Course to the satisfaction of the instructors. Attention is also called to the fact that, under regulation 138 of the School Law, an additional week or two weeks of vacation may be obtained by teachers taking the Summer Course.

While this course is arranged primarily for teachers, yet anyone who is interested in the study of science may attend the classes and receive a full share of attention from the instructors.

Railways will grant to all attending these classes a single fare on the Standard Certificate Plan. Those attending should therefore be sure to obtain the "Standard Certificate" when purchasing a ticket, for only the necessary transportation expenses of teachers can be paid.

For further particulars apply to:—

DAVID SOLOAN, LL. D.,  
Principal Normal School,  
Truro, N. S.

M. CUMMING, B. A., B. S. A.,  
Principal Agr. College,  
Truro, N. S.

A. H. MACKAY, LL. D.,  
Supt. of Education, Halifax, N. S.

## SUPPLEMENTARY CLASSES.

(a)

## PHOTOGRAPHY AND MUSIC.

Should there be a sufficient enrolment, classes in Music (Tonic-Sol-Fa) and Photography will also be provided.

(b)

## PHYSICAL DRILL.

Proficiency in physical exercises is to be imperative on all public school teachers above Third Class (D). To give greater effectiveness to the regulations in the school-law dealing with physical drill in the schools, it is purposed, with the co-operation of the Militia Department of Canada, to provide an instructor in this branch during the session of the summer classes at the Provincial Institutions in Truro. Teachers will thus be enabled to qualify as instructors in physical drill in their schools as required by the new law.

SYLLABUS OF PHYSICAL EXERCISES FOR USE IN PUBLIC  
ELEMENTARY SCHOOLS, 1905.

The above heading is the title of the book prescribed for Physical Training in the schools of Nova Scotia. It is printed for His Majesty's Stationery Office, by Wyman & Sons, Limited, Fetter Lane, E. C., London, and is sold in England at ninepence.

In some respects it is not the ideal for mixed schools, and teachers are expected to use their judgment in omitting exercises, which they cannot conduct without exciting a sense of ungracefulness. Some of these movements are, however, among the most valuable for the development of health and strength. Every teacher should have good judgment enough to use the exercises appropriately.

The text is being very carefully revised by the Education Department of England, and when completed is likely to be the standard throughout the Empire. The original editions are exhausted; so that we can do nothing better than wait for the new edition.

(c)

## CLASSES FOR BILINGUAL TEACHERS.

Classes in language-methods for bilingual teachers in Acadian schools will open on Tuesday, July thirteenth, and continue till Thursday, August twelfth. Applications for admission should be sent as early as possible to the principal of The Provincial Normal School, 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.

Travelling expenses at five cents per mile will be paid to students who are regularly employed teachers in Acadian communities, and who speak both languages with fair fluency.

Under regulations 138, of the School Law (see Manual of School Law), an additional week or two weeks of vacation may be obtained by teachers taking the summer course.

For particulars respecting the Bilingual School apply to the Instructor,

J. ALPHONSE BENOIT, B. A.,  
Normal College,  
Truro,

or to

DAVID SOLOAN, LL. D.  
Principal, Normal College,  
Truro, N. S.



### RURAL SCIENCE SCHOOLS AND GARDENS.

Regulation 36, pages 66 and 67 of the "Manual of School Law, Nova Scotia, 1901," has been repealed and the following substituted in its stead:

36. Rural Science Schools and Gardens:—To qualify under section 69 of chapter 52 of the Revised Statutes of 1900, the teacher of a school must have an Agricultural or Rural Science diploma as specified in the clauses following, and must notify the Inspector at the opening of the school each year of the classification to be competed for—"superior," "good" or "fair" of the Statute, which are the equivalent respectively of "A1", "A2" and "A3" of Regulation 34 preceding:

(1) "The graduation diploma from the School of Agriculture referred to in section 69 of Chapter 52 of the Revised Statutes of 1900, shall hereafter be known as the Rural Science diploma, under which title it shall hereafter be awarded by the Rural Science Normal School at Truro, conducted under the auspices of the Agricultural Colleges. First Class teachers who complete the course as prescribed from time to time, and obtain the Rural Science diploma, shall be qualified to draw the grants for "Superior," "Good" and "Fair" as provided in the Statute above mentioned on the fulfillment of the regular conditions respectively specified. But Second Class teachers who complete the course and receive the diploma may on the recommendation of the Inspector draw one-half of the regular grants for the classifications "Fair" and "Good" respectively on the fulfillment of the regular conditions."

(2) Any such licensed teacher intending to compete for classification as "fair", "good," or "superior," under section 69 of the Education Act, must give notice of this intention at the opening of the school to the Inspector, who has at the end of each half-year to rank the school; and the lack of such notice shall be a disqualification even should all other conditions be complied with.

(3) For the lowest rank "fair" the school should have the equipment specified in Reg. 51, a and b, must have a school garden of not less than one-eighth of an acre, one-third of which should be set off in beds 4 x 10 feet with walks 3 feet wide, the rest to be set out as an arboretum and shrubbery, part set out each year till all is planted; and a library of not less than 15 volumes in addition to the prescribed books of reference. The school must be in all respects conducted as a first class school with special excellence in Nature Study.

(4) For the rank "good" the school should, in addition, have the equipment specified in Reg. 51, c and d, with a library of not less than 25 volumes, a well conducted school garden of one-fourth of an acre, one-third of which must be in beds as above, the rest arboretum and shrubbery as above, and must be conducted in all respects as a first-class school with good demonstrations in Nature Study by the individual pupils and the school generally.

(5) For the rank "superior" the school should have, in addition to the requirements of the previous ranks, the equipment specified in Reg. 53, with a library of not less than forty volumes, a school garden containing three-eighths of an acre, one-third of which should be set out in beds as above, the remainder as arboretum and shrubbery as above, with a special class of pupils doing advanced work in Nature Study of such a character as to be clearly advancing the industrial methods of the community in at least some departments of agriculture, horticulture, forestry, etc.

(6) The "small" standard school garden should not be less than one-eighth of an acre (54445 square feet), one-half of which might be set out as an arboretum and shrubbery, the remainder being plowed each spring, then worked up by the pupils into beds of four feet by ten, separated by walks three feet broad. This arrangement would give one bed to each of thirty pupils. The younger pupils might be assigned in twos to each bed. The grounds should be kept prettily fenced and kept in good order, even during holidays, when they should be visited by relays of pupils at least once a week. Such a school garden might be recommended by the Inspector for ten, fifteen, twenty or twenty-five dollars per annum from the municipal fund, according to the excellence of the general condition of the school, provided the School Board spend at least as much on the plowing, fertilizing,

etc., forming the annual current expense of maintaining the school in order, in addition to the labor of the pupils and teacher.

(7) The "medium" standard school garden should be about one-quarter of an acre on the average, one-half of which might be set out as an arboretum and shrubbery, and the remainder divided into fifty or sixty, four by ten feet beds, separated by three feet walks, to be conditioned on the same general principles as the "small" standard. This would be the size of the garden desired for the rank "good" where possible, drawing \$15, \$20, or \$25, according to excellence, from the municipal fund.

(8) The "large" standard school garden should be over a quarter of an acre, with at least three times the number of "four by ten feet" plots recommended for the "small" standard, say from 75 to 100 individual beds. This would be the size of garden desired for the rank "superior"; drawing under the same general principles \$20 to \$25 from the municipal fund.

(9) A small shed for the garden tools, with a projection, glass-roofed, facing the sun, to serve as a miniature hot-house for forcing plants in spring, is a necessary part of any standard garden, a very cheap structure sufficing, especially for the "small" garden. The size, number and management of plots specified above are merely given as general directions when teachers or school boards have no other scheme which they deem superior. Any other arrangements approximating these conditions, but demonstrating novel or special advantages, or improvements, are not only allowable, but will be specially commended after a successful test.

(10) If the teacher or the secretary of the school board recorded under oath the attendance of pupils during the holidays in weeding and observing the beds, such time might be arranged through the Inspector to be substituted equitably, according to agreement, for an equivalent number of holidays during the winter or stormy weather of the school year following or the "days attendance" added.

(11) Inspectors may have to consult with each other, and perhaps exchange visits to the schools of each inspectorate, in order to be sure that the same standards of classification are maintained in each inspectorial division. The same conditions hold with respect to the inspection of Manual Training and Superior Schools generally. Notice of competition for school garden grants must be given to the Inspector at the opening of the school each year, and should be signed by the SECRETARY as well as the teacher.

(12) The course of study for the Rural Science diploma shall be as defined from year to year in the Rural Science School Course of Study.



## SIMPLIFIED SPELLING.

From page 60 to page 98 of the April JOURNAL OF EDUCATION, 1908, were published the *first* and *second* lists of simplified spellings. Following this page will be found the *third* list as given in Circular No. 22. The whole three lists are consolidated in one containing over *three thousand* simplifications. This consolidated list is Circular No. 23 of the Simplified Spelling Board, the head office of which is 1 *Madison Avenue, New York City*. Any of these circulars can be obtained by writing the Secretary at the above given address. This Board is not American altho the central office is in New York. It contains the leading philologists and dictionary makers of Great Britain, and representatives from the greater British Colonies around the world.

The circulars, therefore, emanate from the greatest authorities in English philology, representing Britain and America. As they are too lengthy and technical for the newspapers and magazines, they are republished here for the convenient information of our literary scholars. In the common schools we must follow the orthography of the text books prescribed. In fact, no person whose scholarship is not well known to the public should attempt to use the new spellings; for even were he using them correctly he might be deemed illiterate by busy men who have no time to revise their orthography or note what is being done in the world of letters. The old spelling must be considered correct as well as the new, or any combination of them, until the simpler and more correct forms are generally adopted.

Following Circular No. 22 of the S. S. B., should come No. 23 which is practically the new spelling book, But there is not sufficient space for it in the present JOURNAL.

## THE ENGLISH SIMPLIFIED SPELLING SOCIETY.

This Society was formed last fall in London with its offices at 44 *Great Russell Street, London, W. C., England*; near the British Museum. English scholars will recognize the great names on its staff of officers. On the Committee is Dr. Henry Frank Heath, Director of Special Inquiries and Reports of the English Board of Education, which is thus well represented in the Society. We have space merely for publishing after Circular No. 22, the officers of the English S. S. S., and the terms of membership, which are so low that every teacher should join so as to get regularly all the publications issued with the most authoritative sanction of English scholarship. Following this, we publish the note explanatory of the English S. S. S. provisional simplifications of spellings, used in their bulletins of information.

## SIMPLIFIED SPELLING.

## THE THIRD LIST.

The two lists of simplified spellings published by the Simplified Spelling Board have been almost unanimously approved by the supporters of the cause, and especially by the Signers.

The First List (March 21, 1906) was accepted by all friends of simplification as a matter of course, because it was only a selection of the simpler spellings, already in good use, of some "Common words spelled in two or more ways"—Three Hundred Words selected out of many.

The Second List (January 30, 1908) proposed many new simplifications under general rules. It regulated also seventy-five anomalous spellings under special rules.

The general rules of the Second List were as follows:

I. GENERAL RULE FOR DROPPING SILENT FINAL E IN UNSTREST SYLLABLES CONTAINING A SHORT I.

In words of two or more syllables, ending in an unstrest syllable containing a short *i* followed by a single consonant (other than *c*), and a silent final *e*, drop the silent final *e*. That is—

(1) For unstrest *-ile*, pronounced *-il*, spell *-il*. Thus, *docil*, *factil*, *fertil*, *missil*, *projectil*, *reptil*, *servil*, *textil*, *volatil*, etc.

(2) For unstrest *-ine*, pronounced *-in*, spell *-in*. Thus, *destin*, *disciplin*, *doctrin*, *engin*, *examin*, *imagin*, *medicin*, *sanguin*, etc.

(3) For unstrest *-ise*, pronounced *-is*, spell *-is*. Thus, *anis*, *moris*, *practis*, *premis*, *promis*, *treatis*.

(4) For unstrest *-ite*, pronounced *-it*, spell *-it*. Thus, *apposit*, *definit*, *favorit*, *granit*, *infinis*, *opposit*, *preterit*, *requisit*, etc.

(5) For unstrest *-ive*, pronounced *-iv*, spell *-iv*. Thus, *activ*, *detectiv*, *executiv*, *indicativ*, *motiv*, *positiv*, *vindictiv*, etc.

II. GENERAL RULE FOR WORDS IN -ED, PRONOUNCED -T.

Substitute or restore *t*, reducing also the double consonant to a single one. Thus, *cropt*, *dropt*, *stopt*, *topt*, *clapt*, *snapt*, *trapt*, *dipt*, *nipt*, *tript*, etc., *crost*, *tost*, *drest*, *prest*, *dasht*, *wisht*, *pusht*, etc.



And now here is publisht a THIRD LIST.

The Simplified Spelling Board and the Advisory Council have adopted, and they now publicly recommend, the simplified spellings contained in this Third List, covering the following classes of words:

I. Words having *ea* pronounced as short *e*, as *hed*, *spred*, *tred*, *helth*, *welth*, *relm*, *heven*, *medow*, etc.; also words having *ea* pronounced as *a* before *r*, as *harken*, *hart*, *harth*.

II. Preterits and participles ending in *-ed* pronounced *-d*, as *armd*, *burnd*, *curld*, *fil'd*, *hangd*, *livd*, *raind*, *seemd*, *veild*, etc.

III. Words ending in unstrest *-ice*, pronounced *-is*, as *coppis*, *cornis*, *crevis*, *justis*, *lattis*, *notis*, *servis*, *artifis*, *edifis*, etc.

IV. Words ending in *-ve*, pronounced *-v*, preceded by *l* or *r*, as *delv*, *shelv*, *twelv*, *solv*, *resolv*, *carv*, *curv*, *serv*, *reserv*, etc.

A detailed statement of these four classes follows.

It will be observed that in this Third List, as in the preceding lists, the simplifications are easy, and, in respect to the letters or suffix affected, final.

In due course the three lists will be printed in one alfabetic order, and used as a basis for more extensiv simplifications to appear in a larger list or Vocabulary of Simplified Spellings.

It will be understood that an approval of these proposals does not bind one to a personal use of all the forms thus approved. The main purpose is to provide teachers and editors and others who wish to introduce simplified spellings as they have opportunity, with the permanent sanction and guidance of an authorized list of accepted simplifications.

The spelling of this circular is made to conform to the simplifications recommended herein (classes I-IV), in addition to those of the First and Second Lists.

#### I. WORDS HAYING EA PRONOUNCED AS SHORT E.

There is an important group of English words having *ea*, before one or more consonants, pronounced as short *e* (æ). In most of these words, the *ea* was formerly pronounced as long *ê*, which remains in some dialect use. The *ea* is still so pronounced in *break*, *great*, *jean*, *steak*, *yea*, and in some surnames, as *Beattie*, *Beatty*, *Eames*, *MacLean*, *Yeats*, etc. It was at one time, in some words,

a diphthong, pronounced ia. Even now, in some dialects, the *ea* is pronounced a and 'a. The Anglo-Saxon vowel swere respectively *e* (*breakfast*, *feather*, *leather*, *stead*, *tread*, etc.), *êa* (*bread*, *dead*, *lead*, etc.), *eo* (*heaven*), *êo* (*breast*), *æ* (*read*, *pret.*, *spread*, *cleanly*, *cleanse*, etc.). In the words of French origin the Old French and Middle English vowel was *e* (*endeavor*, *jealous*, *measure*, etc.).

The normal literary pronunciation of most of these words has been with short *e* (*ê*), since the beginning or middle of the eighteenth century. They are found speld with single *e* (tho that often ment *ê*, not *ë*), namely *bred*, *brêst*, *ded*, *dred*, *hed*, *heven*, *red* (*pret.*), etc., in Latimer, Surrey, Sackville, Spenser, Raleigh, Hooker, Bacon, Sylvester, Drayton, Shakespeare, Jonson, Heywood, Selden, Herbert, Walton, Howell, Milton, Cowley, Vaughan and most other writers of the sixteenth and seventeenth centuries. In some cases the simple form has prevaild, as *red* (*adj.*), *led* (*pret.*). *Stedfast* is very common, and was therefore included in the First List (the Three Hundred Words). It occurs in the English Bible (1611-1908), in the Book of Common Prayer, and in Latimer, Spenser, Sidney, Drayton, Milton, Butler, Bunyan, Dryden, Thomson, Shenstone, Milman, etc.

Many other words now pronounced and speld with simple short *e*, were formerly often pronounced, in the Tudor period, with long *ê*, and speld with *ea*, as *healp*, *neast*, *reast*, *shead*, etc., for the earlier *help*, *nest*, *rest*, *shed*, etc. These have been simplified. Why not simplify the rest? The simplifications is obvious, easy, and final.

