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APRIL, 1902.



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1902.

Journal of Education.

HALIFAX, NOVA SCOTIA, APRIL, 1902.

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II.—The JOURNAL 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.

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PROVINCIAL AID,

To Teachers employed in the Public Schools,
for the half year ended Jan. 31, 1902.

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

ANNAPOLIS.					
	Number of Teaching Days employed.	Am't paid to Teach- ers from Provincial Treasury.			
Cameron, E H	108	\$99 75			
Goucher, O P	108	99 75			
Longley, I M	108	85 50			
Ruggles, Lenfest	108	99 75			
Shaffner, S C	108	85 50			
Smith, A W L	108	99 75			
Atwood, Alice J	108	57 00			
Banks, Beriah S	108	57 00			
Banks, Wilford E	107	56 47			
Berry, Ruperta	108	57 00			
Best, Elsie M	108	57 00			
Bishop, Ida M	107	56 47			
Böhner, Chas F	108	57 00			
Capstick, Grace	108	57 00			
Chipman, Ella M	108	57 00			
Crisp, Wm K	108	57 00			
Donovan, Florence E	108	57 00			
Dunn, Mary H	108	57 00			
Durling, Ruby E	108	57 00			
Eaton, Ethel M	107	56 47			
Elliott, Cora B	107	56 47			
Frost, Myrtle B	108	57 00			
Gilliat, Mary L	108	57 00			
Graves, Eva M	108	57 00			
Hamilton, Helena H	108	57 00			
Harris, C Louise	108	57 00			
Hirtle, Arthur G	68	35 89			
Jack, Martha	108	57 00			
Kinney, Annie M	107	56 47			
Moore, Clara M	108	57 00			
Morse, Garnet D	95	50 13			
Neiley, Laura M	138	57 00			
Neiley, Mary H	108	57 00			
North, John T	108	57 00			
Parker, E Maude	108	57 00			
Robinson, Ernest W	107	56 47			
Rogers, Stephen H	100	52 77			
Spurr, Alice M	108	57 00			
Spurr, Margaret C	108	57 00			
Spurr, W Voorhees	106	55 94			
VanBuskirk, J L	108	57 00			
Vidito, Helen A	108	57 00			
Wotten, Eunice R	108	57 00			
Young, Nellie V H	56	29 55			
Atchison, Jennie M	59	23 35			
Bacon, Agnes S	107	42 35			
Baker, Ermina M	108	42 75			
Banks, Almada M	108	42 75			
Banks, Mary E	108	42 75			
Bent, Lily J	108	42 75			
Bent, Reginald W	107½	42 55			
Boyle, Rose L	108	42 75			
Brinton, Effie S	88	34 84			
Clarke, Hattie M	108	42 75			
Coldwell, Winnie B	108	42 75			
Corbett, Annabel G	108	42 75			
Crowe, Joseph	108	42 75			
Durling, Edna	95	37 60			
Elliott, Etta M	107½	42 55			
Fletcher, Mary	108	42 75			
Foster, Mayhew C	108	42 75			
Freney, Bertha M	108	42 75			
Gesner, Chas L	108	42 75			
Gesner, Phoebe A	100	39 58			
Hall, Carrie M	107	42 35			
Healey, Bertha A	108	42 75			
Hirtle, Arthur G	40	15 83			
Johnson, Edith M	108	42 75			
Longley, I Fletcher	107	42 35			
Magee, Rena M	104	41 16			
McCormack, A E	108	42 75			
McLean, Muriel A	108	42 75			
Messenger, Wm S	108	42 75			
Morse, M Ellen	108	42 75			
Pickels, Annie A D	107	42 35			
Reagh, Lela B	108	42 75			
Richardson, Ralph P	108	42 75			
Spinney, Theodore H	108	42 75			
Stronach, Harvey N	49	19 39			
Tanch, Jos W	108	42 75			
Tibert, Walton K	108	42 75			
Tupper, Alice	108	42 75			
Winchester, Etta A	54	21 37			
Wiswell, Isabelle	44	17 41			
Young, Nellie V H	44	17 41			
*Adams, Lennie P	88	30 94			
*Balsler, Lilla B	108	38 00			
*Banks, Estella M	94	33 05			
Banks, I Mabel	54	14 25			
*Bardeaux, Laura W	54	19 00			
Bardeaux, Lizzie A	108	27 18			
Beals, Laura E	108	28 50			
Bruce, Minnie V	108	28 50			
Burns, L Mabel	107	28 23			
*Chisholm, Hattie E	106	37 29			
Cossaboom, Annie F	108	28 50			
Coulstan, A Neil	100	26 39			
*Cowan, Jennie E	108	38 00			
Downie, Ethel B	48	12 66			
Durling, Bessie E	107	28 23			
Durling, Cora E	19	4 99			
Elliott, Malcolm R	108	28 50			
Fisk, Cora L	106	27 97			
Fitch, Ethel A	85½	22 54			
Fleet, Gertrude L	108	28 50			
*Freeman, Nina L	106	37 29			
Gates, Lilla L	107	28 23			
*Gillis, Eliza A	108	38 00			
Gormley, Augusta M	108	28 50			
Hindon, Oressa N	108	28 50			
*Jackson, M Ellen	107	37 65			
Marshall, Jessie G	30	7 91			
*Morrison, Laura B	108	38 00			
*Morse, Annie M	106	37 29			
Morse, Nellie C	108	28 50			

Morse, Winnifred E	108	28 50
Newcombe, Bertha E	107	28 23
Parker, Lottie M H	108	28 50
*Pettit, Annie M	98	34 47
Phinney, Flora A	108	28 50
Phinney, Hettie I	108	28 50
Roney, Kittie C	98½	25 99
*Roop, Annie T	108	38 00
Saunders, Emily A	108	28 50
*Thompson, Susie M	108	38 00
*White, Susie	108	38 00
Whitman, Cassie S	108	28 50
*Whitman, Lizzie M	55	19 35
*Wilson, Attie M	78	27 43
*Woodland, Fannie A	86	30 24

ANTIGONISH.

Connolly, James P	100	\$79 17
Dukeshire, Stanley	108	57 00
McPherson, Hugh	96	75 99
Thompson, Alexander	101	93 27
Cameron, Hugh D	101	53 30
Gillia, Angus	108	57 00
Macdougall, Marg F	108	57 00
McKenzie, Donald J	108	57 00
McLean, William	107	56 47
Sister St. Leonard	108	57 00
Sister Mary Ann	108	57 00
Sister M. Victoire	108	57 00
Barry, Henry	94	37 20
Boyd, A A	108	42 75
Chisholm, Mary A	106	41 95
Chisholm, Christina A	108	42 75
Chisholm, Jean	108	42 75
Chisholm, Cassie	108	42 75
Chisholm, Dan M	98	38 78
Decoste, Joseph	108	42 75
Fraser, Catherine	98	38 78
Grant, Catherine	108	42 75
Grant, Mary	108	42 75
Landry, Rose	108	42 75
Landry, Mary E	108	42 75
Mitchell, Jean	108	42 75
Macdonald, Eleanor	103	40 76
Macdonald, Nellie	108	42 75
Macdonald, Angus G	108	42 75
McEachern, Ethel	108	42 75
McFarlane, Lachlin	108	42 75
McGillivray, Allena M	108	42 75
McKenzie, Gertrude	108	42 75
McLean Maggie	107	42 35
McNeil, Florence	108	42 75
McPherson, John A	44	17 41
O'Brien, M Angela	108	42 75
Rogers, Wm J	108	42 75
Steward, Cecelia M	108	42 75
Sister M Leonard	108	42 75
Sister St Camillus	108	42 75
Sister St Mary Matilda	108	42 75
*Boyle, James	108	38 00
Boyd, Margaret J	108	28 50
*Bray, James J	107	37 65
*Campbell, Mary	103	36 23
Cameron, Jessie M	108	28 50
Chisholm, Catherine	108	28 50
Chisholm, Bessie C	108	28 50

Chisholm, Wm J	108	28 50
Chisholm, Mary A	108	28 50
*Chisholm, Margaret B	79	27 78
*Chisholm, Dan R	108	38 00
Dooley, Bridget	108	28 50
*Fitzgerald, Annie	108	38 00
Landry, Florence C	108	28 50
Munro, Blanche M	108	28 50
*Martin, Ellen	108	38 00
*Macdonald, Donald	81	28 49
Macdonald, Penelope	107	28 23
Macdonald, Marcella	100	26 39
Macdonald, Catherine J	108	28 50
Macdonald, Annie J	108	28 50
Macdonald, Dan H	107	28 23
Macdonald, Mary E	68	17 93
McEachern, John	94	24 80
*McGillivray, John D	47	16 53
McGillivray, Marcella	87	22 94
*McGillivray, Maggie	106	37 29
McIntyre, Frederick	105	27 70
McIntosh, Alexander	97	25 59
McKeough, Annie I	108	28 50
McKinnon, Mary A	106	27 97
McKinnon, Mary Maud	104	27 44
McLellan, Annie	108	28 50
McMillan, Hugh H	108	28 50
McNeil, Maggie A	90	23 74
*McPherson, Annie	106	37 29
McPherson, Lachlin	108	28 50
McPherson, Katie A	108	28 50
Sinclair, Jennie B	108	28 50
Sister St Helen	108	28 50
*Taylor, Annie W	54	19 00
Wheaton, Emma M	104	27 44
Wall, Gorman	106	27 97

Assistants.

Floyd, Duncan	100	26 39
McKinnon, Colin F	96	33 76
Macdonald, Ronald	101	35 53
Macdonald, Allan	94	24 80

CAPE BRETON.

Brodie, W S	108	99 75
Cameron, Chas E	108	99 75
Creelman, W A	107	98 82
Crombie, Isaac	108	99 75
England, Harry A	107	56 47
Logan, Bessie M	108	71 25
Macdonnell, D F	107	70 60
McIntosh, D S	108	85 50
McKenzie, Geo W	107	84 70
Stewart, F I	108	99 75
Campbell, Jean E	108	57 00
Cann, Belle H	108	57 00
Carter, Peter	107	56 47
Chapman, Eleanor	108	57 00
Dowling, Thos C	50	26 38
Edgecombe, Ethel	108	57 00
Gillis, Simon P	39	20 57
Hanway, Jas A	97	51 19
*Herdman, W C	97	51 19
McAnis, John T	107	56 47
McDougall, John	108	57 00

Macintosh, Anna B	108	57 00	Sr M Annina	108	42 75
McKenzie, Janie	106	55 94	“ Ambrose	108	42 75
McKenzie, Kate A	107	56 47	“ Modesta	108	42 75
McLennan, Alexes	108	57 00	“ Wilfrid	108	42 75
MacLeod, Mary E	108	57 00	“ Veronica	108	42 75
Matheson, D M	105	55 41	“ Anthony	108	42 75
Partridge, Eleanor E	108	57 00	Sr St Philip	107	42 35
Rutherford, Blanche	105	55 41	“ Frances	108	42 75
Sr St Margaret	108	57 00	Sutherland, Margt A	107	42 35
Sr Frs Xavier	108	57 00	Willet, Joseph	107	42 35
Sr M Josita	108	57 00	Bannerman, Elspeth	106	27 97
Sr M Aquinas	108	57 00	Boomer, Gertrude M	87	22 94
Watson, Margt J	108	57 00	Butler, Sarah	107	28 23
Woodill, A W	108	57 00	Coady, Peter W	79	20 83
Bates, Lawrence D	86	34 03	Carmichael, Jessie	96	25 33
Beaton, Angus D	69	27 30	Cox, Mrs M A	71	18 73
Bown, Eleanor F	107	42 35	Fraser, Sadie	108	28 50
Broderick, Wm D	107	42 35	Fyfe, J Bernard	108	28 50
Carmichael, Annie	108	42 75	Gillis, Mary M	96	25 33
Crombie, Minnie A	108	42 75	Graham, Maggie M	107	28 23
Crosby, Emma	105	41 55	Hillier, Ida	108	28 50
Currie, Eva E	7	2 76	Kelley, Ella A	97	25 59
Currie, Michael D	33	13 05	Kennedy, Annie	97	25 59
Currie, Donald J	107	42 35	Laffin, Bridget	51	13 45
Gates, Gertrude M	80	31 66	Macadam, Dan A	98	25 86
Hanrahan, Mary	108	42 75	McAulay, Christie	108	28 50
Harrington, Annie E	108	42 75	MacCuish, Maggie	108	28 50
Hardy, Hester S	103	40 76	McDonald, Isabelle	108	28 50
Holmes, Caroline	107	42 35	McDonald, Mary C	105	27 76
Kelley, Amy R	108	42 75	McDonald, Joanna	108	28 50
Kemp, Hector F	108	42 75	McDonald, Lizzie S	81	21 36
Kinlay, Mary T	18	7 12	McDonald, Maggie	107	28 23
Lewis, Anna	71	36 02	Macdonald, Minnie	105	27 70
Lewis, Sarah F	105	41 55	McDonald, Maggie M	68	17 93
Macaulay, Jean C	108	42 75	McDougall, Duncan	104	27 44
McCormick, Matilda	105	41 55	McGillvray, Leonora	108	28 50
*Macdonald, Jas R	108	42 75	McInnis, Eliza M	88	23 20
McDonald, Mary M	106	41 95	McIntyre, Matilda	102	26 92
McDonald, Flora	107	42 35	McIntyre, John	107	28 23
McIsaac, Philomena	38	15 03	McIsaac, Dan J	108	28 50
McKeigan, J A	69	27 30	McKenzie, Margaret	95	25 06
McKenzie, Archie J	104	41 16	McKenzie, Jas A	107	28 23
McKay, Nellie J	104	41 16	McKinnon, Annie	108	28 50
McKinnon, Katie	108	42 75	McLean, Annie	107	28 23
McLeod, Katie J	102	40 37	McLean, Neil	108	28 50
MacMaster, Annie J	107	42 35	McLean, Mary C	108	28 50
Macneil, Alexander	105	41 55	McLennan, John	103	27 18
“ (for last term)	198	63 49	MacLeod, Margt J	93	24 53
Macneil, Katie	96	41 95	MacLeod, Louise	106	27 97
Macneil, Maria A	108	42 75	MacLeod, Angeline	102	26 92
McVicar, Edith J	97	38 39	Macneil, M Margt	107	28 23
Martell, Ada B	107	42 35	McNeil, Katie J	106	27 97
Moreash, Clara	107	42 35	MacNeill, Mary A	106	27 97
Morrison, Maggie	105	41 55	McNeil, Annie	107	28 23
Muggah, Margaret	108	42 75	McRae, Duncan K	102	26 92
Neville, Maria	104	41 16	MacVicar, Bessie A	103	27 18
O'Connell, Annie	107	42 35	Matheson, Margt F	49	12 93
Ormond, B M	108	42 75	Maxwell, Ruth E	107	28 23
Patterson, Maggie L	107	42 35	Maxwell, Alice	102	26 92
Phoran, Alice	107	42 35	Munroe, Sarah E	108	28 50
Robinson, Hattie L	107	42 35	Nicholson, John H	107	28 23
Simpson, Margt J	108	42 75	Nicholson, May	107	28 23
Sr St Ethelrude	108	42 75	Nickerson, Margt J	107	28 23
“ Genevieve	108	42 75	O'Handley, Joanna	108	28 50
Sr M Josephine	106	41 95	Ormiston, Mary E	106	27 97
“ Vincentine	108	42 75	Roach, Ada M	39	10 28
“ Dionysia	106	41 95	Ross, Mary M	77	20 31
“ Eulalia	108	42 75	Sr St Gregory	107	28 23
“ Pelagia	108	42 75	Sr Maria Amabilis	108	28 50

Sr St Marie	108	28 50
Smith, John	106	27 97
Steele, Florence	94	24 80
Spencer, Eva J	108	28 50
Thompson, Bella	93	24 53
Wilmot, Percy C	90	23 74
Wallace, Jean	19½	5 12
*Boyd, Mary W	108	38 00
*Cameron, Mary	108	38 00
*Dillon, Agnes W	50	17 59
*McMillan, Mrs F	108	38 00
*Munro, Katie	90	31 65
*Ratchford, Winnie	98	34 47

COLCHESTER.

STIRLING.

Patterson, Harry	108	57 00
Cameron, Annie	103	40 76
Fraser, Alice	107	42 35
MacEachren, M	108	42 75
Nelson, Nancy	107	42 35
Perrin, Elva	108	42 75
Stewart, Helena	97	38 39
Sutherland, Barbara	107	42 35
Taylor, Arabella	106	41 95
Baillie, Christina	88	23 20
Cameron, Laura	108	28 50
*Craig, J Violet	107½	36 78
*Crockett, Eva	108	36 96
Cunningham, Nellie	108	28 50
Downing, Minnie	107	28 23
Ferguson, Jessie	108	28 50
Ferguson, Janie	108	28 50
*Heughen, Maggie	106½	36 45
MacEachren, Janie	108	28 50
McGregor, Flora	95½	25 19
McKenzie, Margaret	94	24 80
*McLeod, Maggie	108	36 96
*McLeod, Jessie	88	30 09
McLeod, Jessie W	108	28 50
Ross, Wm	108	28 50
Ross, Jessie	108	28 50
Ross, Bella	108	28 50
Smith, Ina	107	28 23
*Urquhart, Martha	107	36 62

WEST COLCHESTER.

Foster, F O	108	71 25
Patterson, Grace H	108	85 50
Bruce, Chas J	108	99 75
DeLancy, Jas A	108	99 75
Fulton, A Maud	108	57 00
Fulton, A Bertha	108	57 00
Knight, Frank	108	57 00
Morehouse, F G	107	56 47
Lauk, Annie	108	57 00
Lynds, Allie	108	57 00
Stapleton, W C	108	57 00
Urquhart, Alex	108	57 00
Chisholm, Annie	90	35 62
Currie, Eva	98½	38 98
Davison, Stella	108	42 75
Ellis, Janie	108	42 75
Fletcher, Georgie	108	42 75

Fulton, Susie	108	42 75
Gass, Ellard	88	34 84
Johnstone, Blanche	108	42 75
Johnson, Alena	108	42 75
McCully, Eva	107	42 35
McNutt, Fannie	108	42 75
Murray, A A	20	7 91
Ward, Cora	108	42 75
Peppard, Margaret	108	42 75
Spencer, Louise	108	40 76
Buchanan, L	108	28 50
*Campbell, M A	38	12 99
Chisholm, Ethel	108	28 50
*Corbett, Emma	98	33 53
Creelman, Jean	107	28 23
Fisher, Susie	107	28 23
Fulton, Ethel	108	28 50
*Fulton, Marion	68	23 27
McClintick, Agnes	101	26 65
*McLaughlin, Ethel	105	35 92
*McLaughlin, Grace	107	36 62
McDonald, Laura	107	28 23
Morrison, Lizzie	108	28 50
Robertson, Susie	108	28 50
Shipley, Lily	98	25 86
Smith, Emma	97	25 59

SOUTH COLCHESTER.