The following is a list of the primary words and their commonest derivates, with the simplifications. Six are merely preterit forms (markt with a dash prefixt), and one is a suffix:

already	ALREDY	dread	DRED
bread	BRED	—dreamt	—DREMT
breadth	BREDTH	endeavor	ENDEVOR
breakfast	BREKFAST	feasant	
breast	BREŒT	(pheasant)	FESANT
breath	BRETH	feather	FETHER
cleanly	CLENLY	head	HED
cleanse	CLENSE	-head (-'hood)	-HED
dead		leaven	LEVEN
deaden	DED	meadow	MEDOW
deadly	DEDEN	—meant	—MENT
deaf	DEDLY	measure	MESURE
deafen	DEF	peasant	PESANT
—dealt	DEFEN	pheasant—see feasant	
death	—DELT	pleasant	PLESANT
	DETH	pleasure	PLESURE

health	HEALTH	steady	STEDY
heather	HETHER	stealth	STELTH
heaven	HEVEN	sweat	SWET
heavy	HEVY	thread	THRED
instead, in stead	INSTED, IN STED	threat	THRET
jealous	JELOUS	threaten	THRETN
jealousy	JELOUSY	treacherous	TRECHEROUS
lead (metal)	LED	treachery	TRECHERY
leaden	LEDEN	tread	TRED
—leant	—LENT	treadle	TREDLE
—leapt (Eng.)	—LEPT	treasure	TRESURE
leather	LEATHER	treasurer	TRESURER
—read ( <i>pret.</i> )	—RED	treasury	TRESURY
ready	REDY	wealth	WELTH
realm	RELM	weapon	WEPON
spread	SPRED	weather	WETHER
stead	STED	zealot	ZELOT
steadfast	STEDFAST	zealous	ZELOUS

The ordinary derivatives and familiar compounds not named in the above list include *breaded, breasted, dreaded, headed, leaded, measured, threaded, treasured, etc.*, *breathless, deathless, featherless, headless, measureless, weaponless, etc.*, *deadly, deathly, heavenly, feathery, heady, healthy, leathery, stealthy, thready, wealthy, etc.*, *dreadful, healthful, etc.*, *deadness, deafness, healthiness, pleasantness, steadfastness, etc.*, *peasantry, pleasantry, etc.*, *heavily, jealously, readily, stealthily, etc.*, *ahead, behead, headlong, headstrong, etc.*, *bedstead, farmstead, homestead, beebread, sweetbread, etc.*, *deadenng, deafening, spreading, threatening, etc.*, *unhealthy, unleavened, unpleasant, unsteady, etc.* All these, of course, will be simplified in the same way, by omitting *a*, namely, *breded, brested, dreded, heded, breathless, heavenly, pleasantly, hedy, helthy, thredy, rediness, spreding, thretnng, etc.*

It may be thought that words like *ready* and *already*, and derivatives and inflections like *heady, steady, thready, dreaded, threaded, spreading, etc.*, reduced by the mere omission of the *a*, to *redy, alredy, hedy, stedy, thredy, heded, dreded, breded, spreding, etc.*, require then a doubling of the consonant, in keeping with the analogy of *reddish, bedded, bedding, etc.* And it is true that *ready, steady, dreaded, spreading, etc.*, if the *a* had been always dropt, and the vowel shortened, in the sixteenth century, would have become regularly *reddy, stedly, dredded, spredding, etc.* Such forms are in fact common in print until the nineteenth century (Spenser, Sylvester, Drayton, Bunyan, Mitford and Landor have *steddy*, Milton has *dredded*, Lodge has *spredding*, Mitford has *reddy, etc.*), and they abound to-day in writing that escapes print. But this analogy has never been dominant except in words whose origin was not obvious. Words that were seen

to be of Latin or Greek origin have kept the consonant single if it is single in the original language, as *credit, edit, meditate, element, city, pity, copy, solid, study, etc., metal, petal, critic, conic, onyx, cynic, etc.* The readoption of *reddy, stedly, dredded, spredding, etc.,* while not unreasonable, would seem to favor a principle that can not be conveniently applied to words of obvious Latin and Greek origin. If so applied, it would revive spellings like *crededit, citty, coppy, studdy, etc.,* and require also *medditate, ellement, rappid, etc.*

In a few words *ea* before *r*, earlier pronounced *ê*, has past thru *ê* to *æ* (*â* long) and thence to *â*, and are now pronounced as if speld with *a* before *r*. They were in fact often so speld in the sixteenth and seventeenth centuries. It is recommended that the *e* be omitted. The following are the words:

hearken  
heart  
hearth

HARKEN (First List)  
HART  
HARTH

II. WORDS HAVING -ED PRONOUNCED AS -D.

In its first publication containing a series of simpler spellings, the "List of common words speld in two or more ways," Circular No. 2, March 21, 1906, the Simplified Spelling Board recommended the choice in some seventy special cases, of the spelling *-t*, as still existing and widely sanctioned in those cases, for the preterits and perfect participles of so-called regular verbs ending in *-ed* pronounced *-t*. In the Second List (No. 18, January 30, 1908), the rule was extended to cover all cases. The change was urged for reasons of truth and convenience; but abundant authority was given in the long usage of the great writers.

The preterits speld with *-t* were recommended for general adoption first, on the ground that they were already in some use. It now seems desirable to extend the recommendation to the preterits in *-ed*, pronounced *-d*, and formerly often speld with simple *d*, as in *armd, deemd, burnd, raind, renderd, etc.*

The ending speld *-ed* was at first pronounced *-ed*, in every instance. In certain positions the vowel tended to fall out of utterance, and for several centuries the pronunciation waverd between *-ed* and *-d*, and the words were speld accordingly. It may be taken as a rule that in any book printed before about 1630 words printed with *-ed* were pronounced with an audible *-ed*, and words pronounced with *-d* were printed with *-d* or *'d*. It was not till the nineteenth century that the custom of printing the ending uniformly *-ed*, whether so pronounced or not, became fixt in common use.

Only a few spellings with simple *d* for the earlier *-ed*, now remain out of the former wide use, and they are somewhat disguised in form (*paid*, *staid*, *shod*, etc.). But the whole array of words so simplified may be found in standard writers from Latimer, Surrey, Sackville, thru Spenser, Hooker, Lodge, Sylvester, Drayton, Shakespeare, Jonson, Heywood, Selden, to Howell, Milton, and Cowley. They wrote and printed forms like *armd*, *deemd*, *reard*, *kild*, etc., even *bruisd*, *rousd*, *usd*, etc., without the apostrophe. (See the lists on pp. succeeding. From about 1590 these forms often appeared also with the apostrophe, *arm'd*, *deem'd*, *rear'd*, *kil'd* or *kill'd*, *bruis'd*, etc. Both forms, *-d* and *'d*, were common in prose and verse alike. From the Restoration to the beginning of the nineteenth century the spelling *'d* was the common custom in prose, and the regular fashion in verse (Dryden, Prior, Pope, Thomson, Young, Gray, Cowper, etc.). In the first half of the nineteenth century also the spelling *'d* continued in verse, as in Scott, Byron, Rogers, Campbell, Keats, Shelley, Wordsworth, Tennyson, etc.; but since the petrifaction of spelling under recent publishers, from about 1850, editions of the poets are usually printed with *-ed* instead of the *-d*, *'d*, or *-t* of the authentic editions. This produces uniformity, but it conceals the truth.

But even the apostrophe is not needed in this case. It is not used in other cases where the silent *e* has been omitted in print as in *paid* (*payed*, *paied*), *staid* (*stayed*, *staied*), and the like, and in all the plurals now having *-s* (formerly *-es*), as *hats*, *books*, *caps*, *boots*, etc., and in inflections of verbs, as *cracks*, *slips*, *books*, etc. The apostrophe remains in common use only in the possessiv. In the possessiv it was inserted, first in proper names (about 1590), without any regularity (*Plato's*, *Cæsar's*, *God's*, *about* *Platos*, *Cæsars*, *Gods* or *Goddess*, etc.), and it did not become fixt until far into the eighteenth century. It is not used in *its*, *ours*, *yours*, *hers*, *theirs*. It is at this day often omitted in certain positions, especially in compounds, as in *cat'spaw*, *dog'sear*, *monksbane*, etc.; in names of societies and corporations and in public signs, as in *Farmers National Bank*, *Teachers College*, *Ladies Cabin*, etc.; and in place-names, as in *Kings* (county), *Dobbs Ferry*, etc.

The simplification of *-ed* to *-d* has been accepted by all in some words which end, in the infinitiv, in a vowel digraf; namely, *paid*, earlier *payed* and *paied*; *staid*, earlier *stayed* and *staied*; and *shod*, contracted from the participle of *shoe*, before *shoe* changed its pronunciation from *shô* to *shû*. *Paid* and *staid* are relics of a group of simplified forms which included *flaid*, *plaid*, *praid*, *straid*, *allaid*, *betraid*, *decaid*, *dismaid*, etc., *cloid*, *destroid*, *emploid*, etc. Other relics of this simplification appear in certain participles which have lost their association with their verbs, and are used only as adjectives, namely, *afraid*, (earlier *afrayed*, *affrayed*),

*afeard* (earlier *afeared*), *fond* (earlier *fanned*). So also *scald* (Shakespeare) for earlier *scalled*, and *bald*, adj., for earlier *balled*. So, too, the adjectives *lewd*, *shrewd* (earlier *lewed*, *shrewed*). An isolated case is *made*, for earlier *maked*, *makede*.

In some preterits and participles the vowel before *d* disappeared before the Anglo-Saxon period; namely, *laid*, *said* (Milton, Butler and Vaughan have *sed*) and *heard*; *had*; *could*, *should* and *would*; *sold* and *told*.

It will be noticed that the forms having *-ed* pronounced *-d* are such as have in the infinitive, as pronounced, a final sonant. It is only when the *-ed* is preceded by a sonant, other than *d*, that the weak vowel falls out of utterance, and the two sonants come together, *lived*, *seemed*, *barred*, etc., becoming *liv'd*, *seem'd*, *barr'd*, that is *livd*, *seemd*, *bard*. The rule is: If the infinitive ends in any sonant consonant except *d*, namely, *b*, *g*, *l*, *m*, *n*, *ng*, *r*, *s* = *z*, *th* = *dh*, *v*, or *z*, or by *h*, or by any vowel or diphthong, the *e* of the added *-ed* becomes in ordinary use silent, and may be omitted. Examples are: *Ribbed* *ribd*, *rigged* *rigd*, *killed* *kild*, *rimmed* *rimd*, *tanned* *tand*, *ringed* *ringd*, *breathed* *breathd*, *lived* *livd*, *sneezed* *sneezd*, *buzzed* *buzd*, *hurrahed* *hurrahd*. If the word contains *s* pronounced *z*, the omission of *e* would produce the sequence *-sd*, which is not satisfactory, tho such forms were formerly in some use: *raisd*, *pleasd*, *rousd*, *bruisd*, *usd*, etc. Until the *s* is changed to *z*, it seems best to retain the present spelling in full: *raised*, *pleased*, *bruised*, *used*, etc.

If the final vowel or diphthong as pronounced is represented by *-aw*, *-ew*, or *-ow*, or by *-ay*, *-ey*, or *-oy*, as in *claw*, *hew*, *flow*, etc., *play*, *survey*, *annoy*, *volley*, etc., the *e* of *-ed* can be omitted, as in *clawd*, *hewd*, *flowd*, *followd*, etc., *playd*, *surveyd*, *annoyd*, *volle:d*, etc. But if it is represented by *-ie*, or by *-y* reverting to the original *-ie-* in inflections, the *e* of *-ed* remains, as in *died*, *tried*, *complied*, etc., *carried*, *married*, etc. Such forms were at one time written *dide*, *tride*, *complide*, etc., (like *made*), sometimes *di'd*, *tri'd*, *compli'd*, etc., *carr'i'd*, *marri'd*, etc.

If the infinitive as spelled contains a silent *e* after a single consonant preceded by a long vowel not represented by a digraph (a. . . e, e. . . e, i. . . e, o. . . e, u. . . e, as in *cane*, *revere*, *bribe*, *robe*, *rule*, etc.), the *e* can not well be omitted at present, because it is in effect a diacritic of the vowel pronounced; as in *caned*, *revered*, *bribed*, *robed*, *ruled*, etc. But the forms *can'd*, *rever'd*, *brib'd*, *rob'd*, *rul'd*, etc., have long been in familiar use.

The simplification of *-ed* pronounced *-d*, to *d* is peculiarly convenient in the preterits of verbs which end in the infinitive in unstressed *-el*, *-il*, *-al*, *-ol*, as *level*, *ravel*, *travel*, *cancel*, etc., *cavil*,

*metal, carol*, etc. These preterit forms and other inflections and derivatives are found in the ordinary spelling either with a double *l* or with a single *l* as *travelled* or *traveled*, *travelling* or *traveling*, etc. As both spellings exist, the words fall under the head of "Words speld in two or more ways," and were mentioned as such in the circular of that title (No. 2, March 21, 1906), in connection with verbs in unstress *-et*, with *tt* or *t* (*rivettted* or *riveted*, etc.).

But the simpler spellings *leveled*, *raveled*, *traveled*, *canceled*, etc., may be simplified further by omitting the silent *e* before *d*. The simplified forms of the type *leveld*, *raveld*, *reveld*, *traveld*, *trammeld*, *canceld*, *channeld*, etc., are now recommended by the Board and Advisory Council. In the alfabetic vocabulary the verbs in *-el* will be entered with the inflected and derived forms as follows: *leveld*, *leveler*, *leveling*, etc., *traveld*, *traveler*, *traveling*, etc. These are exactly analogous to forms from verbs in *-er*, as *barterd*, *barterer*, *bartering*, etc. And such forms have ample literary precedent. Lodge, Niccols and Milton have *leveld*, Sylvester has *raveld*, Spencer has *traveld*, Shakespeare, William Browne ('Britannia's Pastoralls'), Sir Thomas Browne ('Religio Medici') and Milton have *canceld*, Sidney, Drayton, Selden and Milton have *enameld*, Shakespeare has *cudgeld*, *quarrelld*, etc., Milton has *emboweld*, and so on.

The silent *e* of *-ed* in preterits like *babbled*, *dazzled*, etc., from verbs ending in *le*- pronounced *-el* (*-el* or *-l*), as *babble*, *dazzle*, *struggle*, *battle*, etc., can not well be omitted, until the spelling of the words ending in *-le* (*-ble*, *-cle*, *-dle*, *-fle*, *-gle*, *-kle*, *-ple*, *-zle*) is regulated. They require separate consideration. If in these words in *-le* we restore the former *-el*, the preterit may be simplified by writing it *-eld*, namely, *babbeld*, *dazzeld*, etc. The question of the double consonant, and the exact notation of the weak syllable (whether *-el*, or *-el*, or *-l* or *-l*), would remain to be determind. Puttenham has *dazeld*, Milton *embatteld*, etc.

The spelling with simple *d* applies with peculiar fitness to the preterits of words in *-ile* and *-ine* when simplified to *-il*, *-in*. Thus, while the preterits of the simplified forms *domicil*, *examin*, *imagin*, etc., would still be *domiciled*, *examined*, *imagined*, etc., the simplification here proposed would complete the regulation, and make *domicild*, *examind*, *imagind*, etc., the accepted, as well as the correct forms.

The neat and succinct appearance of the simplified forms of the words in *-ed*, as reduced to simple *-d*, with the reduction, in many cases, of the doubled consonant preceding, is manifested by placing them in line with similar simplifications in *-t*:

NABD  
NAPT

RIBD  
RIPT

SOBD  
SOPT

BAGD  
BACKT

SNEEZD  
CREAST

WHIZD  
STREST

CLUBD	DOGD	KILD	MAND	GRIEVD	ESTEEMD
CLIPT	DOFT	KIST	MENT	BRIEFT	EXPREST

Observe also the symmetry of the existing parallel forms of certain preterits, when both are speld with accuracy:

DWELD	SPELD	SPILD	SPOILD	PEND	DREAMD
DWELT	SPELT	SPILT	SPOILT	PENT	DREMT

The Board has not undertaken to decide which of these forms, as spoken, is to be preferd. Both are correct. Whichever form you use, spell it accurately.

The preterits, participles, and participial adjectivs in *-ed* pronounced *-d*, number more than fourteen hundred. Those that were in use in the sixteenth and seventeenth centuries, and many of earlier use, were speld, often or usually, with simple *d*, alternating, after about 1590, with *-'d*. Abundant authority for such spellings may be found in the original works of the standard writers. Exact references can be given for the following among many thousands of examples:

Caxton (c. 1412-1492) has *kild*, *kyld*, *payd*, *playd*, *prayd*, *answerd*, *coverd* (*couerd*), (*delyuerd*), *enterd*, etc.

Spenser (1552-1599) has *armd*, *bowd*, *breathd*, *cald*, *child* (*chilled*), *cloyd*, *cond*, *dimd*, *drownd*, *duld*, *feld*, *hangd*, *heald*, *kild*, *mard*, *mournd*, *playd*, *prayd*, *puld*, *queld*, *raizd*, *reard*, *robd*, *seemd*, *skild*, *soild*, *spild*, *stird*, *strowd*, *sumd*, *sweld*, *tand*, *thrild*, *turnd*, *viewd*, *weend*, *wingd*, *abandonnd*, *abhord*, *adornd*, *allayd*, *annoyd*, *answerd*, *appald*, *appeard*, *attaind*, *benuumbd*, *colord*, *compeld*, *conceald*, *congeald*, *containd*, *decaid*, *decayd*, *delayd*, *devourd*, *displaid*, *enjoyd*, *enrold*, *exceld*, *expeld*, *fulfild*, *harbourd*, *harrowd*, *injerd*, *labournd*, *mentiond*, *occasiond*, *odournd*, *over-ruld*, *perceivd*, *prejerd*, *redeemd*, *resolvd*, *returnd*, *reveald*, *transferd*, etc.

Hooker (1553-1600) has *cald*, *puld*, *abhord*, *controld*, *exceld*, *repeld*, etc.

Sidney (1554-1586) has *burnd*, *feard*, *kild*, *plaid*, *puld*, *rubd*, *skild*, *turnd*, *conteind*, etc.

Lodge (c. 1556-1625) has *armd*, *bard*, *breathd*, *cald*, *dewd*, *drownd*, *erd*, *faind*, *fawnd*, *feard*, *feld*, *fild*, *frownd*, *gaind*, *hangd*, *hemd*, *joynd*, *longd*, *mard*, *pend*, *plaid*, *pulde*, *rigd*, *robd*, *saild*, *seald*, *serud*, *soard*, *spoild*, *steeld*, *strewd*, *thrald*, *traind*, *turnd*, *wowd*, *wrongd*, *assaild*, *attaind*, *betraid*, *conceald*, *condemnd*, *confirmd*, *contrould*, *disdaind*, *fulfild*, *interd*, *ordaind*, *proclaimd*, *recald*, *relievd*, *renownd*, *resolvd*, *returnd*, *sustaind*, *timberd*, etc.



Sylvester (1563-1617) has *armd*, *bild*, *browd*, *clogd*, *curbd*, *crownd*, *downd*, *drownd*, *duld*, *hangd*, *plaid*, *quaid*, *queld*, *reard*, *rigd*, *robd*, *skild*, *tild*, *whirld*, *wrongd*, *abhord*, *answerd*, *assaid*, *checkerd*, *differd*, *exceld*, *rebelld*, *reveald*, *tatterd*, etc.

Drayton (1563-1631) has *dragd*, *faild*, *hurld*, *skild*, *wrongd*, *buskind*, *controld*, *debard*, *decaid*, *obtaind*, *preferd*, *transferd*, etc.

Shakespeare (1564-1616) has *breathd*, *cald*, *cloid*, *crownd*, *culd*, *feard*, *fld*, *gald*, *hangd*, *kild*, *mard*, *seald*, *speld*, *spild*, *staind*, *straid*, *straind*, *turnd*, *vowd*, *accustomd*, *angerd*, *beggerd*, *blisterd*, *conceald*, *conquerd*, *coverd*, *distild*, *disturbd*, *enamowrd*, *entertaind*, *flowerd*, *imagind*, *interd*, *martird*, *murderd*, *piniond*, *proportiond*, *slaughterd*, *temperd*, *tuterd*, etc.

Jonson (1573-1637) has *bard*, *cald*, *fld*, *furd*, *kild*, *plaid*, *reard*, *shund*, *spewd*, *stird*, *blazond*, *compeld*, *conferd*, *embroid*, *emploid*, *extold*, *flatterd*, *preferd*, etc.

Heywood (c. 1575?-c. 1650?) has *curbd*, *fld*, *kild*, *plaid*, *pleasd*, *ploud*, *sowd*, *tild*, *abhord*, *adord*, *burdend*, *conferd*, *controld*, *mar-  
tiald*, etc.

Selden (1584-1664) has *aimd*, *claimd*, *daubd*, *hangd*, *joind*, *livd*, *turnd*, *abstaind*, *affirmd*, *answerd*, *betterd*, *bestowd*, *compeld*, *confirmd*, *coverd*, *deceivd*, *deliverd*, *entertaind*, *examind*, *honord*, *maintaind*, *offerd*, *performd*, *receivd*, *reckond*, *referd*, *reformd*, *remem-  
berd*, *repeld*, *silverd*, *summond*, *transferd*, etc.

Wither (1588-1667) has *bard*, *begd*, *blurd*, *cald*, *clogd*, *cloyd*, *fangd*, *gald*, *jagd*, *kild*, *mand*, *pend*, *scand*, *spoyld*, *straid*, *allaid*, *allowd*, *annoyd*, *betraid*, *cankerd*, *conceald*, *controld*, *delayd*, *employd*, *extold*, *interd*, *pamperd*, *pesterd*, *preferd*, etc.

Quarles (1592-1644) has *armd*, *crownd*, *foild*, *frownd*, *spurnd*, *abhord*, *alterd*, *appeard*, *beleaguerd*, *cloysterd*, *condemnd*, *conquerd*, *contemnd*, *destind*, *dissolvd*, *scandald*, *slanderd*, etc.

And so with other writers. Such forms abound in Skelton, Latimer, Golding, Kendall, Tusser, Gascoigne; in Baldwin, Sackville, Churchyard, Ferrers, Higgins, Blenerhassett, Niccols and the other poets of the 'Mirror for Magistrates' (1559-1575-1587-1610); in the ballads, broadsides, plays, histories, anthologies, letters and documents of the Tudor and Stuart periods.

Camden (1551-1623) has *burnd*, *gald*, etc.; Florio (c. 1555?-1625) *culd*, *luld*, *rubd*, *stild*, etc.; Cotgrave (c. 1570?-c. 1634) *bagd*, *bild* (billed), *furd*, *jagd*, etc.; George Herbert (1593-1633) *outlawd*, *seald*, etc.; Howell (1594-1666) *drownd*, *coverd*, *deliverd*,

*discoverd, observd, etc.; Cowley (1618-1667) bowd, plaid, sweld; Vaughan (1621-1695) scornd, happend, whitend.*

Milton (1608-1674), poet, scholar, statesman, a reformer in all things, used, in prose and verse alike, such spellings as *arnd, awd, barbd, bowd, calld, chaind, claimd, coold, crownd, curld, deemd, doomd, draind and dreind, dreamd, drown, drugd, faild, feard, foild, formd, frownd, gaind, grievd, groand, joind, livd, moovd daild, plaid, plaind, pleasd, pourd, raind, reard, roard, scornd, seemd, shund, sinnd, sowd, spoild, staid, turnd, veild, warnd, warnd, weend, weighd, wingd, witherd, wonderd, wreathd, abandond, accusomd, adorn, alterd, answerd, appeard, arrayd, assaild, assayd, bannerd, belongd, bereavd, bestowd, borrowed, broiderd, colourd, concernd, confirmd, conformd, considerd, constraind, conveyd, conveyd, deserud, despaird, despoild, destind, destroyd, discern, discern, dissolvd, distemperd, disturbd, enamourd, endowd, enterd, enterd, exclaimd, extold, flutterd, founderd, hallowd, involvd, ministerd, numberd, obeyd and obeid, observd, occasiond, offerd, ordaind, perceivd, pillard, proclaimd, prolongd, purloind, questiond, ransomd, receivd, recoild, recoverd, registerd, remaind, renownd, returnd, reveald, scatterd, severd, shatterd, shelterd, slumberd, squad-rond, summond, sustaind, temperd, transferd, transformd, waterd, wonderd, etc., and of course also such forms as *dropt, lopt, slipt, lipt, stept, etc.*, as well as *rime, fantasm, solem, etc.* This is the Milton whose memory the world has lately been celebrating.*

The habit of spelling with simple *-d* has never been wholly abandond. Any one who has seen original manuscripts of the eighteenth century known that such spelling was then very common. This fact comes to light in print, when the editors and printers refrain from inserting the *e*, or the apostrophe, into the author's text. Accurate reprints of the originals show the simple *-d*. This is the case, for example, in a recent critical edition of the letters of the great Puritan statesman, Samuel Adams ('Writings,' ed. Cushing, 1907). He regularly used, in his letters to the Revolutionary leaders such spellings as *arnd, burnd, heald, judgd, saild, seizd, signd, starvd, steerd, straind, abandond, allowd, chagrind, complaind, concernd, conceivd, considerd, declind, designd, despaird, destind, disturbd, employd, favord, governd, injormd, injurd, involvd, labord, maintaind, observd, receivd, re-peald, threatend, etc.*

From the above and other examples, the following are selected as typical cases, covering all the varieties of termination (*-ld, -md, -nd, -rd, -ngd, -vd, etc.*), and set in column form. The fuller form is given in the first column, the simplified form in the second.

ailed	AILD	aired	AIRD
aimed	AIMD	armed	ARMd

assailed	ASSAILD	imagined	IMAGIND
bailed	BAILED	impelled	IMPELD
bobbed	BOBD	killed	KILD
boiled	BOILD	levelled, leveled	LEVELD
burned	BURND	lived	LIVD
called	CALD	manned	MAND
cancelled.	CANCELD	marred	MARD
carved	CARVD		
centered, centred	CENTERD	occurred	OCCURD
clubbed	CLUBD	offered	OFFERD
coined	COINED	opened	OPEND
compelled	COMPELLED	panelled, paneled	PANELD
conferred	CONFERD	peeled	PEELD
contained	CONTAIND	pulled	PULD
controlled	CONTROLD	railed	RAILD
cornered	CORNERD	rained	RAIND
curbed	CURBD	rammed	RAMD
curled	CURLD	reared	REARD
curved	CURVD	referred	REFERD
destined	DESTIND	reformed	REFORMD
dimmed	DIMD	ribbed	RIBD
dragged	DRAGD	rimmed	RIMD
drubbed	DRUBD	ringed	RINGED
drugged	DRUGD	reined	REIND
drummed	DRUMD	retained	RETAIND
dubbed	DUBD	rolled	ROLD
entered	ENTERD	scattered	SCATTERD
examined	EXAMIND	seemed	SEEMD
expelled	EXPELLED	served	SERVD
failed	FAILD	shattered	SHATTERD
favored	FAVORD	shelved	SHELVD
feared	FEARD	skinned	SKIND
felled	FELD	smoothed	SMOOTHD
fettered	FETTERD	snarled	SNARLD
fevered	FEVERD	sneezed	SNEEZD
filled	FILD	spelled	SPELD
foiled	FOILD	spilled	SPILD
followed	FOLLOWD	stammered	STAMMERD
fulfilled	FULFILD	stilled	STILD
furled	FURLD	swarmed	SWARMD
gained	GAIND	tempered	TEMPERD
grieved	GRIEVD	trained	TRAIND
gummed	GUMD	travelled,	
hammered	HAMMERD	traveled	TRAVELD
hanged	HANGD	turned	TURNED
happened	HAPPENED	uttered	UTTERD
hemmed	HEMD	veiled	VEILD
hindered	HINDERD	veined	VEIND
hummed	HUMD	walled	WALD

peered  
preferred

PEERD  
PREFERD

webbed  
withered

WEBBD  
WITHERD

### III. WORDS HAVING *-ICE* PRONOUNCED AS *-IS*

The Second List (January 30, 1908) includes a rule to simplify the unstrest ending *-ise* (with short *i*), to *is*. The words concerned are *anise*, *mortise*, *practise*, *premise*, *promise*, *treatise*, simplified respectively to *anis*, *mortis*, *practis*, *premis*, *promis*, *treatis*. In the discussion in the Board, it was proposed that in the near future the words ending in unstrest *-ice* with short *i*, should be simplified in like manner. The proposal was repeated in the Second List (p. 13). It has now been officially adopted. It is, in fact, open to no objection. The simplification is obvious, easy, and final.

The following are the principal words concerned:

accomplice	ACCOMPLIS	jaundice	JAUNDIS
apprentice	APPRENTIS	justice	JUSTIS
armistice	ARMISTIS	lattice	LATTIS
artifice	ARTIFIS	licorice	LICORIS
auspice	AUSPIS	malice	MALIS
avarice	AVARIS	matrice	MATRIS
benefice	BENEFIS	notice	NOTIS
bodice	BODIS	novice	NOVIS
brattice	BRATTIS	office	OFFIS
chalice	CHALIS	orifice	ORIFIS
cicatrice	CICATRIS	poultice	POULTIS
coppice	COPPIS	practice	PRACTIS
cornice	CORNIS	precipice	PRECIPIIS
cowardice	COWARDIS	prejudice	PREJUDIS
crevice	CREVIS	prentice	PRENTIS
centrifuge	DENTIFRIS	pumice	PUMIS
edifice	EDIFIS	service	SERVIS
fortalice	FORTALIS	solstice	SOLSTIS
interstice	INTERSTIS	surplice	SURPLIS

There is one word ending in unstrest *-uce* that virtually belongs to the class of words in *-ice*. This is *lettuce*, which was formerly speld also *lettice* (as by Jeremy Taylor), beside *lettise*, *lettis*, and *lettus*. The spelling *lettis* should be restored:

lettuce, lettice

LETTIS

An additional advantage in the simplification of these words from *-ice* to *-is* will be that the *-ed*, then coming after *s* in the derivative preterits, perfect participles and participial adjectives in *-ed* pronounced *-t*, can be simplified to *-t*. Thus:

apprenticed	APPRENTIST	noticed	NOTIST
beneficed	BENEFIST	poulticed	POULTIST
corniced	CORNIST	practiced	PRACTIST
creviced	CREVIST	prejudiced	PREJUDIST
jaundiced	JAUNDIST	prenticed	PRENTIST
latticed	LATTIST	surpliced	SURPLIST

This opens the way for a similar simplification to come in preterit forms like *danced*, *lanced*, *advanced*, *enhanced*, *fenced*, *commenced*, *minced*, *convinced*, *bounced*, *announced*, *pronounced*, etc., namely, *danst*, *lanst*, *advanst*, *enhanst*, *fenst*, *commenst*, *minst*, *convinst*, *bounst*, *announst*, *pronounst*, etc. Forms like these with *-st* (beside *-s't*, *-c't*), *-c't* abound in the works of Spenser, Sylvester, Shakespeare, Jonson, Milton, and their contemporaries.

All the older words in the *-ice* list were formerly speld also, some of them exclusively, with *s*, either *-is* or *-ise*, and the simplification is therefore in great part the restoration of a correct form. *Practise* preceded *practice*. *Service* was often *servis*, *malice* was often *malis*, and so on. In the case of *bodice* the earlier form was *bodies*, the plural of *body*. In only a few cases, namely, *artifice*, *edifice*, *office*, *orifice* (Lat. *-ficium*), *dentifrice* (Lat. *-fricium*), *prejudice* (Lat. *-judicium*), *surplice* (Lat. *-pellicium*), was the consonant in question originally *c*, and it was in Latin pronounced as *k*. In one word, the earlier *-ice* has become *-is* the former *nourrice*, *norice*, *nurce* (Lat. *nutrix*, *nutricem*) has become *nurse*.

#### IV. WORDS ENDING IN -VE PRECEDED BY L OR R.

Among the many words ending in silent final *e* in which the final *e* can be omitted without throwing the other letters into associations momentarily confusing, are the words ending in silent *e* after *v*, preceded by *l* or *r* (*-lve*, *-rve*). The silent final *e* in these sequences has no effect, and may be omitted therefore without producing any effect. The Board has already recommended the omission of the inert *e* in the suffix *-ive*. See Second List, words in *-IVE*, Circular No. 18, p. 14.

The words in *-lve* subject to the simplification include four of native origin (*delve*, *helve*, *shelve*, *twelve*), and three small groups of words from Latin primitives in *SOLVERE* (*solve*, *absolve*, *evolve*), *dissolve*, *resolve*), *VOLVERE* (*circumvolve*, *convolve*, *devolve*, *involve*) and *VALVA* (*valve*, *bivalve*, *univalve*):

absolve	ABSOLV	involve	involve
bivalve	BIVALV	resolve	RESOLV
circumvolve	CIRCUMVOLV	revolve	REVOLV
convolve	CONVOLV	shelve	SHELV

delve	DELV	solve	SOLV
devolve	DEVOLV	twelve	TWELV
dissolve	DISSOLV	univalve	UNIVALV
evolve	EVOLV	valve	VALV
helve	HELV	selves	SELVES

The *e* would be omitted also, of course, in plurals and other inflections. Thus, *helvs, shelvs, valvs, etc., delvs, solvs, etc.* This applies to the plural of *self*, thus, *selvs, ourselvs, yourselvs, themselvs.* Milton has our *selvs.* Fuller has *twelv.*

Three words formerly in this class are now separated from it by the loss, in pronunciation, of the *l*, namely, *calve, halve, and salve.* These could be simplified only to *câv, hâv, sâv,* or to *cav, hav, sav.* They may be let alone for the present.

The common words in *-rve* are as follows:

carve	CARV	preserve	PRESERV
conserve	CONSERV	reserve	RESERV
curve	CURV	serve	SERV
deserve	DESERV	starve	STARV
nerve	NERV	subserve	SUBSERV
observe	OBSERV	swerve	SWERV

Other classes are reserved for future consideration.

THE SIMPLIFIED SPELLING BOARD

1 MADISON AVENUE, NEW YORK.

January 25, 1909.

THE ENGLISH IMPLIFIED SPELLING SOCIETY.

44, GREAT RUSSELL STREET, LONDON, W. C.

President:

The Rev. Professor Skeat, Litt. D., LL. D., D. C. L., Ph. D.