Archibald, G G	107	84 70
Best, Lillian	107	84 70
Campbell, W R	107	98 81
Crowe, H S	107	84 70
Fash, Mabelle	107	84 70
Hemmeon, M D	107	84 70
Little, James	106	83 90
O'Brien, Mary	107	70 58
Archibald, Lulu	107	56 47
Barteaux, J E	107	84 70
Bool, Evelyn	107	56 47
Burris, Grace D	107	56 47
Coleman, Edna F	107	56 47
Davidson, Clara	107	56 47
Dickson, Hattie	107	56 47
Dickson, Lida	108	57 00
Edwards, Libbie	107	56 47
Holesworth, Mabel	108	57 00
Linton, O H	107	56 47
Logan, Margaret	107	56 47
McCallum, Myrtle	107	56 47
Mack, Annie L	107	56 47
Moxon, Arthur	107	56 47
McInnis, Lenora	107	56 47
McKenzie, Georgia A	108	57 00
McKay, Katherine E	108	57 00
McLellan, Lottie	108	57 00
Archibald, Minnie M	108	42 75
Archibald, Jessie M	104	41 16
Archibald, Ella S	108	42 75
Archibald, Janet	107	42 35
Bates, Stella	107	42 35
Bentley, Maggie I.	108	42 75
Benzie, Janet	102	40 37
Brown, Emma M	108	42 75
Carmichael, Thos H	106	41 95
Cox, Jane R	106	41 95
Dalrymple, Lucy M	92	36 41
Dewis, Margaret J	108	42 75
Dean, Robt S	108	42 75

Dickson, Jessie B	106	41 95	Eaton, Isabel	102	53 83
Fisher, Edna M	108	42 75	Elliott, Jane	108	57 00
Fraser, Emily H	78	30 86	Hunter, M C	108	57 00
Frame, Emma M	108	42 75	Lanner, Ida	103	54 36
Fulton, Ella J	107	42 35	Leitch, Hally	106	55 94
Gammell, Janet	108	42 75	Love, Rachel	108	57 00
Gordon, Sadie J	107	42 35	MacCart, Agnes	108	57 00
Lays, Melissa	98	38 78	MacDowell, Mabel	108	57 00
Loring, Eva	108	42 75	MacKay, Anna	108	57 00
Lynds, Lulu J	108	42 75	MacKenzie, Anna	103	54 36
Matheson, Maggie	64	25 32	MacKinnon, Alice	108	57 00
McDonald, Donald W	101	39 97	MacNeil, Bessie	103	54 36
McLellan, Edna	107	42 35	MacPherson, Margaret	108	57 00
McLeod, M Jean	107	42 35	MacPherson, Minnie	108	57 00
McCurdy, Annie K	100	39 58	MacWilliams, Jessie	88	46 44
McNab, D Stewart	103	40 76	Mitchell, Jennie	20	10 55
Nelson, Viva	108	42 75	Moore, Janet	103	54 36
Patterson, S B	103	40 76	Patton, Alberta	108	57 00
Putnam, Ethel	108	42 75	Pugh, Ethel	108	57 00
Roop, Lida M	93	36 81	Purdy, Bertha	108	57 00
Suckling, Caroline	108	42 75	Reid, Mina	69	36 41
Tuttle, Florence S	107	42 35	Ross, A D	107	56 47
Dartt, Adelaide	103	27 18	Roy, Harriet	108	57 00
Dunbrack, Mary	108	28 50	Shaw, Vangie	108	57 00
*Dickson, Ida B	102½	35 08	Slade, W K	108	57 00
Erskine, Carrie M	106	27 97	Anderson, Luey	108	42 75
Grant, Lottie R	103	27 18	Angus, W P	108	42 75
*Goodwin, M Alma	108	36 96	Angus, Marietta	107½	42 55
*Gunn, Mary D	79	27 02	Atkinson, Janie	107	42 35
Harvey, Arabella E	107	28 23	Baird, Sara	108	42 75
*Higgins, E Gertrude	70	23 95	Baker, Carrie	108	42 75
*Langille, A Alberta	33	11 29	Barclay, Winnifred	108	42 75
Lynds, Adelaide	108	28 50	Barnhill, Ida	108	42 75
Lightbody, Susie	107	28 23	Baxter, Alice	108	42 75
Little, Mabel E	108	28 50	Beattie, Laura	108	42 75
Matheson, Maud	44	11 61	Benjamin, May	82	32 45
*McLean, Eva M	100	34 22	Bigney, Mabel	105	41 55
*McHefley, Mary E	78	26 68	Blair, Maggie T	107	42 35
*McCallum, Christina	88	30 09	Brundage, Kate	108	42 75
Murray, Martha B	108	28 50	Burke, Annie C	105	41 55
Nelson, Eda M	108	28 50	Caldwell, Elsie	108	42 75
*Oakes, Phoebe	76	26 00	Carter, Clara	108	42 75
Prescott, Alice	106	30 59	Carter, Ida	108	42 75
Rogers, Sarah	65	17 14	Charman, Eliza	108	42 75
Roodie, Lizzie J	108	28 50	Coates, Clara	108	42 75
*Stuart, Mabel C	58	19 85	Coffin, Sophia	106	41 95
Taylor, Alma F	107	28 23	Creelman, Laura	108	42 75
*Waddell, Joanna G	81	27 71	Crowe, Alice G	105	41 55
			Curry, Katherine	107	42 35
			Downey, Margaret	108	42 75
			Embree, Sara	108	42 75
			Fraser, Lillian	108	42 75
			Fulton, Lottie	100	39 58
			Gould, Alberta	93	36 81
			Grant, M A	108	42 75
			Henley, Theresa	94	37 20
			Higgs, Evelyn	108	42 75
			Hunter, Augusta	108	42 75
			Hunter, Lillian	108	42 75
			Huston, Mary A	108	42 75
			Kent, Susie	95½	37 80
			Kerr, Minnie G	106	41 95
			Kirkpatrick, Ina	102	40 37
			Lanner, Margaret	108	42 75
			Lockhart, Laura	108	42 75
			Logan, Lou E	108	42 75
			MacKay, Maggie B	77	30 46
			MacKinlay, Oressa	108	42 75
			MacLeod, Lilas	108	42 75

CUMBERLAND.

Lay, E J	108	99 75
MacNeily, Murray	108	99 75
MacTavish, N D	108	85 50
Atkinson, Blanche	108	57 00
Archibald, Susie	108	57 00
Aymar, W M	108	99 75
Ballentyne, Janet	108	57 00
Barnes, Lilah	108	57 00
Baxter, Agnes	108	57 00
Beaton, Katherine	108	57 00
Black, Sadie	108	57 00
Campbell, Annie	108	57 00
Charman, J H	108	57 00
Chipman, Geo F	108	57 00
Conway, Isabella	108	57 00
Creelman, Laura M	108	57 00

MacNab, Elizabeth	98	38 78
MacVicar, J E	108	42 75
Metcalfe, Lila	103	40 76
Mitchell, Jennie	87	34 44
Moore, J L	107	42 35
Morrison, Adelaide	108	42 75
Munroe, J A	108	42 75
Murray, Georgie	46	18 20
Nicholson, Mary	108	42 75
Oulton, Lizzie	108	42 75
Oxley, Lydia	108	42 75
Oxley, Priscilla	108	42 75
Patterson, Sara J	108	42 75
Patton, Weldon	108	42 75
Purdy, Janie	108	42 75
Purdy, Annie	108	42 75
Simpson, Lydia	108	42 75
Simpson, Susie	88	34 84
Smallwood, Lizzie	53	20 98
Spencer, Mary	108	42 75
Robb, Sadie	107	42 35
Tait, Lillian V	108	42 75
Taylor, Geo W	97	38 39
Thompson, Etta	54	21 37
Trenholm, Ruth	104	41 16
Urquhart, M	108	42 75
Vance, Stiles	102	40 37
Webb, Laura	108	42 75
Atkinson, Bella	108	28 50
Baird, Edna	71	18 73
Barnes, Nettie	108	28 50
Barnes Carrie	106	27 97
*Bigney, Blanche	100	34 44
Borden, Minnie	108	28 50
Boomer, Ethel	99	26 42
Brown, Ethel	108	28 50
Bryden, Margaret	106	27 97
Carter, Florence	108	28 50
*Chisholm, Cynthia	108	37 20
Colburn, Nellie	108	28 50
*Creelman, Maud	94	32 37
Cummings, Ethel	102	26 92
*Davison, Bertha	102	34 78
Dewar, Charlotte	103	27 18
Dixon, Annie	108	28 50
Dixon, Elva	103	27 18
Dobson, W A	107½	28 36
*Elliot, Ida W	76	26 17
Fenton, L A	105	27 70
Finley, Mary J	105	27 70
Grant, Annie	108	28 50
Henderson, Emma	108	28 50
Keiver, Mary	84½	22 28
King, Ida	108	28 50
Johnson, Ida E	108	28 50
*McCallum, Kate	108	37 20
McDonald, Emma	108	28 50
McDonald, Jessie	108	28 50
McFarlane, Marion	108	28 50
McKay, M A	107	28 23
*McKim, Josie	77	26 51
*McKim, Lizzie	107	28 23
Miller, Clara	95	25 06
Moore, Bertha	20	5 26
Murray, Ella	106	27 97
Oxley, Gertrude	108	28 50
Oxley, Annie	108	28 50
Patterson, Marlin	107	28 23
Ralston, Ethel	106	27 97

Reid, Annie M	75	19 79
Reid, Eudavilla	108	28 50
Reid, Lena	107	28 23
Ross, Myra	106½	28 10
*Ross, M. E	89	30 62
*Siddard, Annie	108	37 20
*Skinner, Kate	94	32 37
Skidmore, Flora	107	28 23
Smith, Mazie	108	28 50
*Soley, Elva P	101	34 78
Tufts, Bella F	108	28 50
Urquhart, Janie	108	28 50
*Weir, Minnie	108	37 20
*Wood, Sadie	108	37 20

PARRSBORO.

Magee, W H	108	99 75
Messenger, Laura	106	69 92
Carter, Fred	108	57 00
Davison, L F	107	56 47
Flemming, H	108	57 00
Kirkpatrick, Lizzie	108	57 00
MacAleese, Jennie	108	57 00
MacKenzie, Annie	88	46 44
O'Mullon, Mary	108	57 00
Richardson, Laura	52	27 44
Spinney, C C	108	57 00
Sproul, M J	106	55 94
Watton, Lillian	108	57 00
Cameron, Bertha	108	42 75
Creelman, Minerva	108	42 75
*Dickinson, Maud	108	42 75
Fraser, Margaret	73	28 88
Fulmore, Della	103	40 76
Johnson, J B	108	42 75
Kirkpatrick, Bessie	101	39 97
Knowlton, Edith	100	39 58
Lavers, Josie	103	49 76
Lyons, Nellie	104	41 16
McDonald, Ethel	20	7 91
McIntosh, Elsie	108	42 75
Pierce, Elsie	108	42 75
Scott, Bertha	93	36 81
Sinclair, Alex	43	17 01
Sproul, Hester	108	42 75
Watton, Ethel	108	42 75
*Carter, Georgie	108	37 20
*Deuch, Susie	89	30 62
*Grant, Lena	80	27 54
*Lynch, Marion	108	37 20
McCabe, Alice	86	22 68
Morris, Emily	108	28 50
*Robinson, Alice	20	6 87
Rutherford, Ada	108	28 50
Slater, Sadie	108	28 50
Smith, Ellie	108	28 50
Smith, Flora	108	28 50
*Vans, Margaret	78	26 85
*Wasson, Alphretta	108	37 20

DIGBY.

Dagnaud, P M	97	\$89 57
Hogg, Henry B	108	99 75
Alexius Sister M	108	57 00
Bancroft, Geo R	108	57 00
Barteaux, A E	108	57 00
Bishop, Mina A	108	57 00
Bond, Mary G	108	57 00
Ellenwood, Bertha D	35	18 45
Graham, Jessie E	107	57 47
Hogg, Nathaniel W	59	31 14
LeBlanc, Edw M	108	57 00
Morse, Egbert P	108	57 00
Morse, Flora M	103	54 36
Mullen, Alva E	108	57 00
Pothier, Andre G	92	48 55
Richardson, R G D	108	57 00
Robbins, Catherine H	49	25 85
Russell, Elizabeth C	108	57 00
Scott, Agnes B	103	54 36
Taylor, Jas A	106	55 94
Vroom, Carrie E	108	57 00
Wade, Lennie D	107	56 47
Wade, Louisa M	107	56 47
Armstrong, A H	108	42 75
Baptista, Sister M	108	42 75
Belliveau, Catherine	108	42 75
Belliveau, Grace M	106	41 95
Bent, Minnie S	108	42 75
Clarke, J Allison	107	42 35
Coggins, Agnes M	108	42 75
Copeland, Laura W	95	37 60
Cornwell, Janet M	73	28 88
Cowan, Janet A	107	42 85
Crowe, Bessie H	108	42 75
Crowell, Mabel M	108	42 75
Daniels, Clara A	97	38 39
Denton, Laura B	100½	39 78
D'Entremont, Raymond	107	42 35
Eugenie, Sister M	108	42 75
Findal, Adeline	103	40 76
Gaudet, Evangeline	108	42 75
Hilton, Winnifred E	108	42 75
Hopkins, Lottie W	102	40 37
John, Sister M	108	42 75
Mussells, Maud A	108	42 75
Perry, Hattie M	108	42 75
Pothier, Marguerita A	103	40 76
Rumsey, Clara I	54	21 37
Sabeau, Grace H	85	33 65
Sanders, Arthur W	105	41 55
Seraphia, Sister M	108	42 75
Stanislaus, Sister R	108	42 75
Thibodeau, Rose Ann	108	42 75
Titus, Robie L	108	42 75
Warne, Janet L	108	42 75
*Amirault, Clara B	108	38 00
Belliveau, Leah	27	7 11
Belliveau, Leonice	104	27 44
Belliveau, Edw M	20	5 26
*Blackadar, Grace E	108	38 00
*Brooks, Edith A	102	35 88
Chipman, Nellie	108	28 50
Comeau, Adaline	108	28 50
Comeau, J Albert	88	23 20
Comeau, Geo P	108	28 50
Comeau, Resther J	87	22 94
*Cossaboom, Mamie L	108	38 00

Cowan, Mary C	107½	28 36
Crousse, Josephine P	108	28 50
Denton, E May	107	28 23
*Denton, Flora B	106	37 29
Deveau, Ann Lea	108	28 50
Dorman, Gertrude O	88	23 20
Doucet, Marie Nellie	108	28 50
Dunn, Annie M	103	27 18
Durland, Henrietta G	108	28 50
Fraser, Winifred M	108	28 50
Gaudet, Beatrice	107	28 23
Gehue, Loretta	108	28 50
Haines, Eva E	108	28 50
*Hainey, Mary C	89	31 29
*Hill, Dorcas A	45	15 82
*Hinzman, Maud S	108	38 00
Johnson, Ethel B	104	27 44
Lambertson, Nora M	108	28 50
LeBlanc, Symphorien	103	27 18
Lonergan, Margaret L	108	28 50
*Miner, Mildred E	58	20 40
*Morehouse, Edna R	108	38 00
Mullen, Annie L	107	28 23
*Mullen, Tracey H	108	38 00
Mussells, I H	107½	28 36
*Perry, Lydee S	108	38 00
Pothier, Martha A	107	28 23
Prime, Lenetta	108	28 50
Robicheau, Isabella	78	20 57
*Robicheau, Loretta	78	27 43
Robicheau, Mary A	78	20 57
*Rosengren, Ethellyn	97	34 12
Smallie, Mary	107	28 23
Sulis, Bessie J	108	28 50
Sutherland, Grace	103	27 18
Taylor, Sophia	108	28 50
Thibault, Alma	106	27 97
Thurber, Bessie G	108	28 50
Titus, Lizzie T	108	28 50
Welch, Fannie A	108	28 50
Wormell, Sarah D	108	28 50

Assistant.

Ursula, Sister M	108	28 50
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GUYSBORO.

McLeod, D F	108	99 75
Richards, T R	108	99 75
Bruce, Wm M	108	57 00
Crowe, Winnifred	108	57 00
Chisholm, Wm J	108	57 00
Murphy, Mary J	108	57 00
Grant, Mabel	107	56 47
Johnson, Harriet	108	57 00
Parker, Herbert	108	57 00
Sangster, Osborne	54	28 50
Thompson, Margaret	98	51 72
Cameron, Edith	108	42 75
Connolly, Cassie M	108	42 75
Denham, Louise	108	42 75
Kennedy, Janie S	101	39 97
Mattatall, Daisy	107	42 35
Macaulay, Esther	108	42 75
Macdonald, Charlotte	101	39 97
McIntosh, Jessie	78	30 86
McMillan, Mary J	108	42 75

Osborne, Melissa A	106	41 95
Smith, Helen	98	38 78
Sherman, Maud	108	42 75
Sutherland, Minnie	108	42 75
Torey, Sarah J	104	41 16
Totten, Annie	108	42 75
Wheaton, Effie L	108	42 75
Aikens, Howard	108	28 50
Boyle, Katie A	108	28 50
*Brown, Annie E	77	27 08
Bowie, Blanche	108	28 50
Blair, Caroline	108	28 50
*Cresine, Mabel E	87	30 59
Cousins, Leah M	38	10 01
*Cousins, Leah M	19	6 69
Cooke, Ethel A	108	28 50
Carroll, Mary A N	108	28 50
Durkee, Viola W	97	25 59
Hadley, Nellie	107	28 23
Grant, Jenetta M	108	28 50
Gunn, Angus C	108	28 50
Hogan, Etta	107	28 23
Jamieson, Bessie G	108	28 50
Hannifen, Maggie	64	16 88
Hines, Laura	108	28 50
Kennedy, Lena C	106	27 97
*Meagher, Minnie	102	35 88
LeVert, John	108	28 50
Morgan, Esther M	103	27 18
Macdonald, Cassie	54	14 25
McIntosh, Sophia M	96	25 33
McKeough, Annie	108	28 50
Patton, Lily J	70	18 47
*Peart, Arthur J	108	38 00
Peeples, Cecil	102	26 92
Redmond, Rosalinda	107	28 23
Sullivan, James	98	25 86
*Taylor, Annie	106	37 29
Sutherland, Mary E	15	3 94
Sutherland, Daniel J	107	28 23
*Taylor, Lolo M	103	36 23

ST. MARY'S.