Vice-Presidents:

- |   |   |
|---|---|
| Henry Bradley, M. A., Ph. D.                              | Thomas R. Lounsbury, LL. D., L. H. D.                             |
| Professor James W. Bright, M. A., Ph. D.                  | (President of the Simplified Spelling Board, U. S. A.)            |
| The Right Hon. James Bryce, D. C. L., LL. D., F. R. S.    | Thomas J. Macnamara, M. P., LL. D., M. A.                         |
| Andrew Carnegie, LL. D.                                   | Sir James A. H. Murray, M. A., LL. D., D. C. L., D. Litt., Ph. D. |
| Frederick J. Furnivall, M. A., Ph. D., D. Litt.           | D. C. L., D. Sc., M. D., etc.                                     |
| Sir William Ramsay, K. C. B., LL. D., D. Sc., M. D., etc. |   |

Committee:

- |                                  |  |
|----------------------------------|--|
| William Archer, M. A.            | Professor A. S. Napier, D. Litt., etc. |
| F. J. Furnivall, D. Litt., etc.  | Alfred W. Pollard, M. A.               |
| Henry Frank Heath, B. A., Ph. D. | John Stephen Westlake, M. A.           |
| R. Stanley Jevons, M. A., B. Sc. | Professor H. C. K. Wyld, B. Litt.      |

Secretary:

William Archer.

Hon. Treasurer:

Dr. Furnivall.

Corresponding Sec.:  
Walter W. Skeat, M. A.

The Simplified Spelling Society has been founded in order to promote a better understanding of the history of English Spelling; to advocate the gradual introduction of such reforms as shall remove the difficulties placed by our present chaotic spelling in the way of children and foreigners; and to provide teachers and others who are acutely conscious of these difficulties with an organisation for furthering their views.

Membership of the Society is open to all who (without committing themselves to any particular proposals) approve of the general principle that English Spelling ought to be brought more into harmony with reason and convenience, and are willing to sign a declaration to that effect.

The Minimum Annual Subscription is One Shilling, the Minimum Life Subscription, Twelve Shillings. Members are entitled to receive, gratis and post free, all the publications of the Society.

---

### EXPLANATORY NOTE.

(For the English Simplified Spelling Publications.)

---

The spellings adopted in the publications are designed merely to accustom the reader to a certain measure of change.

They consist, for the most part, in the dropping of manifestly superfluous letters. It is fully recognized that simplification, to be of any substantial value, whether in education or in common life, must go much further than this.

But, lest confusion be worse confounded, more fundamental reforms must be introduced with great caution, and after careful study of the complex problems involved. It is one of the objects of the S. S. S. to further this study. In the meantime, it endeavors in its publications to educate at once the seeing eye and the thinking mind.

Many seeming inconsistencies will doubtless be observed by the critical reader; some of them, in all probability, mere oversights. As absolute consistency is unattainable in a transition state, it has not been held necessary to aim at it too sedulously.

But many of the apparent inconsistencies have their reasons, which may or may not be deemed adequate.

The main principles kept in view have been (1) to do nothing which might probably have to be undone in the future; (2) to avoid all spellings, which in the absens of a systematic notation (especially for long vowels and difthongs), might leav the pronunsiation doubtful.

For example: No attempt is made to reduse to unity such forms as light, white, height, or great, late, bait, weight, or beet, bleat, deceit, mete, becaus there is as yet no consensus as to the notation to be ultimately adopted for these sounds.

The second "l" is dropt in "wil" and "spel", but not in "all" or "pull", becaus it seems likely that "wil" and "spel" may be final forms, which "al" and "pul" wil scarcely be.

The "gh" is dropt in "taut" becaus there is no danger of its having to be replased, and becaus no ambiguity of sound arises. It cannot be dropt in "ought" or "bought" until the symbol is finally chosen which shal represent the "au" sound.

Final "ce" is usually changed into "s," even at some slight risk of ambiguity, since final "s" in English generally represents the voist or "z" sound. This ambiguity, however, is not serious, and wil pass away as soon as the time is ripe for dealing radically with "s" and "z." Yet where, as in "since" and "hence," the change woud suggest a totally different word, the conventional spelling is retained.

This list of examples might be indefinitely extended. It is perhaps sufficient to show that seeming inconsistencies should be carefully examined before they are condemd.

#### SIMPLIFIED SPELLING SOCIETY

44, GREAT RUSSELL STREET, LONON, W. C.  
ENGLAND.



COUNTY ACADEMY ENTRANCE EXAMINATION.

Regulations 61 of the C. P. I., (page 81, Manual of School Law) is repealed and the following substituted in its place:

The regular mode of admission into county academies shall be by an entrance examination in the last week of the school term in June, on the common school course 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 1910). [*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. See also Reg. 99.] (2) *Language*. (3) *Drawing and Bookkeeping*. (4) *Geography and History*—Geography of Asia, Africa, Oceania, in detail, with a review of Canada. *History of Canada* (Hay or Calkin). (5) *General Knowledge*: (a) The five families, Crowfoot, Rose, Heath, Violet and Lily; with the important native trees and the common weeds injurious to agriculture. (b) The common rocks and minerals of Nova Scotia. (c) Common insects injurious to plants and animals. (d) A few of the common birds. (e) *Health Reader*, No. 2. (*Mechanic or Domestic or Rural Science*, or *Music* as in Regulation 99). 6. *Mathematics*.

COUNTY ACADEMY ENTRANCE EXAMINATION, TIME  
TABLE, JULY, 1909.

DATE.	TIME.	SUBJECT.
Tuesday 29th 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.
Wednesday 30th 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.

FROM THE REPORT OF THE COMMITTEE ON COLLEGE ENTRANCE  
REQUIREMENTS, NATIONAL EDUCATIONAL ASSOCIATION,  
U. S. A., 1899.

Three distinct terms seem to be needed:

- (1) *Program of studies*, which includes *all the studies offered* in a given school;
- (2) *Curriculum*, which means the *group* of studies schematically arranged for *any pupil* or *set* of pupils;
- (3) *Course of study*, which means the quantity, quality and method of the work in *any given subject* of instruction.

Thus the *program* of studies includes the *curriculum*, and may indeed furnish the material for the construction of an indefinite number of curriculums. The *course of study* is the unit, or element, from which both the program and the curriculum are constructed.

154. HIGH SCHOOL PROGRAM FOR 1908-09.

[Subject to modification for 1909-10 on recommendation by the Advisory Board, the changes, if any, to be published in the September *Educational Review* for the Atlantic Provinces.]

- (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) 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). 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 mark 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, providing *English* is one of the group.

(5). Two hours shall be given at examination for each paper which shall contain only eight questions.

(6). When a candidate wishes to raise a "High School Pass" to a "Teachers' Pass," he shall be required to make a mark 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 Foreign Languages but who have made the High School average pass on the other subjects, 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 Foreign languages, but who have made a Teachers' average pass on the other subjects, shall have the privilege of completing the pass at a subsequent examination by making at least 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 word misspelled.

(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.

## GRADE IX.

(English and any other *five* subjects imperative).

## 1. ENGLISH:—

(a) LITERATURE—Dickens' *A Christmas Carol* (Riverside) and Scott's *The Lady of the Lake*, 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.). Spotton (except Chap. XIX) and the study of the Wild Plants of the Phenological observations, with *Pteris*, *Aspidium*, *Asplenium*, *Onoclea*, *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; Conan Doyle's "Micah Clark."

(b) As in GRAMMAR:—Text book complete.

2. LATIN:—As in *Collar and Daniell's First Latin Book* complete, and "*Cæsar's Invasion of Britain*," by Welch and Duffield.

3. GREEK:—As in *White's First Greek Book*, lessons I to end of XLV.

Or FRENCH:—*Bertenshaw's Grammar*, Part II, and *Souvestre's "Le Serf."*

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*" or *Calkin's*; and oral lessons by teacher based on *Bourinot's "How Canada is Governed"* (three questions).

5. CHEMISTRY:—Inorganic, as in *Waddell* or *Williams*.

6. ARITHMETIC:—Text book complete.

7. ALGEBRA:—As in *Hall & Knight's Elementary* to end of Chapter XXVII.

8. GEOMETRY:—*Hall & Stevens' Euclid*, Book I, with all included exercises to the end of Proposition 48.

## GRADE XI.

[*Junior Leaving Examination.*]

(English and any other *five* subjects imperative.)

1. ENGLISH:—*Shakespeare's Merchant of Venice*, *Macaulay's Warren Hastings*. History of English literature as in *Meiklejohn*. For outside reading and theme writing: *Lorna Doone*.

2. LATIN:—Grammar and easy composition partly based on prose author read.

(a) *Cæsar's De Bell. Gall.*, Book I, and (b) *Vergil's Æneid*, Book I, with grammatical and critical questions.

3. GREEK:—Grammar and easy composition based partly on author read and *White's First Greek Book* completed. *Xenophon's Anabasis*, Book I, with grammatical and critical questions.

or FRENCH:—*Berthon's Specimens of Modern French Prose* omitting IV, VI and 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 thorough review of *Bertenshaw's Grammar*, parts I and II, with exercises complete.

or GERMAN:—As in *Joynes-Meissner* to lesson 44, with *Buchheim's Modern German Reader*, Part I, complete. Review of Grade X German.

4. HISTORY:—General History, as in *Swinton*.

5. PHYSICS:—As in *Gage's Introduction to Physical Science*.

6. PRACTICAL MATHEMATICS:—As in *Murray's Practical Mathematics*, except Chapter XI. Mensuration of surfaces and solids to be studied also as in *Eaton* or an equivalent.

7. ALGEBRA:—As in *Hall & Knight's Elementary Algebra* to end of Chapter XL, except Chapter XXIX to end of XXIXd.

8. GEOMETRY:—*Hall & Stevens' Euclid*, Books II, III and IV, with all included exercises and the "theorems and examples" italicized following each Book from I to IV.

## GRADE XII.

[*Senior Leaving Examination.*]

(Nine papers out of the 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).

1. ENGLISH (Two Papers) : (a) Lounsbury's *English Language*. History of English Literature as in Gwynn's *Masters of English Literature* (published by Macmillan Company, Toronto).
  - (b) Shakespeare's *Julius Cæsar* and *Hamlet*; Milton's *Paradise Lost*, Books I and II; Chaucer's *Canterbury Tales*, *The Prologue*, *The Knight's Tale* and *Nonne Prestes Tale*, (Skeat 2½6 edition); with the following books for outside reading and theme writing:—Pope's *Rape of the Lock*, Ruskin's *Sesame and Lilies*, Thackeray's *Henry Esmond*.
2. LATIN (Two Papers): (a) Bennett's *Latin Grammar* or equivalent; Bradley's *Arnold's Latin Prose Composition* to end of exercise XVIII; Sight Translation.
  - (b) Cicero's *Pro Lege Manilia* and *De Amicitia*; Vergil's *Æneid*, Books II and III.
3. GREEK (Two Papers) : (a) A thorough review of *White's "First Greek Book,"* Sight Translation; *Easy Composition* partly based on the prose author read.
  - (b) Xenophon's *Anabasis*, Books II, III and IV; Homer's *Iliad*, Book I.
4. FRENCH:—Molière's *L'Avare*; Mérimée's *Colomba*; Berthou's *Specimens of Modern French Verse*, Part I, 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, *Grammar and Composition* as in Joynes-Meissner.
6. ALGEBRA—Hall and Knight's *Higher Algebra*, Chapters 1-23 inclusive, chapter 32 to section 461, chapter 35, omitting cubics and biquadratics and (\*) paragraphs throughout the prescribed work.
7. GEOMETRY:—As in Hall and Stevens, Books V and VI; and Solid geometry; *Analytical geometry*, as in Wentworth's chapters, 1, 2 and 3.
8. TRIGONOMETRY:—*Plane and Spherical* as in Murray's.
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:—Myers' Ancient History (revised edition), Parts I, II and III.

(SCHEDULE B.)

PRESCRIBED FORM FOR PROVINCIAL HIGH SCHOOL EXAMINATION.

AT.....STATION.

To.....Inspector of Schools:

.....May, 190

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 hereby 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 85, "Provincial Examination of High School Students," as specified in the list below.

Candidates intending to take the M. P. Q. Examination (fee \$2.00, 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.



SYLLABUS  
OF  
THE UNIVERSITY POST-GRADUATE EXAMINATION.

---

110. (b). The testing provincial post-graduate examination shall be upon two series of papers—the *higher* of University “graduation distinction” standard, the *lower* of University “graduation pass” standard. The post-graduate examination “pass” shall require:—

1. A provincial pass (50%) in at least *one subject* of the higher standard.
2. A provincial pass in *five other subjects* of the Lower standard.
3. Certificates of the following University courses taken and passed by candidates shall be imperative and must be taken later than the first year of the University course, namely:—Logic and Psychology, and any two of the following: Ethics, Political Economy, Sociological Science, Modern Philosophy, History.

4. SYLLABUS OF THE HIGHER STANDARD.

[Two papers, three hours long, on each subject.]

I. ENGLISH.

(A) History of the English Language as in Lounsbury's “English Language” or “Emerson's History of the English Language.”

(B) History of Nineteenth Century English Literature, as in Herford's “The Age of Wordsworth” (1798–1832), and Walker's “The Age of Tennyson.” (1830–1870).

(C) A thorough knowledge of the following works:—Dowden's “Selections from Wordsworth,” Browning's *Shorter Poems* by Baker, Tennyson's *Shorter Poems* by Nutter, Palgrave's *Golden Treasury of Songs and Lyrics* (Book IV), Pancoast's “Standard English Prose” (the selections from Lamb to Stevenson).

(D) Ten Brink's *History of Early English Literature* (Vol. I).

(E) Bright's *Anglo-Saxon Reader* (the introduction and Parts I, II, and IV).

(F) Morris' Specimens of Early English Part I (Extracts ix to xviii inclusive).

[N. B. All candidates are expected to have a thorough knowledge of the principles of Composition. To ensure the possession of this knowledge and of the ability to make practical use of it, the writing of an Essay on some one of several given subjects will form an important part of this examination.]

#### II. AND III.—FOREIGN LANGUAGES.

Translation at sight, from any ordinary authors, with Grammar (including Prosody), Composition, and a fair knowledge of the national, social, institutional and literary history of the people whose language is dealt with, in any two of the following languages:—Latin, Greek, French, German.

[Extracts will be set from at least three prose and three poetical authors in each language. In French and German the candidate's ability to use the spoken language may be tested by one or more questions requiring *viva voce* examination.]

#### IV.—MATHEMATICS.

- (A) Algebra, Geometry and Trigonometry *as in Grade XII*
- (B) Plane and Solid Analytical Geometry, including the general equation of the second degree. Differential and Integral Calculus, as in Murray's *Infinitesimal Calculus*.

#### V.—SCIENCES.

Any one of the following:

##### PHYSICS.

- (A) A knowledge of *General Physics*, as in "A Textbook of Physics" by Watson (unstarred sections), or any equivalent.
- (B) The presentation of note-books describing the *laboratory experimental work* of the candidate, duly certified by the Instructor, the work to consist of at least 50 experiments of recognized University grade (e. g. as in Ames and Bliss' "Manual of Experiments in Physics"). In cases where the candidate cannot present note-books satisfactory to the examiner, the test may be made by a practical laboratory examination.
- (C) *Elementary Mathematical Physics*. A knowledge of the results obtained by the application of elementary mathematics

to physical problems; such as might be obtained during a course of lectures of two or three hours per week running through two years. The grade of work such as is given in Preston's "Theory of Heat," Preston's "Theory of Light," and J. J. Thompson's "Elements of Electricity and Magnetism," or their equivalents.

#### CHEMISTRY.

(A) *Inorganic Chemistry* as in Smith's "General Inorganic Chemistry," or an equivalent, with laboratory work in General Chemistry, which should include the preparation of some typical gases, acids, and salts, and at least five or six quantitative experiments in illustration of the fundamental laws of Chemistry. The laboratory work may be partially tested by requiring the candidate to produce a properly certified record of his experimental work.

(B) *Organic Chemistry* as in Remsen's "Compounds of Carbon" or an equivalent, to be accompanied by laboratory work, which should include the preparation of at least 20 typical carbon compounds. The laboratory work may be tested partly by questions in the papers on Chemistry, and partly by requiring the candidate to produce specimens of his preparations properly certified to be his own work.

(C) *Analytical and Physical Chemistry*, including:—

1. *Qualitative Analysis* of the Common acids and bases. Candidates may be tested by a practical laboratory examination and by questions in the Chemistry papers.
2. *Quantitative Analysis.* The estimation of the following elements in their common compounds:—Chlorine, Sulphur, Phosphorus, Carbon (in carbonates), Silicon, Silver, Copper, Calcium, Magnesium, Lead, Iron; Carbon and Hydrogen in organic compounds. Candidates may be tested by a practical exercise in the laboratory and by question in the Chemistry papers.
3. *Physical Chemistry*, as in Talbot and Blanchard's "Electrolytic Dissociation Theory" and "Walker's Introduction to Physical Chemistry."

(D) *Outlines of History of Chemistry*, as in Tilden's "Short History of Scientific Chemistry," Thorpe's "Essays in Historical Chemistry" and "Justin von Liebig" and "John Dalton" in the Century Science Series.

## BIOLOGY.

(A) Botany as in *Principles of Botany and Laboratory and Field Manual* by Bergen and Davis. A practical knowledge of the system of classification and the use of manuals, as Gray's. An acquaintance with (a) the common Spermatophytes and Pteridophytes of Nova Scotia, and (b) type species of native Bryophytes and Thallophytes representing the more common classes or orders. The exhibition of, and examination upon, a collection of one hundred species correctly determined and well mounted by the candidate under (a), and of another hundred (counting microscopic slides) also mounted and determined under (b).