Boyd, Angus J	46	24 27
Fraser, Alfred W	108	57 00
Cameron, Thos G	108	42 75
Cameron, Christie J	108	42 75
Dickson, Margaret	103	40 76
Dechman, Clara E	108	42 75
Hiltz, Ethel M	107	42 35
McIntosh, Martha E	86	34 05
McLean, Annie	107	42 35
McNaughton, Dan P	108	42 75
McPherson, Alexander	59	23 35
Sinclair, Maude H	105	41 55
Chisholm, Nellie	107	28 23
Cumming Melissa K	84	22 15
Davidson, Effie E	48	12 66
Hattie, John D	108	28 50
Macdonald, Blanche	108	28 50
*MacGillivray, Jessie	108	35 00
*MacMillan, Adam D	13	4 56
Purcell, Margaret	102	26 92
Sutherland, Mary E	81	21 36
Sutherland, Ellen B	20	5 26
Sutis, Laura	108	28 50
Smith, Harriett E	86	22 68

HALIFAX.

CITY.

McKay, A	98	\$99 75
Kennedy, W T	94	85 50
Morton, S A	94	85 50
Mackintosh, K	94	85 50
Logan, J W	94	85 50
McCarthy, J B	94	57 00
Peters, F A	94	57 00
Lanos, J	76	
Hill, K F	38	
Butler, G K	98	71 25
Cummings, E	98	57 00
Doherty, D P	98	71 25
Evaristus, Sr	94	71 25
Marshall, G R	98	85 50
O'Hearn, P	98	85 50
Rosaire, Sr	27	19 62
Trefry, J H	98	71 25
Wilkie, F A	98	71 25
Alonzo, Sr	98	57 00
Ambrosia, Sr	98	57 00
Anderson, T	98	57 00
Berchmans, Sr	98	57 00
Boreham, E	98	57 00
Bowden, J M	98	57 00
Bowden, L J	40	23 26
Brims, M C	98	57 00
Brodie, I	98	57 00
Bruce, J	98	57 00
Cameron, E	98	57 00
Cecilia, Sr	98	57 00
C'eighton, I M	98	57 00
Cunningham, A M	98	57 00
DeChantal, Sr	94	57 00
Delahanty, K	98	57 00
Dempsey, I M	52	30 24
Dickey, S E	98	57 00
Dolorosa, Sr	98	57 00
Donohoe, Mme	98	57 00
Dwyer, M T	98	57 00
Electa, Sr	83	48 27
Florence, Sr	98	57 00
Flowers, E M	98	57 00
Flowers, H L	98	57 00
Gaul, R E	98	57 00
Genevieve, Sr	94	57 00
Haverstock, A M	98	57 00
Hart, G	98	57 00
Kelly, J M	98	57 00
Laracy, A X	98	57 00
Marshall, L E	98	57 00
Moseley, M I	98	57 00
McColough, A M	18	10 47
Met urdy, E R	98	57 00
McDonald, A H	98	57 00
McGregor, H	98	57 00
Moody, M H	98	57 00
Phelan, M T	98	57 00
Pius, Sr	98	57 00
Rankine, A B	98	57 00
Rosaire, Sr	71	41 29
Ross, E J	98	57 00
Saunders, A C	98	57 00
Shields, S W	98	57 00
Sims, S A	98	57 00
Spencer, M	54	31 41

Cox, Fred A	91	36 02
Croighton, Alice	108	42 75
Crowell, Edith	108	42 75
Davis, Hattie F	107½	42 55
Deller, Sam M	107	42 35
Densmore, Ora	108	42 75
Ervin, Edna	103	40 76
Fisher, Ethel	108	42 75
Freeman, Mary E	108	42 75
Fultz, Florence M	107	42 35
Gaetz, Ella May	107	42 35
Hall, Ralph M	108	42 75
Hamilton, Mary A	98	42 75
Hancock, Mildred	57	22 56
Hart, Mary E	108	42 75
Higgins, Alberta	108	42 75
Higgins, Arabella	105	41 55
Hennigar, Edith	98	42 75
Henrion, Carrie E	108	42 75
Huestis, Ada B	108	42 75
Hume, Bessie	98	42 75
Hume, Emma	98	42 75
Jackson, Eleanor	108	42 75
Kaye, Hattie A	108	42 75
Kierstead, Flossie	89	35 23
Laidlaw, Eliz	98	42 75
Jordan, Mabel	54	21 37
Langille, Gil	20	7 91
LeBlanc, John P	106	41 95
Lewis, Lizzie K	81	32 07
Lindsay, Cora	108	42 75
Lodge, Emma	108	42 75
Mary, Sister	108	42 75
Maskell, Viola	108	42 75
Messervey, Ethel	107	42 35
McDonald, Effie	107½	42 55
Mackasey, W P	105	41 55
McKay, Belle C	98	42 75
McKenzie, Marg	98	42 75
McMillan, Jennie	107	42 35
O'Brien, J R	108	42 75
O'Brien, Leonard	75	29 67
Pender, A M	98	42 75
Pennington, Louise	88	34 84
Phelan, Florence	107	42 35
Richardson, Lidie	108	42 75
Rockett, Evleen	107	42 35
Rockett, Marg	108	42 75
Roche, Clara	106½	42 15
Rose, Clarence	108	42 75
Sheehan, Daisy	108	42 75
Shute, Jessie F	98	42 75
Smith, Isabella	15	5 94
Thomas, Bessie	98	42 75
Tulloch, Bertha	108	42 75
Tobin, Gertrude	107	42 35
Wier, Amelia	77	30 36
Williston, Jennie	107	42 35
Wisdom, Sadie	64	28 48
Woodroffe, Laura	97	42 35
Annand, Laura	102	26 92
Archibald, Maud	29	7 64
Brown, Gertrude	101½	26 78
Brandige, Ethel	108	28 50
Cameron, Hattie	108	28 50
Campbell, Mary	107	28 23
*Chisholm, Jessie	108	38 00
Colter, Mary	108	28 50
Conrad, Laura	97	25 59

Cook, Georgie E	108	28 50
Corkum, Ethel	108	28 50
Cottle, Hannah	107	28 23
Crook, Mabel	100	26 39
Crowe, Carrie F	107	28 23
Crowell, Ida M	108	28 50
*Cruikshank, John F	100	35 18
Davis, May T	108	28 50
Dechman, Minnie	108	28 50
*Dickie, Bessie	107	37 65
Drake, Lydia	79	20 83
Dymond, Clara	108	28 50
Evans, Laura F	105	27 70
Fultz, Chester L	103	27 18
Giles, Agnes M	108	28 50
Greenough, Arabella	87	22 94
*Gunn, Ellen	70	24 62
*Hamilton, Mabel	104	36 59
*Hancock, Mildred	50	17 59
Hartling, Ella J R	108	28 50
*Horne, Lilly A	80	28 14
Hume, Sadie M	107	28 23
Hutchinson, Janet	108	28 50
Johnson, Nellie F	108	28 50
Jones, M Eleanor	99	26 12
Lindsay, Susie L	106	27 97
Little, Flora	107	28 23
Mitchell, Alice	98	28 50
Mitchell, Guy	107	28 23
Mitchell, Lucy V	108	28 50
Mumford, Eliz	106	27 97
McGrath, Beatrice	20	5 26
McGuire, Annie B	108	28 50
*McLeod, Gertie B	80	28 14
Patterson, Mabel	108	28 50
Peters, Alma T	108	28 50
Richardson, Ruth	104	27 44
*Roberts, Olive M	87	30 69
Rose, Lenora B	98	25 86
Ross, Carrie	107	28 23
*Ross, Libbie J	103	36 23
*Schultz, Sadie E	87	30 59
Sibley, Mattie A	108	28 50
*Smith, Esther H	81	28 49
Soy, Mary	105	27 70
Sutherland, Roberta	108	28 50
*Taylor, Carrie R	107	37 65
*Thompson, Ray M	93	32 70
Warner, Mary B	107	28 23

Assistant.

Findlay, Sadie	98	28 50
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HANTS.

WEST.

Shields, W J	107	98 81
Smith, J A	108	99 75
Angwin, Edith	107	56 47
Bigney, Annie	108	57 00
Brooks, Ethel G	107	56 47
Burgoyne, Mary	106½	56 21
Cutten Nella F	106	55 94
Dawson, Grace A	108	57 00
Dill, Ethel E	108	57 00

Hennigar Annie	107	56 47	O'Brien, Katie E	88	46 44
McLennan, Mary	108	57 00	Rines, Alfred	107	56 47
McNutt Annie	86	45 39	Roy, Mary D	107	56 47
Miller, Bessie	108	57 00	Stephens, Hattie S	108	57 00
Miller, Flora M	107	56 47	Barnhill, Lizzie E	107	42 35
Morse, Carrie A	108	57 00	Caddell, Maud L	108	42 75
O'Brien, Katie	14	7 38	*Canavan, Annie E	108	42 75
Sanford, Mattie V	107	56 47	Dodd, Florence E	107	42 35
Schnare, Lillie A	107	56 47	*Doyle, Cecilia J M	104½	41 36
Sproule, Winnie M	103	54 3½	Douglass, Harriet	108	42 75
Archibald, R D W	108	42 75	Duncan, Clara C	108	42 75
Bennett, Hanna	107½	42 55	Faulkner, Eunice	56	22 17
Burgoyne N A	108	42 75	*Gibson, Ella M	84	33 26
Cochran, S Ethel	103	40 76	Kavanagh, Annie M	108	42 75
Daniels, Ruth E	108	42 75	Logan, Robert J	105	41 55
Davison, Geo W	106	41 95	*MacDonald, Etta	93	36 81
Dimock, Annie	108	42 75	McDougall, Lois A	107	42 35
Fulmore, Bessie M	108	42 75	Morrison, Maggie	108	42 75
Goudy, Emily	108	42 75	O'Brien, Mary L	106	41 95
Kedy, Louise A	107	42 35	Parker, Grace D	107	42 35
King, Alberta L	108	42 75	Quigley, Mary E	72	28 48
Lawrence, Lydia K	106	41 95	Ramey, George R	106	41 95
Lightbody, Annie B	106½	42 15	Roodie, Annie H	20	7 91
Lynch, Jessie A	108	42 75	Ryan, Margaret	107½	42 55
Mariette, Emma M	108	42 75	Stuart, Charles H	108	42 75
McAlpine, Felicia D H	108	42 75	Sweet, Annie E	73	28 88
McCurry, Helen	108	42 75	Wallace, Gertrude B	105	41 55
McHarrie, Agnes	108	42 75	Wallace, Lena	108	42 75
Miller A Blanche	107	42 35	Wallace, Lulu D	86	34 05
Morse, Graham P	79	31 26	Webb, Effie P	108	42 75
Mosher, Edna	58	22 96	Webber, Annie E	107	42 35
Nicholson, Malcolm	91	36 02	Withrow, Mary L	84	33 26
Reid, Daisy	107	42 35	*Brechtin, Maggie	108	38 00
Salter, Hattie M	108	42 75	Brison, Eliza P	103	27 18
Sanford, Maggie	106	41 95	Card, Mary E	66	23 21
Skaling, Janie E	108	42 75	Cole, Lydia M	102	26 92
Underwood Annie	108	42 75	Corbett, Elva Etta	108	28 50
Allison, Jessie M	106½	28 10	Cottle, Pauline D	108	38 00
*Bond, Bessie	101	35 53	Dean, Bertha	75	19 79
*Bond, Sadie E	108	38 00	Densmore, Laura	107	28 23
Demmons, Leila L	107	28 23	Drinnen, Isabelle	18	4 73
Densmore, Georgie	108	28 50	English, Annetta	107	28 23
Dewis, Leella	107	28 23	Etter, A Gordon	108	28 50
Dickson, Lulu	107	28 23	Gowe, Laura V	95	25 06
*Gould, Rosalind M	88	30 94	Horne, Mary E	107	28 23
Lake, Cora A M	107½	28 36	Mason, Mabel E	94	24 80
*Lantz, Carrie F	107	37 65	McDonald, Hattie	108	28 50
*Mason, Harriet E	78	27 43	McKay, Annie B	108	28 50
Marsters, Ethel M	108	28 50	McLellan, Ethel S	108	28 50
Parker, Lillian B	107	28 23	*O'Brien, Janie L	108	38 00
Rathbun, Idna W	108	28 50	O'Brien, Mabel B	108	28 50
*Robertson, Gertrude A	104	36 59	*Parker, Alice B	108	38 00
Shaw, Marion B	74	19 52	McDougall, Emma,	20	5 26
*Shibley, Laura A	83	29 18			
*Weathers, Alice E	84	29 53	<i>Assistants.</i>		
*Wright, Lilah J	107½	37 82			
EAST.			McCallum, Mildred	108	28 50
Crandall, Ella D	108	57 00			
Creelman, Elizabeth	108	57 00	INVERNESS.		
Creelman, Minnie M.	108	57 00	NORTH.		
Currie, G Blanche	107	56 47	Benoit, Agnes	108	57 00
Denton, Kelsey C	107	56 47	Coady, Moses M	108	57 00
Eaton Grace T	104	54 89	Cormier, Mme	108	57 00
Ellis, Russell	107	56 47	McLean, Hector K	44	23 22
Etter, Margaret	106	55 94	McMillan, Neil	54	28 49
Gould, Mary Maud	105	55 41	Aucoin, James H	107	42 35
McHeffey, Jean	107	56 47			

Boudreau, Placide	107	42 35
Boudreau, Joseph C	108	42 75
Campbell, Lizzie A	108	42 75
Carmichael, D E	108	42 75
Chiasson, Ephraim	106	41 95
McDaniel, Annie E	108	42 75
Munro, M Scott	105½	41 75
McInnes, Charles J	33	36 81
McFarlane, D D	108	42 75
McEachen, Angus D	108	42 75
McLennan, Angus J	108	42 75
McDonnell, A S	92	36 41
McDaniel, Bernard	108	42 75
*McLennan, A N	15	5 94
McFarlane, James	108	42 75
Scott, Jessie	32	12 66
Stewart, Duncan A	107	42 35
Tompkins, Rebecca	76	30 07
Tompkins, Mathew F	108	42 75
Arseneau, Nellie	108	28 50
Aucoin, Chas J	108	28 50
*Austin, Kenneth J	101	35 53
Aucoin, Paul J	108	28 50
*Campbell, Jessie C	108	28 50
*Coady, Mary E	96	33 76
Chiasson, Norrie	25	6 59
Chiasson, Peter	108	28 50
Chiasson, Joseph F	108	28 50
Doucet, Paul	75	19 79
*Fleming, Maggie	62	21 81
Gallant, Edmund	108	28 50
Gillis, James D	107	28 23
Hart, Bert	28	7 38
LeBlanc, Judith	108	28 50
McIntosh, Sadie C	108	28 50
McDonald, Maggie J	69	18 20
McLeod, Mary A	105	27 70
*McLeod, Susie	100	35 18
McDaniel, Jessie	102	26 92
McIsaac, Annie M	102	26 92
McLellan, Catherine J	102	26 92
McMillan, John P	108	28 50
McKinnon, Alex E	108	28 50
*McLellan, James	108	38 00
McMillan, M R	40	10 65
Smith, Mary C	108	28 50
Smith, Cecilia M	108	28 50
ASSISTANT.		
McLellan, Margy A	108	19 00
SOUTH.		
Beattie, Frank H	108	99 75
Calder, Robt L	108	71 25
McLeod, J A	108	99 75
Chisholm, Duncan	45	23 74
Finlayson, John N	108	57 00
Lamey, Bessie	108	57 00
McDonald, A D	108	57 00
McLean, James J	105	55 41
Cameron, Louise J	108	42 75
Embree, Luella A	20	7 91
Sr St Mary	108	42 75
Sr St Prisca	108	42 75
Finlayson, Geo D	108	42 75
*McDonnell, M T	104	41 16
McInnes, Barbara	108	42 75

McKay, Margaret J	106	41 95
McLellan, Margaret	108	42 75
McDonald, Mary B	108	42 75
*McMillan, Sarah	108	42 75
McInnes, Euphemia	108	42 75
McInnes, W C	108	42 75
Murphy, P A	108	42 75
McDonald, Alex D	96	37 99
McInnes, Duncan	34	13 45
McMaster, D B	108	42 75
McLean, D R	108	42 75
*McDonald, Theresa	108	42 75
Philpot, Mary	108	42 75
Nicholson, Arch G	103	40 76
Beaton, Katie	104	27 44
Beaton, Annie	104	27 44
Boyd, Annie	20	5 26
Beaton, Pat F	108	28 50
Campbell, Annie B	108	28 50
Campbell, Mary	96	25 33
Campbell, James	108	28 50
Chisholm, Janie	19	4 99
Coady, Moses J	87	22 94
Finn, Clarence P	100½	26 52
Kennedy, Margaret	102	26 92
Sr St Mary	108	28 50
Sr St John	108	28 50
McDonald, Agnes	108	28 50
McDonald, Mary J	108	28 50
*McMillan, Catherine A	82	28 83
McMillan, Catherine A	21	5 52
McQueen, Catherine	107	28 23
McMaster, Mary J	95	25 06
McRae, Margaret	108	28 50
McKinnon, Mary A	94	24 80
McRae, Tena May	89	23 47
McMaster, Mary B	102	26 92
McMillan, Katie	98	25 86
McIver, Tena	97	25 59
McNeil, Mary J	106	27 97
McLennan, Mary A	108	28 50
McLean, Alex S	75	19 79
Matheson, D J	108	28 50
McIsaac, Mary Agnes	92	24 27
McLellan, Mary E	108	28 50
*McIver, Norena	107	37 65
McRae, Jessie A	105	27 70
McDonald, Norman	103	27 18
*McDonald, James	89	31 29
McKay, D P	90	23 74
*McMillan, Peter	108	38 00
McKinnon, James	96	25 33
*McInnes, Robt J	108	38 00
McLean, Duncan	90	23 74
McQuarrie, Angus	88	23 20
McLennan, Joseph N	108	28 50
McDonald, Wm J	108	28 50
*McDonald, Angus A	100	35 18
McDonald, Stephen A	54	14 25
McKinnon, Miscey	8	2 11
Rankin, D B	97	25 59
Smith, Jacob S	108	28 50
Walker, Annie	108	28 50
Wood, Emma L	85½	22 54
Chisholm, Duncan, (for 1900)	39	20 57

KINGS.					
Chisholm, Emma	107	70 58	Messenger, M W	108	42 75
Farrell, Theresa	108	85 50	Moore, Elizabeth	108	42 75
Godfrey, John F	30	15 82	Morton, Annie L	108	42 75
McCarthy, Mary W	55	29 02	Mosher, Maggie E	108	42 75
Ross, Jennie W	108	99 75	*Mosher, Rosalie	108	42 75
Shaw, Percy J	108	99 75	Nichols, Elva G	108	42 75
Vaughan, C L	106½	70 25	Nichols, Lola M	108	42 75
Alcorn, Emily	108	57 00	Nichols, Naomi E	108	42 75
Archibald, Emma	108	57 00	*Palmer, Charlotte	108	42 75
Banks, Stella M	105	55 41	Palmer, Eloise H	108	42 75
Bentley, Florence B	97	51 19	Parker, Ida A	108	42 75
Best, Emma J	108	57 00	Parker, Prim E	106	41 95
Bishop, Annie M	106	55 94	*Rand, Will L	103	40 76
Blanchard, Roberta	108	57 00	Reid, Prim G	105	41 55
Bowlby, Minnie F	108	57 00	Robinson, Clara	108	42 75
Bustin, Harry L	108	57 00	Robinson, Mabel L	108	42 75
Caldwell, Myrtle	107	56 47	Saunders, Mabel C	108	42 75
Chute, Lottie D W	108	57 00	Shaw, Alice M	20	7 91
Cox, Sarah E	107	56 47	Shaw, Christina C	98	38 78
Creed, Harriet M	55	29 02	Spicer, Mabel A	107	42 35
Ford, Robie W	108	57 00	Sutherland, Edna	108	42 75
Hamilton, Bessie	107	56 47	Wallace, Euphemia	108	42 75
Harvie, Alice B	108	57 00	Webster, Alberta	108	42 75
Hibbert, Ralph W	108	57 00	*West, Hattie W	96	37 99
Hird, Cassie B	100½	53 03	West, Mildred M	103	40 76
James, Beryl G	51	26 91	Vaughan, Henrietta	107	42 35
Lloyd, Katie A	107	56 47	Beals, Mary E	108	28 50
Loomer, Estella J	108	57 00	Best, Eunice E	108	28 50
Marchant, Laura L	108	57 00	Bezanson, Emma G	103	27 18
Margeson, J Willis	108	57 00	Bishop, Mabel	93	24 53
Moses, Glinda A	107	56 47	Bowles, Laura B	102	26 92
Pearsons, Kate E	104	54 89	Boyle, Cora M	108	28 50
Putnam, Clara	102	53 83	*Brown, Beatrice A	108	38 00
Rand, J Adelaide	108	57 00	*Burgess, Annie J	107	37 65
Robinson, L D	59	31 14	*Cox, Sadie E	64	22 51
Sanford, Albert L	168	57 00	*Davison, Laura E	103	36 23
Spinney, Fred H	108	57 00	*Etter, Norma C	108	28 00
Stephens, Emma L	108	57 00	*Ewing, Gertrude Z	108	38 00
Stronge, Gertrude A	108	57 00	Fales, Annie B	101	26 65
Wallace, Burpee W	108	57 00	Gammon, Mildred	108	28 50
Webster, Leora C	107	56 47	*Hatchard, Clara G	103	36 23
Welton, Jennie	108	57 00	Haly, Lily	108	28 50
Welton, Mildred	108	57 00	Haly, Mildred	83	21 89
White, Jennie M	108	57 00	Hiltz, Flora A	92	24 27
Yuill, Etta J	108	57 00	Johnson, Florence E	106	27 97
Baker, Laura C	89	35 23	Kennikle, Flora A	108	28 50
Benjamin, Cassie M	108	42 75	Kennikle, James	38	8 70
Bingay, Bessie M	67	26 51	*Kirkpatrick, Jessie E	108	38 00
Bishop, Hattie L	107	42 35	*Long, Gertrude	74	26 02
Borden, Annie C	108	42 75	*McCloskey, Arthur J	64	22 51
Brown, Estella M	108	42 75	*McGregor, Ella M	78	27 43
Burgess, Laurie L	108	42 75	*Mosher, Ruth	54	19 00
Challen, Bessie	108	42 75	*Neville, Violet A	78	27 43
Chase, Millicent S	107	42 35	*Newcomb, Lloyd	87½	30 76
Chisholm, Maud	108	42 75	*Parker, Maude S	105	36 94
Coldwell, Justin S	108	42 75	Parrish, Cora B	108	28 50
Crowe, Fannie B	74	29 27	Patterson, Ruth A	108	28 50
*Dorman, Robert	102	40 37	*Rand, Fannie L	108	38 00
Dyas, Katheryne	108	42 75	*Rockwell, Gladys	108	38 00
Ells, Edith R	108	42 75	*Stronge, Eva M	108	38 00
Foster, Laurie E	108	42 75	Loye, M Beatrice	108	28 50
Gammon, Minerva	107	42 35	Young, Jessie S	108	28 50
Jordan, Jennie E	108	42 75			
Jones, Mattie R	86	34 05			
Kelly, Minnie A	107	42 35			
Lee, Minnie	108	42 75			
Loomer, Rene S	104	41 16			

LUNENBURG.

Crouse, Annie	108	\$71 25	West, Ella	108	42 75
Hewitt, Minnie	108	85 50	Westhaver, Edna	108	42 75
Morton, R F	108	99 75	Wilson, Eva	108	42 75
McKittick, B	108	99 75	Zinck, Ellie	108	42 75
Smith, J F	107	98 81	Zwicker, Nettie	108	42 75
Hamm, Maggie	108	57 00	Gaetz, Ida	107	42 35
Durland, H A	108	57 00	*Barry, Ida	93	32 70
Forbes, Addie	108	57 00	Barry, Luella	98	25 86
Kaulback, Lenora	108	57 00	Bichard, Florrie	108	28 50
Kirk, Helen	106	55 94	Charlton, Kate	108	28 50
Leary, Mary	108	57 00	*Ches ey, Isabel	108	38 00
Lantz, Jessie	108	57 00	*Chesley, Jessie	103	36 23
Lewis, Kate A	108	57 00	*Covey, Flora	42	14 77
McDougall, W	108	57 00	Corkum, Beatrice	108	28 50
McKeon Helena	108	57 00	Dalton, Retha	97	25 59
Mulloch, Florence	103	54 36	Deal, Arabella	108	28 50
Smith, Lizzie	108	57 00	DeLong, Rachie	108	28 50
Strum, Mabel	108	57 00	Eisenhauer, Alice	108	28 50
Tobin, S G	108	57 00	Eisenhauer, Iona	103	27 18
Veinotte, A M	108	57 00	Eisenhauer, John	108	28 50
Wallace, Effie	108	57 00	Ernst, Mary	98	25 86
Young, Helen	108	57 00	Fader, Lillian	98	25 86
Zinck, Etta	108	57 00	Fancy, Bessie	108	28 50
Hewitt, Fred	108	57 00	Fancy, Elizabeth	108	28 50
Hamm, Ora	107	56 47	*Feener, Nora	105	36 94
Bell, Marie	108	42 75	*Feindell, Theresa	108	38 00
Bolivar, Stella	107	42 35	Fitch, Clara	107	28 23
Bowers, Mary	108	42 75	Haughn, Lottie	20	5 26
Card, Hattie	108	42 75	Haines, Taphenas	108	28 50
Cossmann, M	107	42 35	Hallamore, Elsie	108	28 50
Cushing, Alice	108	42 75	Hebb, Bessie	107	28 23
Eisenhauer, B	107	42 35	Hebb, Florence	107½	28 36
Fancy, Lydia	108	42 75	Herman, Bessie	108	28 50
Gow, Isabel	108	42 75	Herman, Letitia	108	28 50
Hamm, Erema	103	40 76	Herman, Naomi	108	28 50
Hebb, Elsie	108	42 75	Inglis, Flora	68	17 93
Herman, Eldridge	108	42 75	Jefferson, Eva	108	28 50
Hirtle, Amanda	108	42 75	Kaulback, Laura	108	28 50
Hirtle, Beatrice	108	42 75	Kennedy, Lois	108	28 50
Hyson, R E	108	42 75	Langille, Rebecca	108	28 50
Kaulback, Helen	98	38 78	Langille, Zilpah	108	28 50
Keddy, Beatrice	108	42 75	Lohnes, Mary	108	28 50
Keddy, Bessie	108	42 75	Manning, Geo	108	28 50
Logan, Mary E	106	41 95	*Mason, Jessie	108	38 40
Lohnes, Eva M	107½	42 55	Mitchell, Lena	108	28 50
Mader, Flora	108	42 75	Moreash, Carrie	108	28 50
Manning, Myra	105	41 55	*Morgan, Sadie	68	23 91
Millett, Nettie	108	42 75	*Mossman, Eva	54	19 00
McLachlan, Ethel	108	42 75	Mullock, Addie	108	28 50
McLachlan, Lelia	108	42 75	*Mullock, Walter	108	38 00
Newcomb, Mabel	108	42 75	Murley, Estella	108	28 50
Palmer, Etta	108	42 75	McGregor, Hattie	108	28 50
Prince, Ina	108	42 75	McMillan, Maud	108	28 50
Ramey, Rebecca	108	42 75	Naas, Ellen	108	28 50
Ritcey, Maggie	108	42 75	*Neal, Ella	102	35 88
Ritcey, Norman	106	41 95	*Patterson, Maud	103	36 23
Scott, Ethel	108	42 75	Parker, Carrie	88	23 20
Selig, Stafford	102	40 37	Publicover, Lida	108	28 50
Thompson, Mabel	108	42 75	Rafuse, Jessie	108	28 50
Tobin, Ellen	108	42 75	Rafuse, Maggie	108	28 50
Tobin, Mary E	108	42 75	Raney, Grace	108	28 50
Veinot, Minnie	108	42 75	Remby, Lottie	107	28 23
Warner, Emma	108	42 75	Rodenizer, Effie	108	28 50
Weagle, J A	108	42 75	Sarty, Eva	108	28 50
Webb, Daisy	96	37 99	Seldon, Clementine	108	28 50
Wentzell, Cora	108	42 75	Shea, Minnie	102½	27 05
Wentzell, Hattie	108	42 75	Spearwater, M	108	28 50
			Slauenwhite, P	108	28 50
			Smeltzer, Jennie	108	28 50

Smith, Ada A	108	23 50
Smith, Idella	108	28 50
Trethewey, Mary	103	27 18
*Veinotte, May	108	38 00
Vogler, Jessie	108	28 50
Waterman, Alma	108	23 50
Weagle, Josie	107	28 23
Wentzell, Jemima	102	26 92
Wile, Susie	108	28 50
Wilson, Alvin	54	14 25
Wilson, Ethel	108	28 50
Wolfe, Jessie	54	14 25
Zwicker, Bessie	101	26 65

CHESTER.

Lawson Thomas	49	45 26
Smeltzer, H R	107	70 39
Corkum, Inez	108	57 00
Fultz, Emily	49	25 85
Joudrey, Edith	108	57 00
Bogart, I H	53	20 98
Butler, Mary	49	19 39
Duncan, Jessie	108	4 75
Hennigar, B	108	4 75
Skerry, Ellen	108	4 75
Smith, Chas. D	104	41 16
Smith, Vera M	108	42 75
Walker, Bertie	108	42 75
Webber, Eva	49	19 39
Zinck, Lilla	106	41 95
*Broome, Carrie	98	34 47
Cox, Bessie	108	28 50
*De Adder, L	108	38 00
Dunlop, Jennie	107	28 23
*Ernst Florence	69	24 26
Howholdt, C	107	28 23
Hennigar, Grace	108	28 50
Hubleby, E M	108	28 50
Lockhart, Jessie	108	28 50
Lohnes, Lydia	107	28 23
Long, Agnes	106	27 97
Mills, Ethel	103	27 18
Roop, Carrie	93	24 53
Shoop, Nora	108	28 50
*Wright, Ethel	108	38 00

PICTOU.

NORTH.

Boehner, R S	102	80 75
McLellan, Robt	102	94 20
Munro, Henry F	102	80 75
Robinson, C B	102	80 75
Connolly, Nellie E	103	54 36
Dickson, Ethel M	95	50 13
Dunn, Geo A	103	54 36
Grant, Jessie E	102	53 83
McArthur, Alex	102	53 83
McArthur, Olive E	102	53 83
McRae, Muriel H	107	56 47
Maxwell, Martha	108	57 00
Macgillivray, Annie L	108	57 00
McLeod, John W	108	57 00
McLeod, Anna E	108	57 00
Sproull, Katie F	108	57 00
Young, Nettie B	108	57 00
Cruikshank, J J	102	40 37

Cooke, Charlotte May	72	28 48
Ferguson, Jennie I	108	4 75
Fraser, Katherine	107	42 35
Grant, Etta W	105	41 55
Grant, Ella J	108	42 75
McMillan, Catherine C	107	42 35
Mackenzie, Barbara	107	42 35
McKenzie, Hugh A	88	34 84
Macdonald, John R	107	42 35
McKay, Jessie C	108	42 75
McMillan, Anabelle	88	34 84
McKay, Kate	54	21 37
McKay, John M	77	30 46
McKay, Katherine	108	42 75
Matheson, C Edna	108	42 75
McKay, Marion A	108	42 75
Murray, Christina	107	42 35
Munro, Lillie	102	40 37
McLean, Ella J	107	42 35
McKenzie, Jas A	15	5 94
Munro, Lillie F	103	40 76
Rose, Jessie F	102	40 37
Ross, M Odessa	100	39 58
Sutherland, Georgianna	108	42 75
Thomson, Isa	102	40 37
*Boutilier, Eliza	101	35 53
Cameron, Maggie	28 5	7 51
Davies, Jessie	107	28 23
Elliott, Marion	108	28 50
Grant, Anna	108	28 50
Gass, Sherburne	93	24 53
Hamilton, Annie	91	24 00
Henderson, Bessie	108	28 50
Kennedy, Mary M	108	28 50
*Kennedy, Christie	77	27 08
*Langille, Edith C E	103	36 23
Lowden, Jennie C	107	28 23
Matheson, Maud	60	15 82
Matheson, Lottie	48	12 66
Matheson, Florence	108	28 50
McAulay, Lorinda	99	26 12
McAulay, Elva	108	28 50
McKay, Kenneth G	102	26 92
McKay, Malcolm	108	28 50
*McKay, William	108	38 00
McKenzie, Anna	108	28 50
McKenzie, Marion J	108	28 50
McGregor, Minnie	107	28 23
McLandress, Elizabeth	108	28 50
McLeod, Robt H	108	28 50
*McLeod, Jas D	108	38 00
McLeod, Kathleen	107	28 23
*Munro, Margaret	107	37 65
Robinson, Emma C	108	28 50
Stramberg, Vida M	103	27 18
Sutherland, Jean	88	23 20

SOUTH.

Benzie, R M	108	85 50
Fraser, Wm P	108	99 75
McLean, S C	108	85 50
McLeod, J. T	107	98 81
MacKenzie, Ellen	53	34 96
Simpson, F S	108	99 75
Smith, E B	108	85 50
Allen, Margaret E	108	57 00
Cunningham, A F	107	56 47
Fraser, Attie A	108	57 00

Grant, Tena	106	55 94
Johnson, Isabel	108	57 00
Macdonald, Christina	108	57 00
Mackenzie, A S	108	57 00
MacKay, Elizabeth S	54	28 50
McKaracher, Mary	108	57 00
McLeod, Jeannette, R	107½	56 73
McLean, Cassie E	108	57 00
Murray, Sadie A	108	57 00
Sutherland, Tena B	67	35 36
Smith, Jannie C	54	28 50
Thompson, Lizzie	108	57 00
Archibald, Olive L	107	42 35
Black, Jessie F	108	42 75
Cameron, Mary M	107½	42 55
Cameron, Margaret	39	15 43
Cameron, Anna B	106	41 95
Calder, Allister	108	42 75
Cavanagh, Maria	108	42 75
Chisholm, Mary M	106	41 95
Chisholm, Bessie M	108	42 75
Cock, Ada	78	30 86
Copeland, Adelaide	102	40 37
Cunningham, Leah	108	42 75
Cunningham, Dolina	106	41 95
Crocket, Annie C	106½	42 15
Duff, Catherine	108	42 75
Fraser, Mary C	71	28 09
Fraser, Tena K	108	42 75
Fraser, Annie McL	54	21 37
Gillis, Margaret E	108	42 75
Gunn, Mary A	108	42 75
Grant, Ada	108	42 75
Grant, Julia	108	42 75
Henderson, J W	107	42 35
Herdman, W W	89	35 23
King, Ida M	107	42 35
Laurie, Elizabeth	107	42 35
MacKay, Cassie M	108	42 75
Maxwell, Ella	108	42 75
Maxwell, Bessie B	107	42 35
McKinnon, Ada	107	42 35
McDonald, Agnes C	107	42 35
McDonald, Mary	108	42 75
McIntosh, Isabelle,	107	42 35
McLean, Cassie	108	42 75
McLean, Minnie	108	42 75
McLaren, Lottie	108	42 75
MacKenzie, Harry A	107	42 35
McLeod, Bessie J	108	42 75
McPherson, Margaret	108	42 75
McPhie, Maude	102	40 37
Murray, Annie M	108	42 75
Munroe Mary E	108	42 75
O'Neil, Annie H	108	42 75
Patterson, Geo E	108	42 75
Roy, Fannie B	98	38 78
Roy, Sarah D	106	41 95
Russell, Martha C	108	42 75
Sutherland, Jessie L	108	42 75
Sutherland, Alex A	108	42 75
Sutherland, Lexie E	106½	42 15
Wagner, Georgina	54	21 37
Wilson, Annie	108	42 75
Weir, Isabelle D	106	41 95
Young, Martha	108	42 75
*Baird, Anna E	54	19 00
*Bryden, Almira J	108	38 00
Campbell, Mary F	107	28 23

*Cameron, Rachael McD	107	37 65
Cameron, Hannah	107	28 23
*Culton, Annie I	64	22 51
Davies, Janet M	101	26 65
Douglas, Florence N	106	27 97
*Fraser, Cassie,	83	29 18
Grant, Cassie	100	26 39
Grant, Alex	107	28 23
Grant, Jessie M	93	24 53
Grant, Wm P	107	28 23
Harivel, Sophie	107	28 23
*Hattie, Daniel	72	25 32
Kennedy, Jennie M	108	28 50
Logan, Nellie P	66½	17 53
MacDonald, Ada S	105	27 70
*MacKay, Georgia	87	30 59
*MacKay, Bessie V	108	38 00
McLeod, Florence J	103	27 18
McDonald, Christina M	108	28 50
McDonald, Sadie J	104	27 44
MacGillivray, Mary	107	28 23
McKay, Nellie L	107	28 23
*McBain, Lena	24	8 43
McPherson, Mary	108	28 50
McPhie Christina J	106½	28 10
McTavish, Helena	93	24 53
Murdoch, Louise M	108	28 50
Robson, Norman	14	3 68
Stewart, Jennie W	108	28 50
*Sutherland, Robt	59	20 75

QUEENS.