(B) Zoölogy as in *Zoölogy Descriptive and Practical* by Colton, and *Hand-Book of Instructions for Collectors* issued by the British Museum (Natural History). A practical knowledge of the system of classification and the use of manuals, as Jordan's. An acquaintance with (a) the more common vertebrate fauna of Nova Scotia, and (b) typical species of the more common classes or orders of the native invertebrates. The exhibition of at least fifty specimens under (a), and at least fifty microscopic or macroscopic specimens under (b), all correctly determined and neatly mounted or prepared.

(C) *Outline History of Biology*, as in "Science of Life" by Thompson, or an equivalent, with latest theories. *Bacteria in Relation to Country Life*, by Lipman.

[The candidate must show his ability to dissect macroscopically and microscopically, to make microscopic sections, and have an elementary knowledge of microscopic technique. A monograph upon, or a special study of, any biological group or species, may be accepted according to its merits as supplementing defects in collections, etc. Any original work showing a knowledge of the subject will enhance the candidate's standing.]

## GEOLOGY AND MINERALOGY.

As in *Introduction to Geology* by Scott, *Physiography* by Salisbury, and *Mineralogy*, as in *Minerals and How they Occur*, by Miller. A laboratory knowledge of the rocks and minerals of the province, and field knowledge of the results of forces changing the surface of the earth.

## 5. SYLLABUS OF THE LOWER STANDARD.

[One paper three hours long on each subject, supplemented by *viva voce* examination and practical demonstration at the option of the examiner].

## I.—ENGLISH.

As in (A), (B) and (C) of the Higher Standard.

[All candidates are expected to have a thorough knowledge of the principles of Composition. To ensure the possession of this knowledge and of the ability to make practical use of it, the writing of an Essay on some one of several given subjects will form an important part of the examination.]

## II. AND III.—FOREIGN LANGUAGES.

As in the higher standard but with easier questions. In French and German the candidate's ability in the spoken language may be tested by one or more questions requiring *viva voce* examination.

## IV.—MATHEMATICS.

As in (A) of the higher standard.

## V. AND VI.—SCIENCES.

Any *two* of the following:—

*Physics*: As in (A) of the higher standard.

*Chemistry*: As in (A) of the higher standard; omitting the sections of the text-book in small print.

*Biology*: As in "First Course in Biology" by Bailey and Coleman, "Practical Botany for Beginners" by Bower, "Animal Life" by Jordan and Kellog, and a knowledge of the use of manuals in the classification of the more common species of the Nova Scotia *Flora* and *Fauna* as in Gray and Jordan respectively or equivalents.

[For the foreign species worked out in the Practical Botany text the nearest native species obtainable shall be studied in the same way, practically. The same principle holds in zoological practical studies.]

*Geology*: As in the first xxiv chapters of Scott's "Introduction to Geology," and Miller's "Minerals and How They Occur."

## 6.—NON-GRADUATE CANDIDATES.

Candidates who have not graduated from a recognized University, if they have spent at least four Academic years in study after attaining the Grade XI standard of scholarship, and have obtained a pass on Grade XII and a pass on the testing provincial post graduate examination, may be admitted to a special examination on the remaining subjects of a full University course, in order to obtain the standing of a graduate of a recognized University under those regulations. But the cost, syllabus and time of any such examination have not at present been determined.

## 7.—GENERAL RULES OF EXAMINATION.

(a) Options will be given when questions deal with minute details in subjects of wide range, in the sciences especially, with the object of equalizing the effects of different instructors, and texts are mentioned merely to indicate the comprehensiveness and intensiveness of the study required.

(b) An average of fifty per cent. on all subjects, with none below forty on the lower series, is required for a pass, provided the candidate also passes in the practical and *viva voce* examination.

(c) If a candidate fails in not more than two subjects, he may take a supplementary on the subjects failed in, but will make a pass only when *no* subject is below fifty per cent.

(d) The examination will be held in Truro during Provincial Examination week and the week following, in proximity to the Provincial Normal and Agricultural College, for the convenience of laboratory demonstration and *viva voce* examination.

(e) Application for examination should be made to the Superintendent of Education before the first day of May, stating the higher and lower subjects to be written upon, and *furnishing proof*

- (1) of having matriculated into a University on a standard practically as high as the pass of Grade XI of the Provincial High School,
- (2) of having taken thereafter a full course of four academic years, three of which must have been the second, third and fourth years of the University course, and (3) of graduation as recognized in Regulation 110 (a) 2, preceding.

(f) The fee for examination, which must accompany the formal application, shall be ten dollars; but for a candidate who has passed Provincial Grade XII, and for a supplementary examination it shall be five dollars. The fee will be returned if the candidate is not qualified for admission to the examination.

## PUBLISHERS OF TEXTS MENTIONED.

- Emerson's "History of the English Language".....(Macmillan).  
 Herford's "The Age of Wordsworth".....(Bell & Sons).  
 Walker's "The Age of Tennyson".....(Bell & Sons).  
 Dowden's "Selections from Wordsworth".....(Ginn & Co.).  
 Baker's Browning's Shorter Poems.....(Macmillan).  
 Nutter's Tennyson's Shorter Poems.....(Macmillan).  
 Pangrave's Golden Treasury.....(Macmillan).  
 Pancoast's "Standard English Prose".....(Holt & Co.).  
 Ten Brink's History of English Literature.....(Bell & Sons).  
 Bright's Anglo Saxon Reader.....(Holt & Co.).  
 Morris's Specimens of Early English, Part I.....(Clarendon Press).  
 Murray's Infinitesimal Calculus.....(Longmans).  
 Watson's Text Book of Physics.....(Longmans).  
 Preston's "Theory of Heat".....(Macmillan).  
 Preston's "Theory of Light".....(Macmillan).  
 J. J. Thompson's "Elements of the Mathematical Theory  
 of Electricity and Magnetism".....(Cam. U. Press).  
 Smith's "General Chemistry".....(Century Co.).  
 Smith's "General Inorganic Chemistry".....(Century Co.).  
 Remsen's "Compounds of Carbon".....(D. C. Heath Co.).  
 Talbot and Blanchard's "Electrolytic Dissociation Theory".....(Macmillan).  
 Walker's "Introduction to Physical Chemistry".....(Macmillan).  
 Tilden's "Short History of the Progress of Scientific  
 Chemistry".....(Longmans).  
 Thorpe's "Essays in Historical Chemistry".....(Macmillan).  
 Shenstone's "Justin von Liebig" in Century Science Series.....(Macmillan).  
 Sir H. E. Roscoe's "John Dalton" in Century Science  
 Series.....(Macmillan).  
 Bergen and Davis, Botany and Laboratory Manual.....(Ginn & Co.).  
 Gray's Manual of Botany (Seventh Edition).....(Am. Book Co.).  
 Jordan's "Manual of Vertebrates".....(McClurg & Co.).  
 "Bacteria in Relation to Country Life" by Lipman.....(Macmillan).  
 Colton's "Zoölogy Descriptive and Practical".....(D. C. Heath Co.).  
 Bailey and Coleman's Biology.....(Macmillan).  
 Thompson's "Science of Life".....(Blackie & Son).  
 Jordan & Kellog's "Animal Life".....(D. Appleton).  
 Bower's "Practical Botany for Beginners".....(Macmillan).  
 Hand Book of Instructions for Collectors.....(Brit. Museum).  
 Scott's "Introduction to Geology".....(Macmillan).  
 Salisbury's "Physiography".....(H. Holt & Co.).  
 Miller's "Minerals and How They Occur".....(Toronto).

# THE MORE IMPORTANT EDUCATIONAL LEGISLATION OF 1909.

An Act to amend Chapter 52, Revised Statutes, 1900, "The Education Act."

Be it enacted by the Governor, Council, and Assembly, as follows:—

1. Chapter 52 of the Revised Statutes, 1900, is amended by adding thereto, after section 55, the following section:

(55A) Every public school building shall be available, free of charge, for the purposes of local Technical Schools and schools for miners and engineers, provided that such use of public school buildings shall not interfere with the carrying on of schools under the provisions of the act hereby amended.

2. Section 59 of said chapter is repealed and the following substituted therefor,—

59. The secretary of trustees shall give a bond to His Majesty with two sureties, subject to the approval of the inspector, in a sufficient sum for the faithful performance of his duties of the office, and such bond shall be lodged with the inspector, who may at any time require a new bond, or a bond in a larger sum in the place of the bond as lodged. Such bond may be in the form in the fifth schedule or to the like effect, and unless sooner terminated by the sureties, or either of them, according to law it shall not be necessary to give any new bond annually or otherwise, unless required by the inspector so long as the secretary is re-elected to office.

## FIFTH SCHEDULE.

Province of Nova Scotia.

Know all men by these presents, that we (name of secretary) as principal, and (names of sureties) as sureties, are held and firmly bound unto our Sovereign Lord, Edward VII, by the grace of God, of the United Kingdom of Great Britain and Ireland, King, &c., in the sum of.....

..... dollars of lawful money of Canada, to be paid to our said Lord, the King, his heirs and successors, for the true payment whereof



we bind ourselves, and each of us by himself, for the whole and every part thereof, and the heirs, executors and administrators of us and each of us, firmly by these presents, sealed with our seals and dated this .....day of ..... in the year of our Lord, one thousand nine hundred and.....

Whereas the said .....has been duly appointed to be secretary to the board of trustees for ..... school section No..... in the district of .....

Now the condition of this obligation is such, that if the said (name of secretary) do and shall, from time to time, and at all times hereafter, during his continuance in the said office, and at all faithfully perform all such acts and duties as do or may hereafter appertain to the said office by virtue of any law of this Province, and shall in all respects conform to and observe all such rules, orders and regulations as now are or may be from time to time established for or in respect of the said office; and if on ceasing to hold the said office, he shall forthwith, on demand, hand over to the trustees of the said school section or to his successor in office, on the order of the trustees, all books, papers, moneys, accounts and other property in his possession by virtue of his said office of secretary, then said obligation to be void, otherwise to be and remain in full force and virtue.

(Name of Secretary) (Seal.)

(Names of Sureties) (Seals.)

Signed, Sealed and delivered in the presence of (Name of Witness.)

3. Section 91 of the said Act is amended by adding thereto the words, "and shall on request file a copy thereof with the inspector."

4. Subsection (2) of section 16 of Chapter 52 of the Revised Statutes, 1900, "The Education Act" as substituted by Chapter 8 of the Acts of 1906, is amended by striking out the word "alteration" in the second line of said subsection.

5. Every male person between the ages of twenty-one and sixty resident within the school section of Marble Mountain in the county of Inverness between the first day of April and the thirty-first day of December, in any year, and who has not paid and is not liable for a poll tax in such year in any other school section in the Province, shall pay each year, when so resident, a poll tax of two dollars for the support of the schools of said section.

An Act to Amend Chapter 52, Revised Statutes, 1900, "The Education Act," and Acts in amendment thereof.

Be it enacted by the Governor, Council, and Assembly, as follows:

1. Section 99 of Chapter 52, Revised Statutes, 1900, and all Acts in amendment of said section are hereby repealed and the following substituted therefor:—

99. (1) In any school section in which up to the first day of July, the ratepayers neglect or refuse to make adequate provision for the maintenance of a school (including the necessary equipment and repairs to a school house or the provision of a temporary school room) during the following school year, the trustees of the school section shall name the sum of money which they deem sufficient therefor, or which may be necessary to supplement an inadequate sum already voted by the ratepayers, and such sum shall be submitted to the district Board of School Commissioners or to the committee of the said board appointed under section thirteen of "The Education Act," and be subject to their approval. If the said board or committee thereof approves the said sum and orders it to be collected, the said trustees shall promptly levy and collect the sum so approved in the same manner as if it had been voted for school purposes at a regular school meeting called for the purpose.

(2) If the trustees of any section neglect or refuse to apply to the board of commissioners or its committee under the authority of the foregoing clause, or if they neglect or refuse to provide a school in case necessary funds have been voted by the ratepayers or approved by the district commissioners or its committee, or if up to the first day of July no annual meeting of the section has been held, or if no trustees have been elected; it shall be the duty of said board or its said committee, as soon after the first day of August as convenient, when notified by the inspector of the conditions in any such school section, to appoint one or more persons interested in maintaining a school in said section as a new board of trustees for the remainder of the then current school year, and the trustee or trustees so appointed shall have all the powers of trustees elected by the ratepayers; and the duties and powers of the trustees, if any, elected by the ratepayers shall thereby be suspended during said period.

(3) The said trustee or trustees so appointed shall forthwith name the sum of money which is deemed sufficient for the support of the school for the remainder of the year (if sufficient has not been already voted) and submit their estimate to the board or its committee for its approval, and if approved, and ordered to be

collected by the said board or its committee, the said sum so approved shall be collected by the said new trustee or trustees in the same manner as if it had been voted for school purposes, at a regular school meeting.

Provided, however, that if the district board or its committee is unable to secure a suitable trustee or trustees they shall notify the inspector of that fact, in which case the inspector shall have all the powers of trustees for the said period as provided in this section, and shall forthwith estimate and name the sum of money which he deems sufficient for the maintenance of the school for the remainder of the year, and shall submit his estimate to the said board or its committee for its approval as above provided for, which approval, if given, shall be communicated to the inspector by the said board or its committee in writing.

(4) The inspector shall certify the said sum to the municipal clerk who shall levy the said sum so fixed on the section in the same manner as if voted for school purposes at a regular school meeting called for the purpose, and shall prepare a collector's roll for the collection of the same. The regular municipal collectors shall collect such rates and taxes in the same manner and with the same remedies and for the same remuneration as in the case of other rates and taxes and shall return the same to the municipal treasurer.

(5) The amount so collected shall be paid on the order of the inspector to meet the necessary expenses for the support of the school in the said section.

(6) Nothing in this section shall be construed to relieve trustees from the penalty imposed by section 39 of this chapter.

#### AMENDMENTS OF REGULATIONS OF THE C. P. I. APRIL, 1909.

*Resolved*, that the following be substituted for Regulation 25:

25. The Secretary of the school trustees shall notify the Inspector in writing as soon as any teacher is engaged, stating the *name* and *class* of license of the teacher, and the salary promised. If any such engagement is broken without mutual agreement, the Inspector as soon as informed thereof, shall report the teacher to the Council of Public Instruction as presumably liable to suspension of license.

*Resolved*, that the following be substituted for Regulation 27:

27. 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 fact, the class of license held, with its year and number, the period of engagement, the address of the Secretary of School Trustees, and the name of the school section where last engaged.

This intimation shall be kept on file in the Inspector's office; and any delay on the part of the teacher in giving such notice shall render him or her liable to the loss of provincial grants up to the date of proper notification.

A teacher intending to compete for (1) superior classification as a Class "A" teacher, or (2) classification as a Rural (Agricultural) Science teacher, or (3) a school library grant, or (4) an Inspector's Certificate for promotion, or (5) 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 34 (a) is amended by inserting after the word "school" in the second line of the Regulation as it appears in the "Manual of School Law, Nova Scotia, 1901," page 65, the clause "if also the principal of all the schools of the Section."

Regulation 36 and all its amendments are further amended as on pages 124 of this *Journal of Education*, April, 1909.

*Resolved:*

1. That on the recommendation of the Normal College at Truro, the Council of Public Instruction may award Kindergarten Diplomas of *First* and *Second* Ranks to approved candidates who have respectively the scholarship qualifications of *First* and *Second* Class Teachers, and who have successfully taken a full year's course in the Truro Kindergarten affiliated with the Provincial Normal College; and that such Diplomas shall be taken by the Superintendent of Education as the equivalents respectively of *First* and *Second* Class Licenses in the distribution of the Provincial Aid to the teachers holding them.

2. That on the recommendation of the Superintendent of Education and the Principal of the Provincial Normal College, be awarded a provisional license for one year, of a class as high as the scholarship and professional training of the candidate may warrant. On the advance of the candidate's qualifications according to the Nova Scotian regulations, and the inspector's recommendation, the license may be continued for a subsequent year.

3. That should arrangements be made for the exchange of teachers for one year from any portion of the Empire or from France or Germany, the council may on the recommendation of the superintendent and principal of the Normal College, award a provisional license of the same class to the foreign substitute.

4. No appeal from the examination of a candidate's answer paper at the Provincial High School examination shall be entertained by the superintendent unless it is accompanied by a fee of fifty cents to cover the minimum expense, and not even then unless a responsible person vouches for the good standing of the appellant.

### BOOKS RECOMMENDED TO TEACHERS AND FOR SCHOOL LIBRARIES.

STORIES AND LEGENDS—*A First Greek Reader* (MacMillan and Co., pp. 217, price 80 cents). For Supplementary reading and sight translation.

HARDY'S LATIN READER—(MacMillan and Co., pp. 195, price 65 cents). For supplementary reading and sight translation.

*Handbook of Canadian Literature*—B. Archibald MacMurphy. Cloth, 236 pages, \$1.00.

THE MORAL EDUCATION LEAGUE, FOUNDED 1897.  
OBJECT:—To urge the introduction of systematic Moral and Civic Instruction into all schools, and to make the formation of character the chief aim in education.