Freeman, H S	108	99 75
Dauphinee, Josie	108	57 00
Dexter, Sadie	107½	56 73
Harrington, B	108	57 00
Harrington, G	108	57 00
Kempton, E M	108	57 00
Kempton, May	108	57 00
Mullins, Jennie	108	57 00
Penny, Laurie	103	54 36
Arthur, Linnie	108	42 75
Bell, Diadem	103	40 76
Collie, Zelia	71	28 09
Eldridge, Grace	108	42 75
Emenot, Mary	108	42 75
Ford, Carrie	108	42 75
Freeman, Margt	107	42 35
Hemeon, Nettie	108	42 75
Harlow, R L	108	42 75
Manthorne, Maud	107½	42 55
Shields, Brenton	107	42 35
Smith, Jennie M	108	42 75
Swim, Lina	102	40 37
Freeman, Allene	30	11 87
Chandler, Sadie	108	28 50
Dexter, Jennie	95	25 06
Forbes, Annie	98	25 86
Forbes, Gentie	108	28 50
Froude, Iona	108	28 50
Gardner, Estella	74	19 52
*Godfrey, Jessie	108	38 00
*Hupmau, Ella	106	37 29
Huskins, Morley	105	27 70
Mack, Emily	103	27 18
Manthorne, L	106½	28 10
McLeod, Mabel	108	28 50
Parke, Robina	107	28 23

Parull, Alma	108	28 50
*Swicker, Elsie	97	34 12
Smith, Bessie	108	28 50
Taylor, Emma	108	28 50
*Winters, Louisa	99	34 83
Zwicker, Annie	108	28 50

NORTH QUEENS.

Freeman, Jessie	108	57 00
Best, Linda	108	42 75
Brown, Bernice	97	38 39
Ford, Mollie	88	34 84
Freeman, Janet	108	42 75
Hagan, Lillian	108	42 75
Sproule, May	108	42 75
Telfer, Ada C	108	42 75
West, Susie	108	42 75
Boyle, May	108	28 50
Decker, Mary E	108	28 50
*Dolliver, Lydia	88	30 94
*Freeman, Mabel	108	38 00
Freeman, Maud	107	28 23
Harlow, Ada	107	28 23
*Hunt, Estella	68½	24 09
*Kempton, Delila	98	34 47
*Leary, Bernice	108	38 00
*Smith, Allie	88	30 94
Whitman, Lula	108	28 50

Assistant.

Shireffs, Alice	19	3 33
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RICHMOND.

Urquhart, H D	108	\$99 75
Boyd, Daniel D	107	56 47
Boyd, Christina	107	56 47
Campbell, D H	108	57 00
Crowe, Margt M	81	42 75
Hynes, James	108	57 00
Madden, Annie E	108	57 00
Martin, O McN	108	57 00
Baillie, Alex G	108	42 75
Cameron, Allan J	98	38 78
Dakin, Cora P	107	42 35
Deslauriers, M H	108	42 75
Doucet, M C	103	40 76
Finlayson, D K	67	26 51
Harris, Gladys E	98	38 78
Lattemoore, Libbie F	106	41 95
McKillop, Ewen D	107	42 35
McLean, Tina O	108	42 75
McLeod, H A	54	21 37
Macneil, Helena J	106	41 95
McDougall, Peter	108	42 75
Major, William	108	42 75
Morrison, John L	105	41 55
Nelson, J Scott	100	39 58
O'Brien, Garnet W	100	39 58
Renault, Alfred	103	40 76
Beranger, Elizab	107	28 23
Bonin, Mary E	101	26 65
Boucher, Susan M	108	28 50
Boudrot, Edwd D	106	27 97

Boyd, Sarah E	80	21 10
Briand, Amable	107	28 23
Boyle, Mary I	108	28 50
Boyle, Jo. S E	208	28 50
Chiasson, Adelard	105	27 70
Deagle, Joseph	107	28 23
Doyle, Matilda A	107	28 23
Ferguson, W N	106	27 97
Ferguson, K A	74	19 52
Hureau, Helen	95	25 06
Langley, John	20	5 26
Langley, Harriet E	79	20 83
Macdonald, Mary E	107	28 23
McDonald, Henry	106	27 97
MacGarry, M E	103	27 18
MacLachlan, M A	87	22 94
Macleod, Marie S	103	27 18
Matheson, Elsie	108	28 50
O'Toole, Sara E	108	28 50
Parks, Mary E	98	25 86
Sampson, Florence M	108	28 50
Sampson, Mary E	108	28 50
Sampson, Martha P	103	27 18
Tait, W D	103	27 18
Thibeau, Peter	43	11 34
*MacLean, Dan A	99	34 83
*MacLeod, Tena H	94	33 05
*Morrison, Dan A	103	36 23
*Murphy, Margt A	105	36 94
*Nelson, G A	107	37 65
*O Toole, Henrietta	107	37 65
*White, Sarah C	108	38 00

SHELBURNE.

Bruce, C S	108	99 75
Blackadar, G D	108	99 75
Allen, Janie R	93	49 08
Hogg, Maggie	108	57 00
Johnson, Carrie	108	57 00
Larkin, B A	108	57 00
MacDonald, W W	108	54 36
Thorburn, E M	108	57 00
Abbott, Cora	108	42 75
Atwood, Maud	108	42 75
Bower, Carrie E	108	42 75
Bower, Fred A	108	42 75
Bruce, Flo J	97	38 39
Etherington, Lily	106	41 95
Goodick, J D	108	42 75
Harding, M K	108	42 75
Holden, Annie V	103	40 76
Kean, Evelyn	108	42 75
Longhurst, K C	108	42 75
Lyle, E R	108	42 75
Martin, K L	108	42 75
MacAlpine, E	108	42 75
MacDonald, Mina	108	42 75
Martin, Bell	108	42 75
Swanburg, M M	108	42 75
Thomson, C H	108	42 75
Thorburn, B M	108	42 75
Turner, Flora	108	42 75
West, Henry H	101	39 97
Churchill, L P	108	28 50
Clark, C B	107	28 23
Freeman, L T	87	22 94

*Giffin, Ida M	40	14 07
Graham, Louise	105	27 70
Hayden, Maud	108	28 50
Hayden, Clarence	108	28 50
MacKay, F M	94	24 80
*Purney, Helen G	39	13 71
Purney, Gladys	108	28 50
*Reynolds, H C	108	38 00
Robertson, Bertha	107	28 23
Seldon, Nora	107	28 23
Swaine, Fred S	108	28 50
Swanbarg, M L	108	28 50
Swimm, C M	101	26 65
Thorburn, M B	84	22 15
*Williams, Flo	100	35 18

BARRINGTON.

Craig, N R	108	57 00
Freeman, A T	102	53 83
Huggins, G M	108	57 00
MacGill, L P	108	57 00
MacInnis, A D	108	57 00
Mackay, Nettie	108	57 00
Martin, M L	108	57 00
Turpin, Eudarilla	106	55 94
Backman, A R	82	32 47
Bethel, Allie	106	41 95
Bramen, Lennie	107	42 35
Downie, H A	108	42 75
Eisenhour, R C	107	42 35
Harlow, A C	108	42 75
Hogg, G W	105	41 55
Hopkins, Bell	108	42 75
Knowles, Ina	108	42 75
MacMillan, Lizzie	105	41 55
Nickerson, C N	108	42 75
Nickerson, S H	108	42 75
Swanburg, A M	108	42 75
*Thomas, Ida M	108	42 75
Zwicker, Carrie	107	42 35
Wilson, E M	8	3 16
Crowell A W	108	28 50
Cunningham, M	107	28 23
*Hardy, B W	87	30 59
Hogg, A C	108	28 50
Huskilson, Lena	108	28 50
Huestis, Maud	108	28 50
Kenney, Gertrude	106	27 97
Lamrock, Bessie	108	28 50
Lewis, Ella A	83	21 89
*Mackay, Edith V	77	27 08
Nickerson, B A	105	27 70
Perry, Emma F	108	28 50
*Snow, Cassie E	108	38 00
Thomas, Eva D	107	28 23

VICTORIA.

Archibald, Eugenie	85	78 51
Grant, Florence	108	57 00
McKenzie, Sophia S	108	57 00
McCurdy, Gertrude H	108	57 00
Meek, Lena A P	108	57 00
McDonald, M B	108	57 00
Roper, Hattie L	108	57 00
Beaton, Alex A	10	3 95

Buckles, Daniel	74	29 27
Campbell, Lizzie M	118	42 75
Cameron, Wm D	107	42 35
Grant, Christina	108	42 75
Hartigan, Elizabeth	108	42 75
Howatson, Jessie	108	42 75
McRae, Bessie F	108	42 75
McDonald, Mary I	107	42 35
*McDonald, Catherine A	108	42 75
McLeod, Margaret	104	41 16
McLeod, John D	93	36 81
McLeod, Alex	108	42 75
McKenzie, Christina	102	40 37
McInnes, Angus J	108	42 75
*McIver, Angus J	108	42 75
McDougal, Alex	108	42 75
Wall, Martin	108	42 75
Burns, Arsenius	98	25 86
Cameron, Ethel B	108	28 50
Campbell, Tena E	84	22 15
Campbell, Bella M	44	11 61
Doyle, Sarah J	59	15 56
Doyle, B Agnes C	103	27 18
Fraser, Esther C	102	26 92
Livingstone, Sarah M	106½	28 10
Livingstone, Katherine	103	27 18
*Morrison, Jessie C	108	38 00
Munro, Katie	95	25 06
McDonald, Jennie	105	27 70
McCharles, Lena M	108	28 50
McIntosh, Euphemia	108	28 50
McNeil, Elizabeth	87	22 94
Morrison, Joanna B	53	13 98
*McKenzie, Eliza A	108	38 00
McAulay, Jessie	96	25 33
McLeod, Bella M	108	28 50
McNeil, Mary	106	27 97
McMillan, Flora	103	27 18
McRae, Florence F	108	28 50
*McIver, Dolena	96	33 76
McRae, Lexie C	107	28 23
McLean, May C	108	28 50
McDonald, John A	106	27 97
*McDonald, Malcolm	100	35 18
McLeod, Angus	98	25 86
McIver, Iver J	98	25 86
McIver, Arthur	108	28 50
McLennan, John N	56	14 77
McDonald, Angus D	98	25 86
Nicholson, Donald	106	27 97
*Palmer, Gladys	103	36 23
*Rankin, Ronald J	107	37 65
Smith, Mary A	108	28 50
Stewart, Robert A	65	17 14

YARMOUTH.

Cameron, A	100	92 35
Kempton, W F	100	79 16
Wyman, H S	99	78 36
Archibald, M A	108	71 25
Bingay, N B	108	71 25
Bingay, J H	108	71 25
Horner, A W	107	84 70
MacGray, M W	108	71 25
Trask J. Logan	108	71 25
Allen, S B	108	57 00

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 last Monday in March is suggested 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 Inspectors *before the end of February*, 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 1st day of March, when it is probable action can be taken promptly on them, and due notice given in time for the holding of the meetings on the last Monday of the month.

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

The following School Sections have been added to those given in Sec. 42, of the Comments and Regulations of the Council of Public Instruction, whose annual meetings have been fixed by the Council for the last Monday in March.

ANTIGONISH.

No. 76.....Frankville.

DISTRICT OF ARGYLE.

No. 2.....East Pubnico.

CAPE BRETON.

No. 28.....Marion Bridge.

No. 75.....Trout Brook.

DISTRICT OF CHESTER.

No. 2.....East Chester.

DISTRICT OF DIGBY.

No. 14.....Gilbert.

DISTRICT OF GUYSBORO.

No. 3.....Riverside.

**DISTRICT OF LUNENBURG AND
NEW DUBLIN.**

No. 60.....Cleveland.

No. 72.....New Cumberland.

DISTRICT OF HALIFAX, WEST.

No. 1.....Hubbard's Cove.

No. 28.....Portuguese Cove.

No. 65.....West Chezzetcook.

DISTRICT OF HALIFAX, EAST.

No. 4.....Head Jeddore.

No. 27.....Beaver Harbor.

DISTRICT OF SOUTH QUEENS.

No. 3.....Central Port Mouton.

RICHMOND.

No. 8.....Petit de Grat.

DISTRICT OF ST. MARY'S.

No. 30.....Spanish Ship Bay.

VICTORIA.

No. 26.....Upper Washabuct.

No. 34.....Gillis Point.

No. 65½.....South Ingonish.

(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 in 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 attached to the school register, so as to be preserved as the property of the section for reference from year to year; the *other* to be sent in with the Return to the Inspector, who will transmit it to the Superintendent for examination, and compilation if desirable.

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 all other local phenomena of a similar kind be recorded. Each 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, some of the pupils radiating as far as two miles from the school room. The "nature study" under these conditions would be mainly undertaken at the most convenient time, thus not 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 district will let very little escape notice, especially if the first observer of each annually recurring phenomenon receive credit as the first observer of it for the year. The observations will be accurate, as the facts will have to be demonstrated by the most undoubted evidence, such as the bringing of the specimens to the school when possible or necessary.

For all observers the following most important, most essential principles of recording are emphasized: Better *no date*, *no record*, than a *WRONG ONE* or a *DOUBTFUL ONE*. Sports out of season due to very local conditions not common to at least a small field, should not be recorded except parenthetically. The date to be recorded for the purposes of compilation with those of other localities should be the *first* of the *many* of its kind following immediately after, etc. 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.

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.

PHENOLOGICAL OBSERVATIONS, CANADA.

Province For the year ending July, 190 .
 County District
 Locality or School Section No.....

[The estimated length and breadth of the locality within which the following observations were made X miles. Estimated distance from the sea coast..... miles. Estimated altitude above the sea level..... feet.
 Slope or general exposure of the region
 General character of the soil and surface
 Proportion of forest and its character
 Does the region include lowlands or intervalles?..... and if so name the main river or stream..... Or is it all substantially highlands?.....
 Any other peculiarity tending to affect vegetation?.....]

The most central Post Office of the locality or region.....

NAME AND ADDRESS OF THE TEACHER OR OTHER COMPILER OF THE OBSERVATIONS, RESPONSIBLE FOR THEIR ACCURACY.

When First Seen.	When becoming common.
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(WILD PLANTS, ETC.)

1. Alder (*Alnus incana*), catkins shedding pollen.....
2. Aspen (*Populus tremuloides*), ".....
3. Mayflower (*Epigaea repens*), flowering.....
4. Violet, Blue (*Viola cucullata*), ".....
5. Violet, White (*V. blanda*), ".....
6. Red Maple (*Acer Rubrum*), ".....
7. Bluets (*Houstonia caerulea*), ".....
8. Field Horsetail (*Equisetum arvense*), shedding spores.....
9. Dandelion (*Taraxacum officinale*), flowering.....
10. Adder's Tongue Lily (*Erythronium Am.*), flowering.....
11. Hepatica (*H. triloba*, etc.), flowering.....
12. Gold Thread (*Coptis trifolia*), ".....
13. Strawberry (*Fragaria Virginiana*), ".....
14. " " " fruit ripe.....
15. Wild Red Cherry (*Prunus Pennsylvanica*), flowering.....
16. " " " fruit ripe.....
17. Blueberry (*Vaccinium, Can. and Penn.*), flowering.....
18. " " " fruit ripe.....
19. Tall Buttercup (*Ranunculus acris*), flowering.....
20. Creeping Buttercup (*R. repens*), ".....
21. Clintonia (*Clintonia borealis*), ".....
22. Painted Trilium (*T. erythrocarpum*), ".....
23. Star flower (*Trientalis Americana*), ".....
24. Lady's Slipper (*Cypripedium acaule*), ".....
25. Marsh Calla (*Calla palustris*), ".....
26. Indian Pear (*Amelanchier Canadensis*) ".....
27. " " " fruit ripe.....
28. Raspberry (*Rubus strigosus*), flowering.....
29. " " " fruit ripe.....
30. High Blackberry (*Rubus villosus*), flowering.....
31. " " " fruit ripe.....

PHENOLOGICAL OBSERVATIONS—(Continued)

<p>[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.)</p>	<p>When First Seen.</p>	<p>When becoming Common.</p>
32. Pale Laurel (<i>Kalmia glauca</i>), flowering		
33. Sheep Laurel (<i>K. angustifolia</i>), “		
34. Pigeon Berry (<i>Cornus Canadensis</i>), flowering		
35. “ “ fruit ripe		
36. Blue-eyed Grass (<i>Sisyrinchium ang.</i>), flowering		
37. Twinflower (<i>Linnaea borealis</i>), “		
38. Butter and Eggs (<i>Linaria Canadensis</i>), flowering		
39. Yellow Rattle (<i>Rhinanthus Crista-galli</i>), “		
40. Pitcher-Plant (<i>Sarracenia purpurea</i>), “		
41. Heal-All (<i>Brunella vulgaris</i>), “		
42. Great Willow-Herb (<i>Epilobium angustifolium</i>), flowering		
43. Common Wild Rose (<i>Rosa lucida</i>), flowering		
44. Common St. John's Wort (<i>Hypericum perforatum</i>) flowering		
45. Fall Dandelion (<i>Leontodon autumnale</i>), flowering		
(CULTIVATED PLANTS, ETC.)		
46. Cherry (<i>Prunus cerasus</i>), flowering		
47. “ “ fruit ripe		
48. English Hawthorn (<i>Crataegus oxyacantha</i>), flowering		
49. American Hawthorn (<i>Crataegus</i> —), “		
50. Plum (<i>Prunus Domestica</i>) “		
51. Apple, early flowering, (<i>Pyrus</i>), “		
52. “ late “ “ “		
53. Red Currant (<i>Ribes rubrum</i>), “		
54. “ “ fruit ripe		
55. Black Currant (<i>R. nigrum</i>), flowering		
56. “ “ fruit ripe		
57. Lilac (<i>Syringa vulgaris</i>), flowering		
58. Potato (<i>Solanum tuberosum</i>), flowering		
59. Timothy (<i>Phleum pratense</i>), “		
60. White Clover (<i>Trifolium repens</i>), flowering		
61. Red Clover (<i>T. pratense</i>), “		
62. Wheat (<i>Triticum vulgare</i>), “		
63. Oats (<i>Avena sativa</i>), “		
64. Buckwheat (<i>Fagopyrum esculentum</i>), “		
65. (a) Earliest and (b) latest full leaving of Trees, &c., in Spring.	(a)	(b)
Name the species.		
(FARMING OPERATIONS, ETC.)		
66. Plowing begun		
67. Sowing		
68. Planting of Potatoes		
69. Shearing of Sheep		
70. Hay Cutting		
71. Grain Cutting		
72. Potato Digging		

PHENOLOGICAL OBSERVATIONS—(Continued.)

(METEOROLOGICAL PHENOMENA.)		(a)	(b)
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.]				Going North or coming in Spring.	Going South or leaving in Fall.
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.)

(MIGRATION OF BIRDS, ETC.)			
81.	Wild Duck migrating.....		
82.	Wild Geese migrating.....		
83.	Song Sparrow (<i>Melospiza fasciata</i>).....		
84.	American Robin (<i>Turdus migratorius</i>).....		
85.	Slate coloured Snow Bird (<i>Junco hiemalis</i>).....		
86.	Spotted Sand Piper (<i>Actitis macularia</i>).....		
87.	Meadow Lark (<i>Sturnella magna</i>).....		
88.	Kingfisher (<i>Ceryle Alcyon</i>).....		
89.	Yellow Crowned Warbler (<i>Dendroeca coronata</i>).....		
90.	Summer Yellow Bird (<i>Dendroeca aestiva</i>).....		
91.	White Throated Sparrow (<i>Zonotrichia alba</i>).....		
92.	Humming Bird (<i>Trochilus Colubris</i>).....		
93.	King Bird (<i>Tyrannus Carolinensis</i>).....		
94.	Bobolink (<i>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.)

FORMS.

The following forms are given for the benefit of inexperienced Teachers and Trustees. They are suggestive merely, and represent the smallest amount of information necessary to comply with the law. The Education Department will be glad to receive specimens of improved forms of all kinds which have been tested with respect to simplicity and effectiveness, from Inspectors, Teachers, Trustees, or any educational officials.

TEACHER'S NOTICE TO INSPECTOR.

To.....
Inspector of Schools.
School opened to-day in....., Section, No..... District of....., in
which Mr..... is Sec'y of Trustees. My engagement is for.....
Taught last in....., Section, Co. of..... My License is Class....
No..... Year, 19....
Date..... } Teacher.
..... } P. O. Address.

TRUSTEES' FORMS.

No. 1.

MINUTES OF ANNUAL MEETING.

The Annual School Meeting of....., Section, No..... District of
was held in....., on June....., 190....
1. was elected Chairman.
2. was elected Secretary of the meeting.
3. retired from office of Trustee.
4. was elected to fill the vacancy in the Board of Trustees.
5. Auditors' Report was adopted (here give it in brief)
6. Report of Board of Trustees was adopted (here give it in brief)
7. dollars were voted for school purposes.
8. dollars " " buildings and repairs.
9. Vote on "Compulsory Attendance" law
10. Other business

Signed by Chairman and
Countersigned by Secretary of the
Meeting.
....., Sec. to Trustees.

[Copy of this to be sent Inspector within one week.]

No. 2.

RATE ROLL.

Name.	Amount of Assessment. \$	Poll Tax. \$	Prop. Tax. \$	Total. \$	Payments. \$

No. 3.

FORM OF SECRETARY'S ACCOUNTS.

..... School Section, No.

	DR.	CR
By cash from Assessment Roll.....		\$400 00
To paid Teachers' Salaries	\$200 00	
" for Fuel	50 00	
" Janitor's Services, &c	25 00	
" By Cash from Municipal Fund.....		75 00
" from		30 00
To Bal. of Teachers' Salaries	100 00	

No. 4.

ACCOUNT.

John Smith, Esq., 190
 To School Section, Dr.

To School Tax Current Year, viz. :

On Property.....	\$10 00
Poll Tax.....	1 00
To Balance on old account	5 00
	<u>\$16 00</u>

Immediate payment is requested.

.....
 Sec. to Trustees.

No. 5.

The ratepayers of School Section No. in the District of
 are hereby notified that the Annual School Meeting will be held in the on the
 day of June, 190 , at 8 o'clock, p. m....

Date, } Trustees.

No. 6.

The ratepayers of School Section, No. , in the District of are hereby notified that a Special School Meeting will be held in the on the day of for the purpose of

Date } Trustees.

TEACHER'S AGREEMENT.

Memorandum of Agreement made and entered into the day of A. D., 190 . . . , between (name of teacher), a duly qualified Teacher of the Class of the one part, and (names of trustees), Trustees of School Section No. in the district of of the second part.

The said (name of teacher) on his (or her) part, in consideration of the below mentioned agreement by the parties of the second part, hereby covenants and agrees with the said (names of trustees) Trustees as aforesaid, and their successors in office, diligently and faithfully to teach a public school in the said section under the authority of the said Trustees and their successors in office, during the School Year ending July next.

And the said Trustees and their successors in office on their part covenant and agree with the said (name of teacher), Teacher as aforesaid, to pay to the said (name of teacher) out of the School Funds under their control, at the rate of dollars for the School Year in equal instalments semi-annually.*

And it is further mutually agreed that both parties to this agreement shall be in all respects subject to the provisions of the School Law and the Regulations made under its authority by the Council of Public Instruction.

In witness whereof, the parties to these presents have hereto subscribed their names on the day and year first above written.

Witness, [Name of Witness.] [Name of Teacher.] [Names of Trustees.]

*COMMENT: or quarterly.

BOND OF THE SECRETARY OF TRUSTEES.

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, well and 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 continue in full force and virtue.

Signed, sealed and delivered } in the presence of } [Name of Witness.] [Name of Secretary.] (Seal.) [Names of Sureties.] (Seals.)

BOTANY—GRADE IX.

The following *fifty* common species (occurring in almost every School Section of the Province) are named for analysis and classification in connection with the *Botany* of the First Year of the High School course. A description of the *genera* and *orders* in which these species are included should also be required. This list should be regarded as a *minimum*. Few teachers really interested in teaching science will find much difficulty in adding another fifty, which should include a few specimens of *mosses*, *liverworts*, *lichens*, *fungi*, and *algæ*, as well as some additional *phanerogams*. This list, will of course, be revised from time to time.

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Ranunculus repens. 2. Capsella bursa-pastoris. 3. Viola blanda. 4. Drosera rotundifolia. 5. Cerastium vulgatum. 5. Acer rubrum. 7. Trifolium repens. 8. Prunus Pennsylvanica. 9. Fragaria Virginiana. 10. Pyrus malus. 11. Ribes nigrum. 12. Epilobium angustifolium. 13. Pastinaca sativa. 14. Aralia nudicaulis. 15. Cornus Canadensis. 16. Sambucus. 17. Leucanthemum vulgare. 18. Cirsium arvense. 19. Taraxacum dens-leonis. 20. Lobelia inflata. 21. Epigaea repens. 22. Gaultheria procumbens. 23. Plantago major. 24. Lysimachia stricta. 25. Veronica serpyllifolia. | <ol style="list-style-type: none"> 26. Mentha Canadensis. 27. Solanum tuberosum. 28. Syringa vulgaris. 29. Chenopodium album. 30. Polygonum aviculare. 31. Ulmus Americana. 32. Fagus Ferruginea. 33. Myrica gale. 34. Betula. 35. Populus tremuloides. 36. Pinus strobus. 37. Abies Canadensis. 38. Habenaria or Byrpedium. 39. Iris versicolor. 40. Smilacina bifolia. 41. Juncus effusus. 42. Carex intumescens. 43. Triticum vulgare. 44. Equisetum sylvaticum. 45. Pteris aquilina. 46. Aspidium spinulosum. 47. Dicksonia punctilobula. 48. Onoclea sensibilis. 49. Osmunda cinamomea. 50. Lycopodium clavatum. |
|--|--|

Where the genus alone is mentioned the teacher is supposed to select the species most available in the neighborhood. Some of these flowers are very minute, and their study will require the use of a cheap botanical lens. It is important that each student should own a lens, and be taught how to use it. Students should be exercised in drawing the small parts enlarged on the black boards and in their note books. As a specimen of the *mosses* is recommended "The Common Hair Cap," *Polytrichum*; of the *Liverworts*, *Marchantia*; of the *Lichens*, *Usnea*, *Sticta* or *Cladonia*; of the *Fungi*, *Agaricus campestris*, the "edible mushroom."—*Journal of Education*, April, 1887.

The "*High School Botanical Note Book*," (of Ontario) Parts I. and II., is recommended to teachers as a guide to good method in preparing candidates for the Provincial Examination in Botany of grade IX—as well also, as far as it goes, for grade XII Botany. The last edition of the Ontario text-book (Spotton's) is the better text for High School work.

ZOOLOGY—GRADE XII.

The following types of the *fauna* of Nova Scotia are recommended for dissection and minute study of structure :

- | | |
|---|---|
| <ul style="list-style-type: none"> Ameeba. Paramœcium. Vorticella. A Fresh Water Sponge. Sertularia. Jelly Fish. Star Fish. Sea-Urchin. Earth Worm. Clam, Oyster or Mussel. | <ul style="list-style-type: none"> Land or Water Snail. Crab or Lobster. House Fly or Mosquito. Butterfly or Moth. Grasshopper or Beetle. Herring, Trout or Smelt. Frog. Snake. Pigeon. Rat, Rabbit or Cat. |
|---|---|

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

(Passed 4th April, 1901.)

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 the 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 according to the conditions prescribed by the Council."

(3) The form given for teacher's oath in the third schedule is repealed and the following substituted therefor :

"THIRD SCHEDULE."

TEACHER'S OATH.—(Section 105.)

"I....., a duly licensed teacher of class of the Province of Nova Scotia, make oath and say that I have taught and conducted school in school section No....., district of in accordance with law, for the period of*..... authorized teaching days from the..... day of..... to the..... day of..... during the school year, ending July, 190... , being*..... days during first half-year, and*†..... days during second half-year; that in addition‡ I was employed as specified in the regulations of the Council, Nos..... for*..... days, namely:§..... that the prescribed register has been faithfully and correctly kept by me in every particular as prescribed, and that to the best of my knowledge and belief the total days' attendance for the year in this school, made by the enrolled pupils in the said period was *†..... ; that my agreement with the trustees is in accordance with the statutes and regulations, and that there is no collusive understanding by which any portion of the agreement is to be made of no effect.

.....Teacher.

Sworn to at..... in the County of..... this day of..... A. D.,....., before me,....., J. P., in and for the County of.....

*The numbers to be expressed by words, not figures.

†To be filled in with a dash in semi-annual returns.

‡If teacher claims no additional days under regulations, the blank following to be filled in with a dash.

§Here specify the employment, with date.

AN ACT TO AMEND CHAPTER 52, REVISED STATUTES, 1900, "THE EDUCATION ACT."

(Passed March 27, A. D., 1902.)

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

1. Section twenty-one (21), sub-section one (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 (h) of said section the following words: "the cost of conveying children to school, and."

PROVINCIAL EXAMINATION OF HIGH SCHOOL STUDENTS.

82. "High School Students" shall be held to mean all who 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 Curriculum, to be known also as Grades IX, X, XI and XII respectively of the Public Schools.

84. The examination sessions shall commence each day at nine o'clock, a. m., for Grade XII on first Monday after 1st July*, at the following stations:—Sydney, Antigonish, Pictou, Amherst, Truro, Halifax, Kentville, Liverpool and Yarmouth; for Grades XI, X and IX on the following Wednesday, and for "Minimum Professional Qualification" and "Supplementary" of public school teachers on the Saturday following; and shall be conducted according to instructions, under a Deputy-Examiner appointed by the Superintendent of Education, at each of the following stations, viz.:—1, Amherst; 2, Annapolis; 3, Antigonish; 4, Arichat; 5, Baddeck; 6, Barrington; 7, Berwick; 8, Bridgetown; 9, Bridgewater; 10, Canso; 11, Chester; 12, Cheticamp; 13, Church Point; 14, Digby; 15, Glace Bay; 16, Great Village; 17, Guysboro; 18, Halifax; 19, Kentville; 20, Liverpool; 21, Lockeport; 22, Lunenburg; 23, Mabou; 24, Maitland; 25, Margaree Forks; 26, Middle Musquodoboit; 27, Middleton; 28, New Glasgow; 29, North Sydney; 30, Oxford; 31, Parrsboro; 32, Pictou; 33, Port Hawkesbury; 34, Port Hood; 35, River John; 36, Sheet Harbor; 37, Shelburne; 38, Sherbrooke; 39, Springhill; 40, Stellarton; 41, St. Peter's; 42, Sydney; 43, Tatamagouche; 44, Truro; 45, Upper Stewiacke; 46, Westport; 47, Windsor; 48, Wolfville; 49, Yarmouth.

*For the present year, 1902, examinations will commence on June 30th.

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 same grade written for unsuccessfully at a previous 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. Generally, one dollar must accompany the application for each grade before the one applied for which the candidate has not regularly passed.
- (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 be paid to the Deputy-Examiner on the Saturday when the candidate presents himself for examination, the Deputy-Examiner transmitting the same to the Superintendent with his report.
- (d) The prescribed form of application, which can be freely obtained 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 carefully and fully written out. If the application is defective on account of the omission of the proper fee, or on account of the omission or incorrect statement of any fact called for in the prescribed form, the application is null and void, and even should the Deputy-Examiner admit the candidate provisionally to the examination, his papers may be intercepted at the Education Office.
- (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 and on the payment of one dollar, which are to be transmitted with the Deputy's report to the Superintendent; and if such candidate's statement is correct, the error being due to causes beyond his control, the dollar shall be returned. Providing there is sufficient accommodation, the Deputy-Examiner may admit any candidate, waving all irregularities, on the payment of two dollars for Grade IX, X, or XI, and of four dollars for Grade XII.
- (f) For the convenience of those who have not passed Grades IX or X, or who having taken or passed either of them may not have made 40% on the Science paper of IX or the Science and Drawing papers of X, supplementary question papers on these subjects will be given as per time table on Saturday afternoon of Examination week. Candidates intending to take any of these papers should

indicate the intention in the column of "remarks" in their application. The fee of *one dollar* for each such "supplementary" paper shall be paid the Deputy-Examiner with each answer paper as it is handed in to him at the end of the hour, for transmission to the Education Office.

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

86. Each inspector shall forward, *not later than June 1st*, to the Superintendent of Education, a list of the applications received for each grade of examination at each station within his district, on a form to be supplied from the Education Office, transmitting therewith all moneys, having duly classified and checked the same in the form aforesaid.

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

88. The Superintendent of Education shall have prepared and printed suitable examination questions for each Grade at each examination in accordance with the prescribed course of study, and shall also forward to each Deputy-Examiner a sufficient supply of the printed questions, 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; and the numbered questions composing it shall be constructed with the intention of making each equal in value though not necessarily of equal difficulty. Thus, when 5 questions constitute one paper, the value of each when answered accurately with reasonable fulness and in good form will be 20, no matter whether it should be easier or more difficult than its fellow questions.

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 on the foregoing assumption; and shall sum up the total, placing it on the back of the sheet; and underneath the number of misspelled or obscurely written words, which number is to be deducted from the total for the true value of the paper. Thus, should the sum of the marks of a paper be 54, and the misspelled or obscurely written words be 6, the marks on the back would stand as follows: English Grammar [54—6]=48.

91. To make a "High School Pass" in Grades IX, X and XI, the candidate must make, at least the *minimum aggregate* (400 or more) of the grade on any eight papers, with no subject below 25.

To make a "Teachers' Pass" the candidate must, in addition, have made, at least, 40 on each "imperative" subject in the course up to and including that of the grade next below.

Candidates who have made a "High School Pass" can have it raised to the "Teacher's Pass" by supplementary examination.

92. To make a "High School Pass" in Grade XII, the candidate must make, at least, the *minimum aggregate* (1000 or more) on the subjects prescribed, with no subject below 25.