"THE DESTINIES OF A COUNTRY LIE IN ITS SCHOOLS."  
*Moral Instruction in Elementary Schools in England and Wales. A Return compiled from Official Documents.* 64 pp. David Nutt. 1s. net, by post 1s. 1½d.

#### LESSON BOOKS.

*The Garden of Childhood.* Stories for Little Folk at Home and at School. By ALICE M. CHESTERTON. With illustrations by Gertrude M. Bradley. Based upon the section for Infants of the League's *Graduated Syllabus for Elementary Schools.* Nelson. 6d. net, by post 1s. 9d. Second edition.

*The Magic Garden.* Stories for Children at Home and at School. With Illustrations. Based upon Standard III. of the League's *Syllabus.* Nelson. 1s. 6d. net, by post 1s. 9d.

*A Teacher's Handbook of Moral Lessons.* By A. J. H. J. WALTON. GRAVE. Based upon Standard V. of the League's *Syllabus.* Nelson. 1s. 6d. net, by post 1s. 9d. Fourth edition.

*Further Books* (Standards I., II., V., VI., and VII.) (in active preparation.) To be shortly published by Messrs. Nelson.

*A Manual of Moral Instruction.* Covering all the Sections of the Syllabus, according to the concentric plan. By JAMES REID, M. A. NELSON. 2s. 6d. net., by post 1s. 9d.

*Life and Manners:* A volume of Stories suitable for the Moral Instruction of Children of 10-14 years. With an Introduction on Aim and Methods. By F. J. GOULD. Swan Sonnenschein. 2s. 6d. net, by post 2s. 10d.

THE MORAL EDUCATION LEAGUE QUARTERLY.

A Quarterly Record of the work of the League. 1d., by post 1½d.

PAMPHLETS AND LEAFLETS.

The Constitution of the Moral Education League.

Annual Reports (1897-1908).

The Moral Instruction of Children in Classes. A Pamphlet.

By J. F. GOULD. 1d., by post 1½d.

A Graduated Syllabus of Moral and Civic Instruction for Elementary Schools.

A Graduated Syllabus of Moral and Civic Instruction for Secondary Schools. 2d. by post 2½d.

Moral Instruction: What it is not and what it is.

Moral Instruction: A few words addressed to elementary school teachers.

The Moral Education League.

A Specimen Lesson of Moral instruction.

Important Announcements on Moral Education.

A Village School.

*Copies of this Leaflet and of other Publications will be sent free to you and to your friends on the receipt of a post-card by the Secretary, Moral Education League, 6, York Buildings, Adelphi, London, W. C. England.*

*The Gulick Hygiene Series* by Luther Halsay Gulick, M. D., Recently Director of Physical Training in the Public Schools of New York, (Ginn and Company.).

Book I, *Good Health*, 12 mo., cloth, 172 pages, illustrated, 40 cents list price.

Book III, *Town and City*, 12 mo., cloth, 272 pages, illustrated, 50 cents, list price.

Book IV, *The Body*, (In press).

Book V, *Control of Body and Mind*, 12 mo., cloth, 267 pages, illustrated, list price (?).

*Swedish Recreation Exercises* for school and playground, by Grace A. MacMillan, L. L. A., 6 x 8½ in., 94 pp. Price 2/0 net. (McDougall's Educational Co., London.).

*Webster's International Dictionary*, with list of simplified spellings.

(Of the first list of 300 words 225 are already authorized in the vocabulary of Webster's International Dictionary. Of these, 152 are preferred by Webster, 28 are

given as of equal authority with Webster's preference, and 45 are given as the Websterian second choice. Of the 75 words not in the vocabulary of the International, practically all are found in the list of Amended Spellings in the preliminary part of the dictionary. As fast as they are sanctioned by good usage they will be added to the vocabulary proper.) G. & C. MERRIAM Co., Springfield, Mass., U. S. A.

*Oral Lesson Book on Hygiene* covering instruction in the primary Grades (published by the Bureau of Scientific Investigation), Boston.

In "Humane" fiction the following books by a Nova Scotian authoress should be known,

*Beautiful Joe: A Real Dog.*

*Beautiful Joe's Paradise.*

*Nita: The story of an Irish Setter.*

*Alpatok: The story of an Esquimaux Dog.*

*My Pets: Short interesting Animal Stories.*

by Marshall Saunders (L. C. Page, Boston.).

#### HUMANE EDUCATION.

The Nova Scotia Society for the Prevention of Cruelty offers prizes of \$20.00 for the first prize, \$10.00 for the second, \$5.00 for the third, to the teachers in public schools who send in the best reports of the work done by Bands of Mercy in their respective schools. Full instruction as to the formation of Bands of Mercy and the necessary documents may be secured by writing to the Massachusetts Society for the Prevention of Cruelty, 19 Milk Street, Boston, Mass.

The conditions under which the prizes are awarded may be learned on writing *Miss Marshall Saunders, Spring Garden Road, Halifax, N. S.*

#### THE SIR FREDERICK W. BORDEN SCHOLARSHIP.

The following is the decision of the committee appointed to regulate the award of the yearly scholarship of seventy-five dollars conferred upon the Canning school, Kings County, by Hon. Sir Frederick W. Borden:—

I. The scholarship shall be open to students resident in Kings County who have spent the last year before matriculation at the Canning public school.

II. It shall be awarded to the student as above described, matriculating at any Nova Scotia college or at Mt. Allison, N. B., whose standing is highest at the Nova Scotia provincial examination in Grade XI. The payment of the scholarship, however, shall be conditional on actual attendance at one of the colleges named for a full year, unless in the opinion of the trustee the student was unable to complete the year. If the winner is unable to meet the conditions regarding attending college, the scholarship shall pass to the next competitor, in order, who matriculates as above, meeting all conditions.

III. After the first award of this scholarship, if no pupil shall win it for the next or any year, the scholarship shall be awarded to the senior winner who is pursuing a college course at one of the colleges named.

Nevertheless, if during any year or years there should be no claimant from the Canning school, under the above regulations, then the scholarship shall go to that pupil of any school in Kings County whose standing is highest at the Nova Scotia provincial examinations, in Grade XI, meeting all conditions.

IV. The trustee of this scholarship shall be the school inspector of the district in which Canning is situated.

V. The name of this scholarship shall be "The Sir Frederick W. Borden Scholarship."

---

### SUMMER SCHOOL OF SCIENCE FOR ATLANTIC PROVINCES OF CANADA.

The session for 1909, will be held at Charlottetown, P. E. I., July 13th to 30th. The course consists of Botany, Chemistry, Drawing, Geology, Literature, Manual Training, Music, Oratory, Physical Culture, Physics, Physiology, Zoology, and Military Drill. The best instructors of the Maritime Provinces are on the faculty of the school.

Teachers of Nova Scotia are allowed one week's additional holidays, who attend the school. To teachers who wish to qualify for the certificate for drill and physical culture there will be given special opportunities to do so. They will have the opportunity to take from three to four hours a day instruction if they desire to do so.

Scholarships of the value of \$20.00 are offered for competition.

The cool bracing climate of Prince Edward Island makes it a pleasant place for a teacher to spend a holiday. Pleasant excursions are planned. Additional information can be obtained from the secretary, Mr. J. D. Seaman, Charlottetown, P. E. I.

---

### THE DOMINION EDUCATIONAL ASSOCIATION.

meets in its Seventh Convention at Victoria, British Columbia, July 13th, 14th, 15th and 16th, 1909.

### THE NATIONAL EDUCATIONAL ASSOCIATION

of the U. S. A., meets in its forty-seventh Annual Convention, at Denver, Colorado, July 3rd to 9th, 1909.



## LORD ROBERTS' TROPHY. FOR RIFLE SHOOTING BY SCHOOL CADETS.

To be competed for annually by representative teams of schoolboys of the empire, not over 16 years of age, on the 1st July in the year of the match. For regulations, etc., write the *Hon. Secretary*, R. J. E. Hanson, M. A., R. N. V. R., *Schoolboys' Headquarters*.

Bisley,  
Surrey, England.

## THE CANADIAN RIFLE LEAGUE COMPETITION.

The regulations will be promptly supplied by the *Secretary*, Frank Beard, Ottawa.

### A NELSON VICTORY SHIELD,

containing some of the copper from the old famous battleship "Victory," of Admiral Lord Nelson, for which Lord Strathcona contributed £1,000, to enable it to be offered to schools as prizes, can be obtained through Mr. EDWARD W. MATTHEWS, *SECRETARY*, PASSMORE EDWARDS SAILORS' PALACE, LONDON E., ENGLAND. This institution was originated to aid the British (Canadian) and Foreign Sailors' Society. It is mentioned here because the smallest school can obtain this beautiful burnished copper shield for no more than one dollar, which will be accepted as a contribution to the Society. Copper charms of "Victory" metal can be had for a quarter. This shield should be mounted on an appropriate base of wood upon the margin of which the leader of the school each year might be engraved, the whole forming a useful and inspiring decoration of the school room.

### DESCRIPTION OF SHIELD AND OBJECT.

Lord Strathcona is President of the Canadian Branch of the British and Foreign Sailors' Society. His Lordship's desire is that every school in Canada, from Atlantic to Pacific, may have an opportunity of securing this Nelson Shield, which is of much historic interest. He hopes that annually a paper may be written on a Sailor subject, which will be of educational and patriotic value to the youth of Canada; and that the Shield will be presented on prize day, and held by the successful scholar for the year. It is composed of pure Nelson copper, and is a work of art. On the upper corners are the oak and maple leaf. In the upper centre is the historic ship "Victory" under full sail. In the lower centre is the bust of Nelson, on one side of which is his immortal flag signal, and on the other the date of the momentous day in the nation's history. At the bottom, upon the scroll, are the following words:—"Made of copper from H. M. ships "Victory" and "Four-droyant." Presented by Lord Strathcona and Mount Royal, G. C. M. G., through the British and Foreign Sailors' Society, for Canadian Schools, 1907. E. R. VII."

The Ministers of Education in the various Provinces are co-operating with the Society.

## PUPILS' SCHOOL CORRESPONDENCE.

Teachers who wish to have their pupils linked in correspondence with pupils in other parts of the Empire, can be put in the way of doing so by communicating with

Mrs. E. M. ORD MARSHALL, Hon. Secretary "League of the Empire,"  
Caxton Hall, Victoria St., Westminster, S. W.,  
London, England.

The League of the Empire is the most convenient institution through which to get into touch with other schools for general school correspondence, nature study correspondence, etc., as intimated in previous JOURNALS.

The FEDERAL MAGAZINE is published monthly by the League, and makes a specialty of communication with the schools of all parts of the Empire. The League has been appointed the agent of the Department of Education of Nova Scotia, in London for educational purposes, where it is in touch with the Imperial Educational authorities. In every school with more than one teacher, one at least should obtain this magazine for the teachers' reading club or library.

### ESSAYS WANTED BY MILITARY DEPARTMENT ON HOW BEST TO INTRODUCE PHYSICAL TRAINING SYSTEM.

Special to The Morning Chronicle.

OTTAWA, Ont., May 4.—The Executive Council of the Strathcona Trust for the encouragement of physical and military training in public schools has decided to offer cash prizes aggregating \$650 for the best essays upon the following subject:—"The Best Method of Introducing and Developing a general system of physical and military training in the public schools throughout the Dominion upon the principle enunciated in the rules governing the administration of the Strathcona Trust."

Six prizes of \$250, \$150, \$100, \$75, \$50 and \$25 respectively will be awarded to the writers of the best essays. Competitors are limited to Canadian School teachers, or pupils, in the Normal Schools. Essays may be written in either English or French and must reach the Department of Militia not later than August 1st, next.

Full information in regard to the completion and to the agreement entered into between the Militia Department and the Province of Nova Scotia in respect to the training in schools will be furnished on application to the Executive Council of the Strathcona Trust, Militia Department, Ottawa.



# JOURNAL OF EDUCATION.

APRIL, 1909.

## OFFICIAL NOTICES.

The full number of legal teaching days in the half school year ended 5th February was 103, in the second half year ending 30th June next it is 101 days. Total teaching days for the school year is 204.

1909.

### CALENDAR, SUMMER, 1909.

- |       |     |   |
|-------|-----|---|
| April | 26. | Fourth Quarter began.   |
| May   | 7.  | Arbor Day.  |
| May   | 21. | Empire Day.   |
| May   | 24  | Victoria Day (holiday). No applications for High School Exams. received after this date.  |
| June  | 21. | Applications for admission to Military School, Halifax, should be in Education Office; and for admission to Rural Science School, Truro, should be sent to Principal Agricultural College before this date. |
| June  | 28. | Regular Annual Meeting of School Sections.  |
| June  | 29. | County Academy Entrance Examination begins.   |
| June  | 30. | Public Schools and Normal College close.  |
| July  | 1.  | Dominion Day.   |
| July  | 5.  | Provincial High School examinations commence.   |
| July  | 6.  | Early opening of Vacation Rural Science School at Truro.  |
| July  | 7.  | Last day for Annual School "Returns" to be received by Inspector.   |
| July  | 10. | M. P. Q. Examination.   |
| July  | 13. | Opening of Military School at Halifax   |
|       |     | Full opening of Vacation Rural Science School at Truro.   |
|       |     | Opening of Bi-lingual School for Acadian Teachers at Truro.   |
|       |     | Opening of Summer School of Science at Charlottetown.   |
|       |     | Dominion Educational Association opens at Victoria, B. C.   |
| July  | 19. | Last day for Inspector's "sheets" to be received at Education Office.   |
| July  | 30. | Summer Science School at Charlottetown closes.  |
| Aug.  | 1.  | Next School Year begins.  |
| Aug.  | 12. | Vacation Rural Science School at Truro closes.  |
| Aug.  | 30. | Regular opening of Public Schools, beginning of First Quarter.  |
| Sept. | 6.  | Labor Day (holiday).  |
| Sept. | 30. | Opening of Normal College at Truro.   |

DATES OF MEETINGS OF BOARDS OF DISTRICT SCHOOL  
COMMISSIONERS.

- HALIFAX, RURAL—Tuesday, May 25th.  
 HALIFAX, EAST—Friday, June 18th.  
 HALIFAX, WEST—Thursday, June 3rd.  
 LUNENBURG AND NEW DUBLIN—Wednesday, May 12th.  
 CHESTER—Wednesday, June 2nd.  
 QUEENS, NORTH—Friday, June 11th.  
 QUEENS, SOUTH—Thursday, June 17th.  
 SHELburne, —Friday, May 14th.  
 BARRINGTON—Wednesday, May 12th.  
 YARMOUTH—Tuesday, June 8th.  
 ARGYLE—Friday, June 11th.  
 ANNAPOLIS, EAST—Wednesday, May 26th.  
 ANNAPOLIS, WEST—Tuesday, May 25th.  
 DIGBY—Monday, May 17th.  
 CLARE—Wednesday, May 19th.  
 KINGS—Tuesday, May 11th.  
 HANTS, WEST—Friday, May 14th.  
 HANTS, EAST—Wednesday, June 16th.  
 ANTIGONISH—Wednesday, May 19th.  
 GUYSBORO—Tuesday, June 1st.  
 ST. MARY'S—Tuesday, June 15th.  
 CAPE BRETON—Tuesday, May 18th.  
 VICTORIA—Tuesday, June 8th.  
 INVERNESS, NORTH—Tuesday, June 1st.  
 INVERNESS, SOUTH—Tuesday, June 1st.  
 RICHMOND—Wednesday, May 19th.  
 PICTOU, SOUTH—Friday, May 7th.  
 PICTOU, NORTH—Monday, May 10th.  
 CUMBERLAND—Tuesday, May 25th.  
 PARRSBORO—Wednesday, May 12th.  
 COLCHESTER, SOUTH—Tuesday, May 4th.  
 COLCHESTER, WEST—Thursday, May 6th.  
 STIRLING—Thursday, May 20th.

## DISTRICT SCHOOL COMMISSIONERS.

(Appointed February 3rd, 1909.)

- ANNAPOLIS, EAST—Heber Boland, Laurencetown.  
 Samuel E. Bancroft, Laurencetown.  
 Herbert H. Whitman, Laurencetown.  
 Fred. W. Bishop, Paradise.
- ANNAPOLIS, WEST—Alfred E. Atlee, Annapolis Royal.  
 Frank A. Whitman, Annapolis Royal.  
 Thos. M. Buckler, Annapolis Royal.
- INVERNESS, SOUTH—Rev. J. C. McLeod, Port Hastings.

(Appointed March 19th, 1909.)

- ANTIGONISH—Rev. Arch J. Chisholm, Antigonish.
- INVERNESS, NORTH—Rev. Alex. Ferguson, Strathlorne.  
 Rev. J. W. McLean, Whycomoh.
- Lauchlin McKinnon, Ainslie Glen.
- VICTORIA—Rev. C. C. McIntosh, Baddeck.

(Appointed April 24th, 1909.)

- ANTIGONISH—Rev. M. F. Tompkins, Lochaber.  
 Rev. A. H. Denoon, Antigonish.  
 Rev. Dougald Gillis, Antigonish.
- KINGS—Lamert Patterson, Aylesford.
- PICTOU, NORTH—J. Smith Grant, Pictou.  
 W. O. Creighton, West River.
- PICTOU, SOUTH—Howard S. Kennedy, Alma.
- N. INVERNESS—Rev. John D. McFarlane, Margaree Harbor.

## MANUAL TRAINING LICENCES.

ISSUED SINCE THE PUBLICATION OF JOURNAL, OCTOBER, 1908.

45. Joan Thompson Mosher, Windsor, Hants Co.

SECTION TO BE NAMED IN SECOND SCHEDULE.

INSPECTORIAL DIVISION, No. 9.

PICTOU NORTH.

- No. 55. Three Brooks.

## ERRATA.

October Journal, 1908, page 104, first column add to the list of successful M. P. Q. candidates at North Sydney the name of Kathleen M. Moore, Second Rank.

October Journal, 1908, page 100, add to the list of successful Grade IX candidates, Yarmouth, the name of Irwin Cahan Doty.

October Journal, 1908, page 98, line 24 second column, George Henry Wilson should be omitted.

TIME TABLE (OLD "A" EXAMINATION.)

During regular Examination week in July, 1909, in separate rooms at a few A Stations as arranged.

		MONDAY.		
		A. M. 9 to 10 10 " 11 11 " 12		Roman History. Chemistry. Xenophon.
		P. M. 2 to 3 3 " 4 4 " 5		Greek History. Botany. Plato.
TUESDAY.		WEDNESDAY.		
A. M. 9 to 10 10 " 11 11 " 12	Tacitus. Zoology. Navigation.	A. M. 9 to 10 10 " 11 11 " 12		Algebra. Latin Composition. French Authors.
P. M. 2 to 3 3 " 4 4 " 5	Homer. Sanitary Science. Astronomy.	P. M. 2 to 3 3 " 4 4 " 5		English Language. French Composition. Geology.
THURSDAY.		FRIDAY.		
A. M. 9 to 10 10 " 11 11 " 12	Geometry. Greek Composition. Cicero.	A. M. 9 to 10 10 " 11 11 " 12		Trigonometry. Psychology. Horace.
P. M. 2 to 3 3 " 4 4 " 5	Physics. German Composition. Vergil.	P. M. 2 to 3 3 " 4 4 " 5		British History. English Literature. German Authors.

The A (final) papers will be written at the same time as the corresponding papers of regular Grade XII.

SPECIAL STATISTICS FOR 1909.

The two questions of previous years are to be repeated in this year's Annual return. Teachers are requested to read the definitions of *defectives*, and *incurribles* as given in the next paragraph, with thoughtfulness. Inspectors are requested to specially report any case in which a teacher may have answered these or any other question without evidence of intelligent care.

The blank columns 148, 149 and 150 in the *Register* and *Annual Return* are to be filled in as follows:—

- 148.—No. of *Defectives* of school age in Section.
- 149.—No. of *Incurribles* of school age in Section.
- 150.—No. of pupils who have never been vaccinated.

"*Defectives*" are not meant to include the *blind and deaf*, which should be reported in the columns respectively provided for them. *Defectives* are feeble minded pupils, who have not wit enough to profit by ordinary school instruction; but who if educated might be able to earn a living in some capacity, and be saved from the helpless, if not vicious, condition which is likely to render them an expense to the public and a menace to the morals of the community. Some of this class may also be more or less defective in sight or hearing. But neither the School for the Blind nor the School for the Deaf have facilities for the education of any who are not of normal strength of intellect. In many countries a large proportion of such pupils are trained to considerable intelligence and self-control, and are able to fill useful positions and support themselves.

"*Incorrigibles*" mean persons of school age who cannot be effectively controlled by their parents or guardians, or the school authorities; but who have not yet become criminals. They are habitual truants as a rule, but presumably capable of being trained by a firm, kind and intelligent hand into self-respecting, self-controlled and moral citizens. It is hoped that both teachers and trustees will be able to furnish an accurate estimate of the number of such pupils in their school section.

#### SUPPLEMENTARY ANNUAL RETURN, 1909.

The following additional information is requested to be sent in with the Annual returns on a page of letter or foolscap paper, to the Inspector, who after initialling the paper and taking note of any information he may desire, will send it in a special parcel to the Superintendent of Education.

The name, parent or guardian's name, and address of each individual counted in the following columns of the Register (and Return).

- 129 (a) Not in attendance at Institution for Deaf and Dumb.
- 129 (b) Not in attendance at School for Blind.
- 148. Defectives.
- 149. Incorrigibles.

And

- A. Has there been any medical or dental inspection of the pupils in your school?
- B. If so, estimate the number of pupils inspected.
- C. How many times in the year are pupils inspected? Once or twice?
- D. How many teachers have taken a physical training course up to date?

The names asked for above will not be published. They will simply be given to the heads of the institutions provided for them, or those in authority interested in them, for the purpose of communicating with the parents; in other respects the names and addresses shall be deemed to be confidential. This return should be signed by the Secretary and the principal teacher of the section.

By Order,  
24th April, 1909.

A. H. MACKAY.  
*Superintendent of Education.*

#### VACATION SCHOOLS.

As the Education Act requires the Provincial Aid to be paid in conjoint proportion to the class of license held by the teacher and the number of days taught, the C. P. I. has no power to give a holiday to any school or class of schools which can qualify the teacher to draw the Provincial Aid for such days, except as provided for in the Act.

Cities and towns, therefore, which are at liberty to take longer vacation than the rural schools, do so without drawing on the Provincial Aid for such time.

But while many city and town pupils can move into the country during the vacation season, a great number have not the means to leave, and live in portions of the city where they cannot enjoy holiday advantages under the supervision of any responsible parties.

There is, therefore, here, as well as in the United States, a desire to have vacation schools in session for such pupils as parents desire to have under supervision, where the most of the time in fine weather shall be spent in out door educational exercises, nature-study, physical training, games and sports, etc. As such schools would be necessary only in cities and towns, it would be only fair, that any grants lost by taking an extra week in the general public schools, might be allowed to be earned by such special public schools in vacation time.

Should any city or town desire such aid to vacation schools, it is very probable the legislation would be promptly granted.

#### TEACHERS' MEETINGS IN GRADED SCHOOLS.

The Principal of a graded school should not only find it useful but necessary to have regular meetings with his staff, for the purpose of learning the exact character of the work, difficulties and peculiarities, in each school room; for articulating effectively the work of one room into that of another; and for the direction of the whole discipline and training so as to make all the departments



function together as one school. The special duty of the principal is to develop a unity of purpose and an effectiveness of co-operation in all the schools under him. It is assumed in the law that the subordinate teachers are acting under the direction of the principal who is appointed as the expert adviser of the school board with such an end in view.

#### SEMI-ANNUAL ADVANCE OF CLASS OF LICENSE.

The semi-annual payment of Provincial Aid to teachers shall be paid on the basis of the class of license held at the opening of the school each half year.

#### MID-SUMMER AND WINTER VACATIONS.

Hereafter the regular midsummer vacation in all schools may be eight weeks or as specified from time to time in the JOURNAL OF EDUCATION. In rural sections, on previous arrangement with the Inspector, this vacation time may be taken wholly or partially in winter. In such cases there may be authorized teaching within the regular midsummer vacation time after the regular close of the schools near the first of July, the returns of which shall be sent in for the half year ending near the first of February following.

#### SCHOOL LIBRARIES (RURAL).

It should be remembered that notice of the intention to compete for a rural school library grant should be given the Inspector in the regular notice of the opening of the school. If overlooked then it should be given as soon after as possible, for the Inspector should not recommend any grant unless he has had an opportunity to see that the card catalogue, accession book, and accounts, etc., are kept according to regulations.

For the *Five* dollar grant this year, the value of the books must be at least *Forty five* dollars. Next year it will be *Fifty* dollars, which will remain constant henceforward, as well as the number of issues during the year, which must be at least *one hundred and fifty*.

For the *Ten* dollar grant henceforward, the value of the books must be at least *One Hundred* dollars, and the issues for the year at least *Three Hundred*.

#### SCHOOL LIBRARIES (SUPERIOR).

Every school in which the teacher is qualified otherwise for a Provincial grant greater than that of Class B (whether Academy, High School or Superior Common School) must have a Library (or access to a library) worth at least *One Hundred* dollars, fulfilling the requirements of regulation 53. This Library should be furnished

ed with a card catalogue and accession books, etc., as required for rural school libraries; but for the present detailed annual reports, and statistics, are not necessary unless called for specially.

### THE MILITARY SUMMER SCHOOL AT HALIFAX.

The following information has been obtained from headquarters for those desiring to take the Summer Course at Wellington Barracks, Halifax, Nova Scotia.

- (a) The Course will begin on the 13th of July and will last six weeks.
- (b) It consists of Musketry, Military Drill, Tactics and other military subjects which will qualify a teacher as a Cadet Corps instructor, or for what is sometimes called "a military 'A' certificate." Physical Training as now authorized for the schools will be taught.
- (c) A transport requisition will be forwarded to those applying to take the course. This when tendered to a ticket agent will procure a first class railway ticket.
- (d) The actual expenses, such as cab fare, meals, etc., incurred in proceeding to and returning from Halifax will be refunded by the Government to those who obtain a certificate.
- (e) There will probably be accommodation for about twenty teachers in the Officers' Quarters at Wellington Barracks. The remainder will have to live in the City. Those who live in barracks will receive about \$1.25 a day. The cost of living in the Officers' Mess and other expenses will practically use up this amount. Those who live in the City will receive about \$2.00 per day and will themselves arrange for their board and lodging.
- (f) The rooms in the barracks are furnished with bed, bedding, electric light or lamps, bureau, commode, chamber set, table and chairs. Any other furnishings must be supplied by those occupying them.
- (g) Those who do not belong to a Cadet Corps in the possession of uniforms, will not be required to wear uniforms.
- (h) There may be one or two functions at which it will be necessary to wear an evening dress suit. Any who do not wish to bring such a suit may obtain permission to be absent from such functions.
- (i) It is advisable to bring a sword and belt.

(j)\* Teachers who pass this course and become members of the Militia and train a Cadet Corps which passes inspection will receive a yearly bonus as follows:

Less than 20 pupils,	no bonus.
21 to 50	" \$1.00 per head.
51 to 100	" .75 " "
101 to 200	" .50 " "

Not more than \$100.00 will be granted for a Cadet Corps over two hundred.

\*For later information see 209A below.

(k) Application to take the course at Wellington Barracks, Halifax, should be made as early as possible to the Superintendent of Education for Nova Scotia before the 21st of June. The railway station from which transport will be required should be mentioned.

(l) Those who can take the course are to report to the Adjutant, The Royal Canadian Regiment at Wellington Barracks, Halifax, N. S., by 10 o'clock A. M., the 13th of July.

*(Special to the Morning Chronicle.)*

OTTAWA, May 7—A Militia Gazette issued today announces the authorization of organizing a corps of School Cadets Instructors to be composed of teachers in the Public Schools of Canada.

This is in furtherance of the policy of the Militia Department to introduce physical and military drill in the Canadian schools along the lines already adopted in the Province of Nova Scotia and for which Lord Strathcona recently donated a fund of \$250,000.

#### AUTHORIZED UNIFORM.

A uniform is authorized for Cadet instructors as follows:  
 Jacket—Reefer or double-breasted pattern of blue black cloth or serge of ordinary civilian sackcoat length, fastened in front by two rows of four buttons each, of Canadian Militia pattern. Straps, blue crash with gilt metal rank badges. Trousers—Of serge to match color of jacket, no stripes at seams. Cap—Field service infantry, blue. Uniform and equipment will be provided by the officers of the Corps as is done by other officers.

*Amendment of (j) above, referring to allowances payable to Cadet Instructors.*

209A. 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 them, allowance will be paid to Lieutenants, calculated as follows:—

When the corps has less than 20 cadets, no allowance will be made.

- From 20 to a maximum of 50 cadets, \$1 per cadet.  
 For each additional cadet up to 100, 75 cents per cadet.  
 For each cadet in excess of 100 up to 125, 50 cents per cadet.  
 With no additional allowance for any cadet in excess of 125,  
 in any one corps under one Lieutenant instructor.

## NOTES AND COMMENTS.

## UNIVERSITY GRADUATE'S EXAMINATION.

As no regular application was made before the 1st of May for the Academic Headmaster's License Examination, it will not be held this year.

## SCHOOL SANITATION.

From page 76 to page 90 preceding will be found information which the Inspectors are to see both trustees and teachers know and apply in the schoolroom.

Candidates for the M. P. Q. examination are also required to know how to apply these instructions and use the knowledge of the facts presented.

Public meetings are often held in rural school houses. In all cases a condition of granting such use of the school room should be its thorough cleansing before the pupils return to it.

Spitting is so ingrained a habit with many thoughtless people, that the notice of a fine of \$500 or one year of imprisonment hung up in the New York street cars have not broken the habit in that city. But in some of our towns and in the country, the habit is a thousand times more common and disgusting. There is not a filthy spit on a floor or pavement which in dry weather will not be broken up into dust particles so light as to float in the air for hours with every stirring of a breath of wind; and some of these light floating particles may have thousands of germs in them ready to multiply with deadly effect when taken into the nostrils or throat of other people, especially under certain health conditions.

We cannot allow those who think they are healthy to expectorate promiscuously, any more than the unhealthy, for obvious practical reasons. But there is another reason in the fact that many persons are suffering from incipient tuberculosis, for instance, who may even subsequently recover from it, whose sputum may convey the infection fatally to one who happens not to be immune at the time. A person spitting on the floor of a school room should be so promptly and effectively dealt with as to prevent a similar act on his part, and on those who hear of it, ever afterward.

MEDICAL AND DENTAL INSPECTION OF PUPILS.

Some extracts are made below from the reports of the medical and dental inspectors of the pupils in the Halifax Schools, for the purpose of aiding teachers, trustees and parents throughout the country, to think of the great importance and the little cost of arranging, as the law now allows school boards to do, to have the children in the school examined once or twice each year by the best medical man in their neighborhood.

The small cost for which this can be done all over the country is nothing compared with the amount of lifelong suffering which may be obviated in the case of a few in every school, and the added years of healthy life which are likely to be secured for many of the pupils. This is really more necessary in the country than in the towns where doctors and dentists are always within easy reach. But even in Halifax, with all these advantages at a maximum, there have already been hundreds of boys and girls saved, who unknown to their parents were undergoing physical degeneration which would soon have made life a burden, or cut it short. And still a greater number not knowing what was wrong with them, or not knowing that a serious menace to health, vigor and future success, had already set in, had their attention, and their parent's attention, called to their condition in good time. When we are spending so much money in bringing foreigners to fill up our country, how much more should we be willing to spend the small amount necessary to keep our own sons and daughters alive, in good health and vigor.

Parents! discuss this at your next annual meeting. Don't let the month of June pass without considering it. Authorize your trustees to arrange with the best local medical man to inspect and report upon the health of each pupil at school. At the following annual meeting pay close attention to the medical officer's report, and see, even if you have been so fortunate as to have received no benefit on account of the perfect health of your own children, if there will not be several cases in which candidates for a broken-down or weakened life have gained a chance for a vigorous and useful life. Each such saved boy or girl is of more value than a foreign immigrant—very much more, for they are our own people. Instead of being invalids on our hands, they will be helpers. The cost of these precautionary measures, will be a mere bagatelle compared with the life, light and labor saved in the school section.

Here are are some figures from the report of Drs. Cunningham and Doyle who had charge of one-half of the Halifax City Schools.

NUMBER EXAMINED 3050.

Anaemia.....	2.4%	Defective Hearing.....	2.1%
Enlarged Glands.....	6.6%	Discharging Ears.....	5.3%
Cardiac Diseases.....	2%	Defective Nasal Breathing.....	7.4%
Pulmonary Diseases.....	7%	Deformed Palate.....	3.4%
Skin Diseases.....	1.0%	Hypertrophied Tonsils.....	2.4%
Deformities.....	.3%	P. Nasal Growths.....	10.2%
Defective Vision.....	8.1%	Under Treatment.....	
Inflamed Eyes.....	7.8%	Treatment Recommended.....	

It will be seen that the largest percentages are reached by the eye defects, viz., inflamed eyes and defective vision. The necessity of prompt attention is obvious in this regard, most of the defects being acquired and not hereditary, and tend to become worse unless corrected.

The next highest percentages are the so-called catarrhal troubles—defective nasal breathing, enlarged tonsils, post-nasal growths, with their results—enlarged glands, and the still more serious affection of hearing. These figures would suggest the necessity of a careful examination, and of some method of ensuring prompt and proper treatment. It will be seen that only 2% are at present receiving proper attention, while over 10% are in need of it immediately. Recommending pupils for treatment has been done in a very conservative fashion—only when absolutely necessary and cases where the slightest doubt exists being postponed till the next examination, when we hope to have a wider scope.

**Dr. Woodbury, Medical Inspector of the Schools in the other half of the City, has the following extracts in his report:—**

An individual examination has been completed of each pupil present in every department of the schools allotted to my care, representing roughly one-half of the pupils in the city, and results noted in the card index. The tabulated results of which are as follows:—

Pupils suffering from:—	Year 1907.	Year 1908.
Anaemia.....	114	143
Enlarged Glands.....	33	91
Chorea.....	7	6
Cardiac Diseases.....	39	41
Pulmonary, including Bronchial Diseases.....	51	63
Skin Diseases.....	42	71
Deformities.....	39	57
Defective Vision.....	365	372
Inflamed Eyes.....	60	32
Defective Hearing.....	43	40
Discharging Ears.....	20	10
Defective Nasal Breathing from various causes.....	62	75
Deformed Palate.....	6	5
Hypertrophied Tonsils.....	339	327
Post Nasal Growths.....	26	46
Under Treatment at time of examination.....	56	92
Treatment Recommended.....	171	180
Treatment adopted as far as it was possible to ascertain,	67.	