A candidate who makes an aggregate of 600 on any ten or fewer papers of Grade XII, and an aggregate of 500 on a set of ten or fewer different papers of the syllabus at a subsequent examination, or who makes an aggregate of 1000 on twenty or fewer papers of the syllabus,

or who has already taken a XII (c), a XII (sc), or an "A" License, may thereafter present himself for examination on any of the subjects on which he may not have made at least 50 per cent. at a previous examination; and so long as the Council of Public Instruction deems the character of the examination on the subjects not materially changed, all the valuation marks 50 per cent. or above made on each subject at the said and following examinations may be incorporated into a single Certificate, provided, at least, 50 per cent. be made on each of the (twenty) subjects required for the Grades XII (cl) or XII (sc), or on each of the (thirty) subjects in the full course for XII (cl and sc).

93. Candidates failing to make a pass in the grade applied for may be ranked as making a pass in the next grade below, provided 75 per cent. of the *minima* be made; and as making a pass on the grade second below, provided 50 per cent. of the *minima* be made.

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 head title "HIGH SCHOOL CERTIFICATE," showing the grade obtained under the arms of the Education Department; but the other certificates with examination records, even should they refer to but one subject, shall be equally valid for such facts as they show.

95. Candidates who are passing the various grades in consecutive order shall be admitted free to the regular Provincial High School Examination, provided their application and procedure have been regular. In all other cases a scale of fees shall be 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 curriculum. Examination may demand description by drawing as well as by writing in all grades.

PROVINCIAL EXAMINATION RULES.

97. No envelopes shall be used to enclose papers. One hour is the maximum time allowed for writing each paper. One sheet of foolscap will therefore hold all that will be necessary to be written on any paper, if it is properly put down. 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 a seat, and a number shall represent the candidate's name, and must therefore be neither forgotten nor changed. The candidates who *present* themselves shall be numbered from 1 onwards in consecutive order (without a hiatus for absent applicants, who cannot be admitted after the numbering) beginning with the A's, then coming to the B's, C's, and D's in order. Candidates for "Supplementary" papers need not be present at the opening session if 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 the right to claim admission to the examination room, and any candidate leaving the room during the progress of any examination must first send his or her paper to the deputy examiner, and not return until the beginning of the next paper.

(3.) Candidates shall provide themselves with (for their own exclusive use) pens, pencils,

mathematical instruments, rulers, ink, blotting paper, and a supply of good heavy foolscap paper of the size thirteen inches by eight.

(4.) Each candidate's paper must consist of one sheet of such foolscap, which may be written on both sides, and must contain no separate sheets or portions of sheets unless inseparably attached so as to form one paper. Neat writing, and clear, concise answers are much more likely to secure high value from examiners than extent of space covered or a multiplicity of words.

(5.) Each such paper must be *exactly* folded, 1st, by doubling, bottom to top of page, pressing the fold (paper now $6\frac{1}{2}$ by eight inches); 2nd, by doubling again in the same direction, pressing the fold flat so as to give the size of $3\frac{1}{4}$ x 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 B (Grade XI.) on Algebra should indorse his paper as shown below:—

B 18 ()	Algebra.
----------	----------

(7.) The subject title, grade and candidate's No. 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 may 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 can have his certificate of age and character correctly made out and signed, and should note on the application the number, station and year of any previous examinations he has taken, whether he has been successful in obtaining a certificate thereon or not. He can 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 contraction in any of its parts.)

}

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

.

98. The time table of the examinations shall be as in the following form, the details be changed from year to year to suit the syllabus.

TIME TABLE.

PROVINCIAL EXAMINATIONS, BEGINNING 30TH JUNE, 1902.

	TIME.	GRADE A.	COUNTY ACADEMY ENTRANCE.			
MONDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	Roman History. Chemistry. Lucian.	English.			
	P. M. 2.00 to 3.00 3.10 to 4.10 4.15 to 5.15	Greek History. Botany. Demosthenes.	Mathematics.			
TUESDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	Tacitus. Zoology. Navigation,	Drawing, &c. Geography and History.			
	P. M. 2.00 to 3.00 3.10 " 4.10 4.15 " 5.15	Euripides. Sanitary Science. Astronomy.	General Knowledge.			
	A. M. 8.30 to 9.00	Seating of Grades B. C and D.				
WEDNESDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	Algebra. Latin Composition. French Authors.	Algebra. Latin Composition.	Algebra. Latin.	Algebra. Latin.	
	P. M. 2.00 to 3.00 3.10 " 4.10 4.15 " 5.15	English Language. French Composition. Geology.	English Language. French. Greek Authors.	English Language. French.	English Lang. French.	
THURSDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	Geometry. Greek Composition. Cicero.	Geometry. Latin Authors.	Geometry. Greek.	Geometry.	
	P. M. 2.00 to 3.00 3.10 " 4.10 4.15 " 5.15	Physics. German Composition. Vergil.	Physics. German. Greek Composition.	Science. German.	Science.	
FRIDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	Trigonometry. Psychology. Horace.	Prac. Math. Physiology.	Arithmetic. Drawing and B. K.	Arithmetic. Drawing & B. K.	
	P. M. 2.00 to 3.00 3.10 " 4.10 4.15 to 5.15	British History. English Literature. German Authors.	Geo. and History. English Grammar.	Geo. and History. English Grammar.	Geo. and Hist. Eng. Grammar.	
SATURDAY.	A. M. 9.00 to 10.00 10.10 " 11.10 11.15 " 12.15	M. P. Q. EXAMINATION.		SUPPLEMENTARY EXAM.		
		Hygiene and Temperance. School Law and Management. Theory and Practice of Teaching.		P. M. 2.00 to 3.00 3.10 " 4.10 4.15 " 5.15	"C" Drawing and B. K. "D" Science. "C" Science.	

99.

OPTIONAL EXAMINATION IN MUSIC, ETC.

- (a) At the County Academy Entrance Examination and the Teachers' 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 indorsed upon it.
- (c) The certificates will be received by the deputy examiner, compared with his list to verify the correctness of the indorsation 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 indorse 10, 15, or 20 points (according to a) on the examiner's report and 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 to the question by accident, the examiner of the 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 Manual Training 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, 10.

LICENSING OF TEACHERS.

100. No person can, under any circumstances, be a teacher in a public school entitled to draw public money on his or her account without a License from the Council of Public Instruction. Before obtaining such a license a candidate must obtain, first, a certificate of the prescribed GRADE of Scholarship at the Provincial High School Examination, with a "Teachers' Pass" in each of the lower grades; second, the prescribed certificate of professional RANK as a teacher, either from the Provincial M. P. Q. Examination or the Provincial Normal School, 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. 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.
Class A (cl & sc) requires	Grade XII (cl & sc)	Academic Rank	20 years, &c.
Class A (cl) "	Grade XII (cl)	Academic Rank	20 years, &c.
Class A (sc) "	Grade XII (sc)	Academic Rank	20 years, &c.
Class B "	Grade XI	First Rank	19 years, &c.
Class C "	Grade X	Second Rank	18 years, &c.
Class D "	Grade IX	Third Rank	17 years, &c.
Class D (Prov.) "	Grade IX	" M. P. Q.	16 years, &c.

101. As the ordinary or "high school pass" may be taken by a student with little or no knowledge of some of the subjects "imperative" for teachers, (for the "high school pass" is awarded on an average of 50% on any eight papers of a grade, provided none of the eight is below 25%), the following regulation is made to control graduation from the Normal School:

No diploma of the Provincial Normal School shall be awarded any candidate who is found defective (below 40%) in the scholarship of any

imperative subject of the Provincial Course of Study up to and including the corresponding grade, until the Faculty is satisfied that creditable proficiency has been made in each such subject.

102. When a teacher obtains a teacher's license without graduation from the Provincial Normal School, it can be only of a *class* one degree lower than the 'teachers' pass *grade* of scholarship. The following statement explains the principle in detail:

- (a) A *Class D License* cannot be awarded to any one who has not been estimated as high as 40 per cent. on each "imperative" subject of the *grade D High School Course*, by Provincial Examiners.
- (b) A *Class C License* in like manner requires 40 per cent. on each "imperative" subject of *grades D and C*.
- (c) A *Class B License* in like manner requires 40 per cent. on each "imperative" of *grades D, C and B*.
- (d) A *Class A License* in like manner requires 50 per cent. on each "imperative" in *grades D, C, B, and A (classical and scientific)*.

103. When the teacher's pass has not been made by a candidate on the lower grades in order, the following equivalents are allowed:

- (a) 40 per cent. on each of the "imperatives" of grade C shall be considered the equivalent of 40 per cent. on each of grade D, except the *Science* paper.
- (b) 40 per cent. on each of the "imperatives" of grade B shall be considered the equivalent of 40 per cent. on each subject of the lower grades, except the *Science* of D, and the *Science and Drawing* papers of C. The same principle shall apply to grade A marks.
- (c) Opportunity is given on Saturday afternoon to take supplementary examinations on the *Science of D, and the Science, Drawing and Book-keeping of C*.

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 four classes of such licenses, which may be designated as follows:

- Class A (cl. & sc.), A (cl.) or A (sc)—Academic (classical and scientific), Academic (classical) or Academic (scientific).
- Class B—First class.
- Class C—Second class.
- Class D—Third Class.

107. The certificate of professional qualification or skill shall be (a) the academic, first, second or third RANK classification by the Normal School, or (b) the *minimum* (which shall rank one degree lower than the *normal*), and shall be the first, second or third rank pass on the following papers written on the Saturday of the Provincial Examination week: (1) School Law and Management, value 100; (2) Theory and Practice of Teaching, value 100; and (3) Hygiene and Temperance, value 100. First rank pass: an aggregate of 200 with no paper below 50. Second rank pass: 150 with no paper below 40. Third rank pass: 100 with no paper below 30.

108. The Provincial Normal School 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 School, may be accepted when qualified by the addition of the two following conditions: (a) a pass certificate of the Provincial "minimum" professional qualification examination of the corresponding rank, and (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.

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 School:

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 High School certificate of Provincial Grade.....obtained at..... Examination Station as No....., in the year 1.... (Further information below.)

III. My certificate of professional qualification of..... Rank, No..... obtained at....., in the month of....., 1....

(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

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, frugality, 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" may be cancelled by a stroke of the pen.)

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

The correct quotation of the Provincial M. P. Q. Certificate or the Provincial Normal School Diploma in III above, will be considered as equivalent to its presentation.

Any certificates from Normal Schools, etc., which are not regularly recorded in the Education Office, must accompany this application as evidence of the correctness of the quotation.

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 "Teacher's Pass" in the lower grades).

On Grade XII syllabus at Examination Station.....	No.....	Year....
" XI " " " " " " " "	.....	.....
" X " " " " " " "	.....	.....
" IX " " " " " " "	.....	.....

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

.....
 Inspector.

Place and date.....

110. For an Academic or Class A License the three conditions are:—
 (1) A certificate signed by a Minister of Religion or two Justices of the Peace, as in the preceding form, to the effect that the candidate is of the full age of twenty years, and capable of fulfilling the duties specially mentioned in the statute. (2) A pass certificate of the Grade XII. (3) A certificate of Academic first rank professional qualification from a Normal School [for which may be substituted a Provincial Grade XII (cl. and sc.) with a 50% "pass" on each imperative subject of the High School course not covered in Grade XII, and a first rank M. P. Q. (no paper below 50), and at least two years' successful teaching, one of which must be as a *first* class teacher in a superior school.]

111. For a First Class or B License the three conditions are:—(1) A certificate of the full age of nineteen years and moral character as in the foregoing Regulation. (2) A pass certificate of Grade XI. (3) A certificate of first rank professional qualification from a Normal School, or a "teacher's pass" certificate of Grade XII with the first rank minimum professional qualification.

112. For a Second Class or C License the three conditions are:—
 (1) A certificate of the full age of eighteen years and moral character as in the foregoing Regulation. (2) A pass certificate of Grade X. (3) A certificate of second rank professional qualification from a Normal School, or a "Teacher's pass" certificate of Grade XI with the second rank minimum professional qualification.

113. For a Third Class or D License the three conditions are:—
 (1) A certificate of the full age of seventeen years and moral character as in the foregoing Regulation. (2) A pass certificate of Grade IX. (3) A certificate of third rank professional qualification from a Normal School, or a "Teacher's pass" certificate of Grade X with the third rank minimum professional qualification.

TEMPORARY LICENSE.

114. A Third Class (provisional) or D (prov.) License, *valid only for one year*, shall be granted on the 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 only 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.

SYLLABUS OF M. P. Q. EXAMINATION.

115. The questions set for the minimum professional qualification examination shall be within the limits indicated by the books recommended by the Council of Public Instruction on the following subjects:

School Law and School Management.

- (a) To be familiar with the Acts relating to Public Schools in Nova Scotia and Regulations of the Council of Public Instruction with amendments and comments, etc., appearing in the JOURNAL OF EDUCATION from time to time—particularly those portions bearing on the relation and duties of teachers, and on the organization and operation of all grades of Public Schools.
- (b) To understand thoroughly the principles of school organization, the principles and methods of classification, the proper correlation and sequence of studies, the true aim and right modes of discipline, and the proper condition for securing the moral and physical well being of pupils.
- (c) To be familiar with the history of leading Educational Reformers and their systems

Theory and Practice of Teaching.

- (d) To have an understanding of the fundamental laws of the human mind in their relation to the science and art of education generally, including the principles and practice of vocal music.
- (e) To apply practically the principles thus derived to the teaching of each of the subjects embraced in the Common and High School courses of study.

Hygiene and Temperance.

- (f) Hygiene as in recommended or prescribed books with special reference to school room, school premises, and the health of pupils.
- (g) Temperance as in recommended or prescribed books with special reference to requirements of the school law.

136. On giving a week's notice to trustees and pupils, teachers will have the liberty of closing their schools for the purpose of attending the meeting of the association or the institute, and on the attachment of the certificate of regular attendance during the days specified in the preceding regulation from the secretary of the association or institute to the teacher's "return," the inspector is authorized to credit the same as teaching days in the apportionment of the provincial aid and the municipal school fund.

137. When teachers, after having received permission from their trustees, attend "summer schools" or other institutes (during regular teaching days), which are recommended by the Superintendent for the improvement of teachers in the exercise of their profession, allowance will be made by inspectors, as indicated in the preceding regulation; always provided, however, that in any school year not more than five days shall be credited under all the foregoing regulations to any one teacher or school section.

138. If a teacher of class A, B or C, who is engaged in a school section for the year shall have taken a "mid-summer vacation" course of at least five full weeks (thirty days) at the Provincial School of Agriculture, and shall have received a certificate of satisfactory deportment and proficiency for the said term from the principal, he shall, on the written recommendation of the trustees of his school section, be allowed to take one or two weeks of the said course during the opening weeks of the first "quarter" of the school without prejudice to his Provincial aid or to the municipal school fund to the section; provided a memorandum, approved by the Superintendent of Education, specifying the facts and approving of the said two certificates is attached to his return at the end of the first "half year."

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 conditions 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 a definite plan, being arranged either in curves or 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 around 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 observance of this day originated with a recommendation of the Dominion Educational Association at its third triennial convention, which met in Halifax, August, 1898. The Council of Public Instruction of Nova Scotia was the first to adopt the recommendation, appointing the schoolday preceding the holiday commemorating the anniversary of the birthday of Queen Victoria, under whose reign the Empire so widely and harmoniously developed.
- (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 COURSE OF STUDY.

152. The public school course of study may be considered under its sub-division of the common and high school courses. They furnish a basis for the classification of pupils by the teachers and for the examination of schools by the inspectors, while they also secure a definite co-ordination of all the work attempted in the public schools of all grades, thus fostering the harmonious interaction of all the educational forces of the province.

These courses are to be followed in all schools, particularly with reference to (1) the order of succession of the subjects, and (2) the simultaniety of their study. The fulness of detail with which they can be carried out in each school must depend upon local conditions, such as the size of the school, the number of grades assigned to the

teacher, etc. As suggestive to teachers with little experience, contracted forms of the detailed common school course for miscellaneous and partially graded schools are appended.

The public school course of study is the result of the observation and experience of representative leading teachers of the province, under the suggestion of the experiments of other countries, and the criticism of our teachers in provincial conventions assembled for many years in succession. A system developed in such a manner must necessarily in some points be a compromise, and presumably therefore at least a little behind what we might expect from the few most advanced teachers. But it is also very likely to be a better guide than the practice of a majority without any mutual consultation for improvement. The successive progression of studies is intended to be adapted to the order of development of the powers of the child's mind, while their simultaneous progression is designed to prevent monotony and one-sidedness, and to produce a harmonious and healthy development of the physical, mental and moral powers of the pupil. The apparent multiplicity of the subjects is due to their sub-division for the purpose of emphasizing leading features of the main subjects which might otherwise be overlooked by inexperienced teachers. The courses have been demonstrated to be adapted to the average pupil under a teacher of average skill. The teacher is, however, cautioned to take special care that pupils (more especially any prematurely promoted or in feeble health) should not run any risk of "over-pressure" in attempting to follow the average class-work.

Changes in these courses of study must always be expected from year to year, but to a very small extent it is hoped, except in the prescription of certain texts in the high school course. These will be published from time to time in the bulletin of the Department, the JOURNAL OF EDUCATION, published in April and October of each year.

153.

GENERAL PRESCRIPTIONS.

These general regulations, on account of their paramount importance and their unchangeable character, are printed on page 10 of the School Register, so that they may be always before the eyes of the teacher. To save space they are not republished here; but attention is called to the fact that they are even of more importance than the special prescriptions which follow below as supplementary:

156.

SPECIAL PRESCRIPTIONS FOR COMMON SCHOOLS.

GRADE I.

Reading.—Primer with Wall Cards or Blackboard Work.

Language.—Story telling by pupil. Writing easy vertical letters, words and sentences.

Writing and Drawing.—Writing on slate, paper or blackboard. Drawing of easy, interesting figures as in *Manual Training*, to end of Section II (or as in alternative Drawing Course recommended).

Arithmetic.—All fundamental arithmetical operations with numbers, the results of which do not exceed 20, to be done with concrete or abstract numbers, accurately and rapidly. *See general prescriptions.*

Lessons on Nature.—Power of accurate observation developed by exercising each of the senses on simple or appropriate objects. Estimation of direction, distance, magnitude, weight, etc., begun. Common colors, simple regular solids, surfaces and lines. Simple observations on a few common minerals, stones, plants and animals.

Music, &c.—As under *general prescriptions.*

GRADE II.

Reading.—Reader No. 1.