**Results—Cure, 23.**  
 Notably improved, 37.  
 No visible improvement, 7.

I have placed the results of the work in 1907 in a column parallel with those of 1908 for purposes of comparison.

Pupils are constantly leaving school for various reasons and others take their places, which renders it difficult to make mathematical comparisons. A few explanatory remarks will therefore be in order.

The great increase in cases of Enlarged Glands, almost three times the number in last year's report, is due largely to the prevalence of infectious diseases.

The figures for Pulmonary, Bronchial and Cardiac diseases are not so accurate as they might be, were we always able to examine in a room which is warm enough to permit of the removal of a part of the child's clothing. This cannot be done in a hall, passage, or cloakroom.

Tuberculosis does not ordinarily manifest itself in the lungs of children of school age.

The increase in Skin Disease and deformities is due largely to more careful search and an increasing knowledge of many of the children in their homes, in private and dispensary practice. Several cases of deformity are now under treatment.

The decrease in the number of children suffering from inflamed eyes is largely the result of treatment. This is a visible defect, therefore more likely to be remedied when the attention of the parents is called to it.

The number suffering from defective vision is about the same as last year. The figures, of course, include many who have adopted treatment, and are wearing glasses. Their vision without glasses is of course in most cases still defective, they are therefore included in the figures from year to year.

The decrease in the number of pupils having discharging ears is largely the result of treatment.

It is of course very difficult or impossible to ascertain from many of these children as to whether treatment has been adopted. The good results accruing from reporting these cases to the parents are far beyond anything we can estimate in figures.

Every school was visited during the autumn months, and teachers and pupils were given brief instructions with a view to the prevention of contagious diseases, particularly diphtheria. The throats of hundreds of children were examined personally, resulting in the temporary exclusion of many suspicious cases. A circular was prepared for the teachers giving some directions for the prevention of diphtheria and the exclusion of mild cases from the schools.

All teachers submitted to me have been examined as directed for pensions, leave of absence, etc., and written reports of each case sent to the Board. Special examination was also made of children sent to my office by the Board of truant officer.

Constant vigilance has been exercised with a view to the betterment of sanitary conditions in school buildings and classrooms, and recommendations made from time to time.

The question of the disposal of the disease carrying dust which accumulates in the ordinary school room is one which calls for immediate and careful consideration. It might be in the interests of the health of the community if the School Board could see its way clear to become the owner of a well-equipped vacuum cleaning plant, and in this way largely dispose of the germ laden dust which infests the atmosphere of our school buildings.

A little observation has shown that many pupils, as the result of domestic conditions, are in the habit of coming to school each morning without having partaken of any food whatever, or having had only a very early breakfast consisting of bread and tea alone. Effective work is a physical impossibility for these underfed children. This is a problem which must be met sooner or later if we are to get the best results. In cities where something has been done in this direction, it is said that the great majority of the pupils regardless of their domestic circumstances, and many of the teachers are clearly benefited by a small quantity of hot liquid or solid food supplied in the school, especially at some period during the long morning session.

**Drs. Thomson, Woodbury and Ritchie, the Committee on the dental examination of the Halifax Schools, have the following paragraphs in their report:—**

4,259 pupils, average age about 10 years, were examined. Of these 943 had tooth-brushes which were used less than once a day; 970 had irregularities of the teeth more or less detrimental to the health of the individual; 316 were mouth-breathers. There were approximately 13,000 unsound teeth while of the whole number of pupils only 654 were without cavities; 241 had fractured teeth; 103, abscesses; over one thousand had the teeth coated with calculus, commonly called tartar; 426 had lost all the first molars, three of which was the average number present; 193 pupils had had operative treatment at the hands of the dental practitioner; 2,691 were recom-

mended for it. About 3,000 mouths were healthy, over 1,000 unhealthy, and the rest—about 200—very unhealthy.

In the combined grades IV of the city schools 543 pupils were examined. Average age slightly over 10 years, 138 tooth-brushes; 118 with irregularities; 15 with V-shaped arch; 66 mouth breathers; 1,679 cavities; 55 without cavities; 34 with fractured teeth; 18 with alveolar abscesses; 19 with pyorrhoea; 169 with calculus; 24 with no first molars; 27 under treatment; 365 treatment recommended; 362 healthy mouths; 159 unhealthy; 22 very unhealthy.

Taking at hazard the Bloomfield Street School, we find amongst 281 pupils examined:—

V-shaped mouth .....	7.50%
Irregularities .....	36%
Mouth breathers .....	31%
Average number of cavities .....	5%
Under treatment .....	.75%
Healthy mouths .....	85%
Unhealthy mouths .....	14%
Very unhealthy mouths .....	.75%
Without cavities .....	2.87%

Our statistics show that under the heads, healthy, unhealthy, very unhealthy in early life, that is in the lower grades—the percentage of healthy mouths is comparatively high. Every increase in age has its corresponding decrease in percentage. This phenomenon is explained in part by the increasing number of decaying teeth; by the continued neglect of the elementary laws of hygiene; and, by systemic disturbance due to alveolar abscesses and the breaking down of the tooth tissue. The food becomes contaminated during mastication by the decomposing products lodged about the teeth as well as by bacteria in immense numbers. Even the air becomes vitiated in passing to the lungs over the contiguous tissues.

At this point it would be well to call your attention to the large percentage of mouth breathers to be found in public schools. This condition is usually an indication and indeed the result of other trouble more remote. The treatment of which is a minor surgical operation. Neglect this and in many cases the power to concentrate is lost; the vacant stare and dullness of intellect supervene, and the child who might have been a good student is seriously handicapped by conditions not mental, but physical.

We would most respectfully urge upon you that the present school training is insufficient to adequately impress upon the child the importance of the proper care of the teeth and oral cavity. That this is true the statistics quoted are proof sufficient.

It has been and still is the popular belief that the results of decayed teeth and unhealthy gums are purely local in their character. A greater mistake never was made. One of the first considerations in preventive medicine is a healthy mouth. As is well known by the medical and dental profession, the bacteria and toxins from alveolar abscesses, and the accumulation of sordes about the teeth in an unhealthy mouth are far-reaching in their effects, not only by frequently causing intestinal or systemic diseases, but by their continued presence also aggravating and complicating the pathological process of delaying or preventing their return to the normal in spite of the most skilful and scientific treatment.

It will thus be seen that the care of the mouth is not a matter of little or no importance, and we would urge that the following suggestions, printed on the back of the dental notice for parents, should be repeatedly impressed upon the minds of all children in the public schools.

CARE AND PRESERVATION OF THE TEETH.

Too much stress cannot be laid on the preservation of the teeth. Apart from consideration touching personal appearance, good teeth are essential to thorough mastication of the food, without which there cannot be perfect digestion or health. Children should be taught to chew their food slowly and thoroughly.



Decayed, sore, unhealthy teeth and gums are not only a fruitful cause of indigestion, but often lead to serious stomach, throat and lung troubles.

The **FOUR LARGE BACK TEETH** which make their appearance at about six years of age belong to the permanent set, and should therefore be carefully preserved.

To preserve the teeth at their best, they should be carefully brushed with some suitable paste or powder (recommended by your dentist) before going to bed, taking no food of any kind after, also on rising in the morning, and better still after each meal. **CLEAN TEETH SELDOM DECAY.**

Brush all the teeth back and front, the inside as well as the outside surfaces. The brush should be rotated from the gums to the points so as to pass the bristles between the teeth.

A diseased mouth or decayed teeth detract from the appearance, affect the health, produce fetid breath, much suffering and a shorter life. The only object of the dental examination of school children is to prevent these evils.

We would further call your attention to the fact that the average number of the first permanent molar teeth present is only three. These teeth are the first of the permanent set to make their appearance, and through neglect are frequently lost, many of the parents indeed firmly believing that they will be replaced by others. This loss should if possible be prevented, since these teeth are the foundations upon which the whole permanent set are built, and their loss usually results in irregularities of the jaw with a consequent deformity of the face, and loss of function in the teeth themselves while owing to their crowded condition, decay becomes inevitable.

#### EXAMINATION NOTES.

As June is for the Province on the whole, the best school month in the year, the imperative closing of all the schools of the Province for vacation purposes cannot be authorized within the month.

The Provincial High School examinations cannot be held in June, for it would necessitate the closing of every school where the teacher would desire to go up for scholarship promotion. General vacation time is the only time for these examinations.

The Provincial High School examinations are not necessary for grading in the public schools, and are purely voluntary except for candidates for the teaching profession. Any pressure on pupils to take these examinations is totally unauthorized by the Education Department. It is a local rule where it exists for which local authority alone is responsible.

Candidates who happen to be a few points below a pass limit are very apt to think that by a little straining the examiner might equally well pass them. It should be remembered, however, that no one should be down near a "passing mark" which is placed far below the desirable standard as a technical limit. Candidates should be near the "100" mark, and never near the "pass mark." No one a little above a "pass mark" has anything more than a technical right to a pass—a right because of a necessary rule of action, not because of merit. The asking for re-examination when a candidate is a point too low has become such an expensive nuisance, each case involving several letters between the candidate, the Education Office, and the examiners, that the C. P. I. orders its discour-

tinuance except in cases vouched for by a competent authority, when a fee to cover the clerical expense involved is transmitted.

#### PATRIOTISM IN THE SCHOOLS.

Nova Scotia stands well in the Empire. Here the first attempt was successfully made (in 1758) to show how colonies might have selfgovernment within a world wide Empire. Here Empire Day was first formally started on its migration around the globe. And here universal physical, training in the schools, and military training in the higher institutions, for the development of rugged health and good form, and for the preservation of peace in the world, if the same scheme should be adopted throughout the Empire, has come into existence.

Sydney, Antigonish, Halifax, Pictou, as well as Truro, and numerous smaller local centers, have spontaneously rushed, a thousand strong, to the front, although three years have been given to qualify teachers already licensed to conduct the training in the most approved form. The hearty enthusiasm with which all this has been done, and the absence of a single growler, show that our teachers are not mercenaries—that they are true patriots, ready for any reasonable effort for the benefit of the children in their charge, and the good of their country. May the country properly appreciate their spirit.

And here also have we decided to grant a provisional license to any trained teacher from within the Empire who is in good standing and finds a school in which he may be employed: or to exchange for a year with a teacher from Britain, France or Germany.

#### THE GREATER BRITAIN PATRIOTISM.

Every one should know that last year the school children of New Zealand sent about \$1000 as a contribution to the Battlefield Memorial fund of Canada on the occasion of the celebration of the Tercentenary of the founding of Quebec.

Had they known of the later though quieter celebration of the first permanent colonial parliament in Nova Scotia in 1758 and its completion with responsible government in 1848, they would no doubt have preferred to give the contribution to the Halifax Memorial Tower which is to commemorate as well the genesis of their own local government under which New Zealand is the happiest and most loyal member of the Empire. Nova Scotia greets New Zealand on the other side of the globe as one of the noblest patriots in the sisterhood of the Empire.

#### SIMPLIFIED SPELLING.

This appears to be becoming a general world movement except where it is most needed.

Germany and France have lately made extensive changes; and the latter after resistance for many years by the French Academy, is introducing a second instalment.

Most of the other European countries have already been paying attention to orthographic improvement with a view to extending the life and use of their languages, and saving waste of educational energy in the schools.

The latest, however, is the simplification of Dutch in South Africa, which is thus made so formidable a competitor with English, that a correspondent of the Celtic Magazine recommends the Kelts of Scotland to simplify the spelling of Gaelic with the same object. Welsh is increasing in Wales aided by the fact that its reading and spelling can be mastered accurately a year earlier than English can.

From the April "Education Gazette," Capetown, we quote from a long article, on the Departmental Examinations, the following references:

'DUTCH. *First Year.* It appears that the simplified "system of spelling has been generally adopted—less than one per cent. using the old spelling. Many candidates, however, have "only dim notions as to what the new system means. They write "New Spelling" at the head of their papers and use in their answers forms "like \* \* \* \*."

"*Second Year.*—The results of the examination are on the whole fairly good, although \* \* \* \*. The translation into Dutch was "in the majority of cases poor; some candidates seemed to think "that every verb in Dutch is followed by the preposition *voor*, "others that the simplified spelling has no rules at all \* \* \* \*."

Sometime it will be our turn to pass through such a stage. Those who have much writing to do, cannot be expected to cripple their fluency by adopting the new forms. Habits once formed are very troublesome things to change. But still all wise people who have to keep to their acquired habit, must be in favor of the speedy coming of the day when our pupils will be introduced at first to the better form of spelling, so that they may have no wrong habits to desire unavailingly to change when they become busy.

#### PRESENTATIONS TO OUR LIBRARIES.

##### THE GENESIS OF CHURCHES IN AMERICA, BY JAMES CROIL.

About two years ago, Mr. James Croil of Montreal presented to one hundred of our best school libraries, his splendid "History of Steam Navigation." He has repeated this liberal act again by the presentation of another hundred very finely bound and illustrated volumes on the "Genesis of Churches" in America, in which many of the more remarkable edifices of the continent are described and figured. The thanks of the Education Department were formally and heartily tendered to Mr. Croil, but those using the volumes in these hundred libraries will for many years be thankful for the special knowledge thus put within their reach on a subject interesting to all denominations of our people.

##### THE GEOLOGICAL SURVEY OF CANADA.

Our school and college libraries are also under obligations to the Geological Survey of Canada for the disposition of its members and Director to have many of its very valuable publications sent to them regular-

ly. Such presentations should show schools without libraries what they are missing on account of the lack of a regularly organized library.

---

SHORTHAND SYSTEM AUTHORIZED FOR NOVA SCOTIA, THE SHORTEST AS WELL AS THE MOST UNIVERSALLY USED.

Isaac Pitman shorthand has demonstrated its superiority over all other systems by winning all the principal honors in the following International Shorthand Contests:—

*First International Contest*, Baltimore, 1906. The Miner Gold Medal, the only trophy awarded, won by Sidney H. Godfrey.

*Second International Contest*, Boston, 1907. Miner Gold Medal won by Sidney H. Godfrey and the Eagan International Cup won by Miss Nellie M. Wood.

*Third International Contest*, Philadelphia, 1908. Eagan International Cup won for the second time by Miss Nellie M. Wood.

*Fourth International Contest*, Providence, 1909. Eagan International Cup won for the *third time and permanently*, by Miss Nellie M. Wood.

While eleven contestants took the different dictations in the above contest 10th April, 1909, representing the following systems—Sir Isaac Pitman System, Graham, Ben Pitman, Munson, Success and Gregg—only the first two qualified. *Five* of the contestants withdrew before the transcription began, and *four* were disqualified on account of the ruling, that no transcription would be considered which would contain more than ten per cent of errors. The Sir Isaac Pitman system won over the Graham by 264 words in five minutes, against 246. The Ben Pitman second 116 and the Gregg (light line) 64 in the *five* minutes.

---

*The University of St. Francis Xavier* at Antigonish is the first of our Universities to utilize for educational work our beautiful Nova Scotian July weather, as suggested by the JOURNAL OF EDUCATION last year. This Summer School of *Literature, Science, and Physical Training* is proposed to extend from the 12th July to the 4th of August.

# JOURNAL OF EDUCATION.

Published at Halifax, Nova Scotia, on the 18th Day of May, 1909.

## CONTENTS.

	PAGE.
List of members of Council, Educational Officials and Inspectors.....	3
Provincial Aid and Annuities paid to teachers, February 1909.....	4-25
More Important Educational Legislation from 1900 to 1908.....	26-36
More Important Educational Regulations from 1900 to 1908.....	37-54
Acadian Commission Report, 1902.....	55
Regulations for Provincial High School Examinations.....	57
Regulations for Licensing of Teachers.....	66-73
Regulations for Arbor, and Empire Days.....	74
Regulations for Public School Sanitation.....	76
Dr. Knopf on Tuberculosis and Public Schools.....	80
A Catechism on Tuberculosis and Public Schools.....	85
Phenological Observations.....	90-102
Senecio Jacobæa (St. James Ragwort).....	103
Brown Tail Moth.....	106
Rural Science School Course at Truro.....	112
Rural Science Garden Regulations.....	123
Simplified Spelling—Third List, New York.....	126
Simplified Spelling—English Society, London.....	141
County Academy Entrance Examination.....	144
High School Program.....	145
Syllabus of the University Post-Graduate Examination.....	158
More Important Educational Legislation of 1909.....	159
More Important Educational Regulations of 1909.....	169
New Books Recommended to Teachers and Libraries.....	164
Notices of Prize, Scholarship and other Competitions, and Conventions.....	166-168
Calendar, Summer, 1909.....	170
Official Notices.....	171-173
Form for the new Supplementary Annual School Return.....	174
Official Notices, continued.....	175
Military School at Halifax.....	177
School Sanitation.....	179
Medical and Dental Inspection of Schools in Country.....	180
Medical Inspection of Schools in Halifax.....	181
Dental Inspection of schools in Halifax.....	182
Sundry Notes and Comments.....	184