Language.—As in Grade I, but more advanced. *See general prescriptions.*

Writing and Drawing.—As in Grade I, but more advanced. Angles, triangles, squares, rectangles, plans of platform and of school room (or as in *Manual Training* No. I, to end of Section IV.); with *Public School Drawing Course* No. I. (or as in alternative Drawing Course recommended).

Arithmetic.—Numbers up to 100 on the same plan as in Grade I.

Lessons on Nature.—As in Grade I, but more extended. *See general prescriptions.*

Music, &c.—As under *general prescriptions.*

GRADE III.

Reading.—Reader No. 2. *See general prescriptions.*
Language.—As in II., but more advanced. Subject and predicate. Nouns and verbs.
Writing and Drawing.—Vertical letters on slate and in copy books. Freehand outlines on slate, blackboard, etc. Common geometrical lines and figures with their names. Map of school grounds and surroundings. As in *Manual Training*, No. 1, to end of Section VI.; with *Public School Drawing Course*, No. 2 (or as in alternative Drawing Course recommended).
Arithmetic.—As in Common School Arithmetic, Part I., first half. *General prescriptions.*
Lessons on Nature.—Geography of neighborhood, use of local or county maps. Estimation of distances, measures, weights, etc., continued. Color. Study extended to three or four each of common metals, stones, earths, flowers, shrubs, trees, insects, birds and mammals. *See general prescriptions.*
Music, &c.—As under *general prescriptions.*

GRADE IV.

Reading.—Reader No. 3. *See general prescriptions.*
Language.—Oral statements of matter of lessons, observations, etc. Written sentences with punctuation, etc. Modifiers of subject and predicate of noun and verb.
Writing and Drawing.—Copy Book. Drawing as in *Manual Training*, No. 1, to end of Section VIII., with *Public School Drawing Course*, No. 3 (or as in alternative Drawing Course recommended).
Geography.—Oral lessons on Physiography as on pages 85 to 99, introductory Geography, with the general geography of the Province begun on the school map. *See general prescriptions.*
Arithmetic.—As in Common School Arithmetic, Part I., completed. *See general prescriptions.*
Lessons on Nature.—As in Grade III., but extended so as to include four or five objects of each kind, as in *general prescriptions.*
Music, &c.—As under *general prescriptions.*

GRADE V.

Reading.—Reader No. 4, Part I. *See general prescriptions.*
Language.—Oral as in IV. and *general prescriptions.* All parts of speech and sentences with inflections of noun, adjective and pronoun,—orally. Composition practice on "nature lessons," etc., increasing.
Writing and Drawing.—Copy Book. Drawing as in *Manual Training*, No. 1, with *Public School Drawing Course*, No. 4, &c., and drawing from objects (or as in alternative Drawing Course recommended).
Geography and History.—Ideas of latitude and longitude, physiography, etc., developed. Oral geography of Nova Scotia on map in fuller detail. General geography of the Provinces of Canada and the Continent, as on the Hemisphere maps. Oral lessons on leading incidents of Nova Scotia History.
Arithmetic.—As in Common School Arithmetic, Part II., first half.
Lessons on Nature.—From mineral and rock to soil, as shown in neighborhood, and extended to five or six each of the common plants, trees, insects, other invertebrates, fish, reptiles, birds, mammals; and natural phenomena, such as ventilation, evaporation, freezing, closely examined. Health Reader No. 1 begun.
Music, &c.—As under *general prescriptions.*

GRADE VI.

Reading.—Reader No. 4 completed. *See general prescriptions.*
Language.—Oral as in V. extended. Formal composition (simple essays) twice each month. Paradigm of regular verb. Simple parsing and analysis begun. More important rules of Syntax applied. Short descriptive sketches of observations, etc., etc., and letters, from oral instruction, as in "Lessons in English."
Writing and Drawing.—Copy Book. Drawing as in *Manual Training*, No. 2, to end of Section II., with *Public School Drawing Course*, No. 5, &c. Increasing practice in representing common objects in outline (or as in alternative Drawing Course recommended).
Geography.—Introductory Geography text to end of Canada. Thorough drill in outlines of Hemispheres, with map drawings.
History.—Leading features of History of Canada.
Arithmetic.—As in Common School Arithmetic, Part II., completed.
Lessons on Nature.—As in Grade V., but extended to at least six or seven objects of each class specified. Distribution and values of all natural products of the Province. Health Reader No. 1, completed.
Music, &c.—As under *general prescriptions.*

GRADE VII.

Reading.—Reader No. 5 begun. Character of metre and figures of speech to be observed. *See general prescriptions*

Language.—Leading principles of Etymology with paradigms. Parsing and analysis of simple sentences and application of rules of syntax. Oral. Written abstracts of oral or reading lessons. Simple description of "nature" observations, etc., narrative and business forms. Punctuation and paragraphing. All from oral instruction as in "Lessons in English."

Writing and Drawing.—Copy Book. Drawing as in *Manual Training*, No. 2, to end of Section IV., with *Public School Drawing Course*, No. 6, &c. Plotting of lines, triangles, rectangles, &c., according to scale. The use of the "Universal Scale." Simple object drawing extended (or as in alternative *Drawing Course* recommended).

Geography.—Introductory Geography to end of Europe, with thorough map drill, and map drawing. *See general prescriptions.*

History.—Leading features of History of Canada. *See general prescriptions*

Arithmetic.—As in Common School Arithmetic, Part III., first half.

Lessons on Nature.—As in Grade VI., and with the study of specimens illustrating the stones, minerals, &c.; each class, sub-class, and division of plants; and each class of animals found in the locality. All common and easily observed physical phenomena. (Much of this course will be covered by a series of object lessons on the subject matter of any twenty of the easier chapters of *James' Agriculture*, and on the *Introductory Science Primer*.) *Health Reader*, No. 2, begun.

Music, &c.—As under *general prescriptions.*

GRADE VIII.

Reading.—Reader No. 5 completed. Elements of prosody and plain figures of speech, as illustrated in reading, to be observed and studied. *See general prescriptions.*

Spelling.—Prescribed Speller in addition to *general prescriptions*

Language.—Parsing, including important rules of Syntax. Analysis of simple and easy complex sentences. Correction of false Syntax and composition exercises, etc., as in "Lessons in English" completed. Pupils at this stage should be able to express themselves fluently and with fair accuracy in writing, for all ordinary business purposes. *See general prescriptions.*

Writing and Drawing.—Copy Book. Model and object drawing. *Manual Training*, No. 2, to end of Section V., with review of *Public School Drawing Course*, Nos. 5 and 6, &c. Construction of angles, mathematical figures, maps, plans, etc., to scale and their measurement, neatly and accurately, by the "Universal Scale," the use of which should be thoroughly mastered in this grade. *See general prescriptions* (and alternative *Drawing Course* recommended).

Geography.—Introductory Geography completed and reviewed, with latest corrections and map drill, and map drawing. *See general prescriptions.*

History.—Outline history of Britain and Canada, completed and reviewed. *See general prescriptions.*

Arithmetic.—Common School Arithmetic completed. *See general prescriptions.*

Algebra.—Fundamental rules, with special drill on the evaluation of algebraic expressions.

Bookkeeping.—A simple set.

Lessons on Nature.—As in Grade VII., extended to bear on Health, Agriculture, Horticulture, and any local industry of the School Section. Local "Nature Observations." (Much of this course will be covered by a series of oral lessons completing the subject matter of *James' Agriculture* and of the grade of *Science Primers*.) *Health Reader*, No. 2, completed. *See general prescriptions.*

Music, &c.—As under *general prescriptions.*

157.

CONDENSED COMMON SCHOOL COURSES.

[The following condensations of the Common School Course of Study are given merely as suggestions for the benefit of untrained teachers who may require such aid. In connection with the *special prescriptions* given hereunder, the teacher should study thoroughly the meaning of the *general prescriptions* given elsewhere and in the School Register. These *general* combined with the following *special prescriptions* form the *prescribed Courses of Study*.]

158. FOR A COMMON SCHOOL WITH FOUR TEACHERS.

PRIMARY.

Reading.—Primer and Reader No. 1, with wall cards or blackboard work.
Language.—Story-telling by pupil. Easy vertical letters, words and sentences.
Writing and drawing.—Writing on slate, paper or blackboard. Drawing of easy interesting figures, plans of platform and school-room, etc., or, as in *Manual Training* No. 1, to the end of Section IV., with Drawing Book No. 1 (or as in alternative Drawing Course recommended).
Arithmetic.—All fundamental arithmetical operations with numbers, the results of which do not exceed 100, to be done with concrete and abstract numbers, accurately and rapidly.
Lessons on Nature, &c.—Power of accurate observation developed by exercising each of the senses on simple and appropriate objects. Estimation of direction, distance, magnitude, weight, etc., begun. Common colors, simple, regular solids, surfaces and lines. Simple observations on a few common minerals, stones, plants and animals. Simple songs, Hygiene and Temperance.

ADVANCED PRIMARY.

Reading.—Readers Nos. 2 and 3, with spelling.
Language.—Oral statements of matter of lessons, observations, etc. Written sentences with punctuations, etc. Subject, predicate, noun, verb, and their modifiers.
Writing and Drawing.—On slate and blackboard. Common geometrical lines and figures with their names, map of school ground. Copy books. Drawing as in *Manual Training*, No. 1, to end of Section VIII, and Drawing Books Nos. 2 and 3, or representative selections from them, with outline drawing of common objects (or as in alternative Drawing Course recommended).
Arithmetic.—As in Common School Arithmetic, Part I.
Lessons on Nature, &c.—Geography of neighborhood and the use of map of province with easy geographical terms, explanation of the change of seasons, etc. Estimation of distance, measure, weight, etc., continued. Color. Study of four or five each of the common metals, stones, earths, flowers, shrubs, trees, insects, birds and mammals. Simple songs.

INTERMEDIATE.

Reading.—Reader No. 4 with spelling. Health Reader No. 1.
Language.—Formal composition (simple essays twice a month), short descriptions of "Nature lesson" observations, etc., and letters as well as oral abstracts. Simple parsing and analysis begun, with the application of the more important rules of syntax, exercises selected from reading lessons. (No text book in the hands of pupils.)
Writing and Drawing.—Copy books. Drawing as in *Manual Training*, No. 1, complete, and Drawing Books Nos. 4 and 5 (or as in alternative Drawing Course recommended). Model and object drawing
Arithmetic.—As in Common School Arithmetic, Part II.
Geography.—Introductory Geography to end of Canada. Thorough drill in outlines of Hemisphere maps.
History.—Leading features of history of Canada to 1756.
Lessons on Nature.—From minerals and rock to soil, as shown in neighborhood, and six or seven each of the common plants, trees, insects, other invertebrates, fish, reptiles, birds, mammals, and natural phenomena, such as ventilation, evaporation, freezing, closely examined. Distribution and values of the natural products of the province. Music, at least half a dozen songs (tonic sol-fa notation).

PREPARATORY.

Reading.—Reader No. 5. Health Reader No. 2. Elements of prosody and plain figures of speech as illustrated in readings to be observed and studied.
Spelling.—Readers and prescribed Spelling Book, etc.
Language.—Leading principles of Etymology and Syntax. Parsing. Analysis of simple and easy complex sentences. Correction of false syntax. Written abstracts of oral and reading lessons. Simple description of "Nature lesson" observations, etc., narrative and business forms. Punctuation and paragraphing. All oral, including matter of "Lessons in English."
Writing and Drawing.—Copy books. Drawing as in *Manual Training* No. 2 to end of Section V., with Drawing Book No. 6. Model and Object drawing with simple drawing from nature. Construction of angles and simple geometrical figures to scale and their measurement. The use of scales as on "Universal Scale" (or as in alternative Drawing Course recommended).
Geography.—Introductory text book with latest corrections and thorough map drill.
History.—Outlines of British and Canadian History.
Arithmetic and Algebra.—Common School Arithmetic. Fundamental rules of Algebra, and evaluation of algebraic expressions.

Bookkeeping.—A simple set.

Music.—At least eight songs and the tonic sol-fa notation.

Lessons on Nature.—The study by examination of the minerals, stones, earths, &c.; of specimens of each class, sub-class and division of plants; and of each class of animals, as found in the locality, with particular reference to the bearing of the knowledge of any useful industry, as agriculture, horticulture, &c. All common and easily observed physical phenomena. Oral lessons with experiments on subject matter of Introductory Science Primer and *James' Agriculture*.

159. FOR A COMMON SCHOOL WITH THREE TEACHERS.

LOWER.

Reading.—Primers and Readers, Nos. 1 and 2, with spelling.

Language.—Story-telling by pupil. Printing or writing simple words and thoughts.

Writing and Drawing.—Vertical letters, &c., on slate, paper or blackboard and copy book. Drawing from objects, and of easy interesting figures, plans of school grounds, or as in *Manual Training*, No. 1, to end of Section VI., with Drawing Books Nos. 1 and 2 (or as in alternative Drawing Course recommended).

Arithmetic.—As in Common School Arithmetic, Part I., first half.

Lessons on Nature.—Power of accurate observation developed by exercising each of the senses on simple and appropriate objects, geography of neighborhood and local map. Estimation of direction, magnitude, distance, weight, measure, &c., begun. Colors. Objective study of at least a few of each class of the natural history objects in the locality.

Music.—At least three simple songs (tonic sol-fa notation).

MIDDLE.

Reading.—Readers Nos. 3 and 4, with spelling. Health Reader, No. 1.

Language.—Oral statement of matter of reading lessons and oral lessons. Simple description of "Nature lesson" observations, etc., narrative and letter writing. Parts of speech and sentences with the easier inflections and rules of syntax. Parsing and analysis of simple passages in reading lessons begun.

Writing and Drawing.—Copy books. Drawing as in *Manual Training*, No. 1, complete with Drawing Books, Nos. 3, 4 and 5, or representative selections from them, and outline drawing from objects (or, as in alternative Drawing Course recommended).

Arithmetic.—As in Common School Arithmetic, Parts I. and II.

Geography and History.—Drill in Hemisphere maps and Introductory text book to end of Canada. Oral lessons on the leading incidents of the history of Nova Scotia.

Music.—Five or six songs (tonic sol-fa notation).

Lessons on Nature.—Estimation of weights, measures, distances, &c., in connection with reduction exercises; six or seven each of every class of natural history objects (mineral, vegetable and animal) in the neighborhood, examined and classified. Common physical phenomena observed and studied.

HIGHER.

Reading.—Reader No. 5 and Health Reader, No. 2, with spelling and prescribed spelling book, elements of prosody and plain figures of speech in passages read, observed.

Language.—Leading principles of Etymology and Syntax. Parsing, analysis of simple and easy complex sentences, correction of false syntax, oral and written abstracts of interesting lessons. Essays, including narrative description of "nature lesson" observations, &c., and general letter writing with special attention to punctuation, paragraphing, and good form generally. All oral, including matter of "Lessons in English"

Writing and Drawing.—Copy Books. Drawing as in *Manual Training*, No. 2, to end of Section V, with Drawing Book, No. 6. Model and Object drawing, with simple drawing from nature. The construction and measurements of angles and mathematical figures. The use of scales on the "Universal Scale," (or, as in alternative Drawing course recommended).

Geography.—Introductory Geography, complete with latest corrections, and general map drill on Hemisphere maps.

History.—Outlines of British and Canadian History.

Arithmetic and Algebra.—Common School Arithmetic, and evaluation of algebraic expressions and four fundamental rules.

Bookkeeping.—One simple set with commercial forms.

Music.—At least eight songs and the tonic sol-fa notation.

Lessons on Nature.—The study objectively of a number of the typical natural history objects of the locality, their distribution, value and bearing on native industries in the Province. The observation and explanation of common physical phenomena. Oral lessons and experiments as in introductory Science Primer and *James' Agriculture*.

160. FOR A COMMON SCHOOL WITH TWO TEACHERS.

JUNIOR (at least two divisions).

Reading.—Primer and Readers, Nos. 1, 2 and 3, with spelling, and oral abstracts of interesting lessons; nouns, verbs, subjects, predicates, etc., in lessons of higher classes; writing sentences, and descriptions of "nature" observations.

Writing and Drawing.—Letters, words, geometrical figures, etc., on slate, paper and blackboard. Copying from cards. Copy books and drawing as in *Manual Training*, No. 1, to the end of Section VIII. with Drawing Books, Nos. 1, 2, 3 (or as in alternative Drawing Course recommended), and drawing from common objects.

Arithmetic.—As in Common School Arithmetic, Part I.

Music.—Four or five songs, with tonic sol-fa notation.

Lessons on Nature.—Practice in the estimation, by guessing and testing of weights, measures, distances, etc., referred to in reduction tables. Study of regular solids, surfaces, lines and colors. Observation of simple physical phenomena. Examination and classification of representative specimens of minerals, stones, etc., plants and animals, to be found in the locality. Training the eyes to see everything around and the mind to understand explanations and relations.

SENIOR (at least two divisions).

Reading.—Readers, Nos. 4 and 5. Health Readers, Nos. 1 and 2. Spelling and definition. Oral abstracts of lessons. Elementary grammar and analysis drill on sentences in reading lessons. Observations of figures of speech and the character of metre in poetical passages read in the advanced division.

Language.—Leading principles of Etymology, Syntax, etc. Written and oral abstracts, narratives and description of "nature lesson" observations, etc., with attention to punctuation, paragraphing and form. All as in "Lessons in English," taught orally.

Writing and Drawing.—Copy books. Drawing in *Manual Training*, No. 1, complete, and No. 2 to end of Section V., with Drawing Books, Nos 5 and 6, Model and Object Drawing; and lessons on mathematical construction of figures in advanced division. The use of the "Universal Scale." (Or condensation of alternative Drawing Course recommended).

Geography.—Text book (introductory) in advanced division. For all, thorough drill in the general geography of the Hemisphere maps.

History.—Outlines of British and Canadian History, in alternative divisions.

Arithmetic.—Common School Arithmetic, Parts II. and III., with evaluation and fundamental rules of Algebra for advanced division.

Bookkeeping.—Simple set for advanced division.

Music.—At least eight songs and the tonic sol-fa notation.

Lessons on Nature.—One daily to all pupils on such subjects as: estimation of weights, measures, distances, etc., properties of bodies, common physical phenomena, local representative specimens or species of the mineral, vegetable and animal world in the locality, the natural resources of the province—and the bearing of these on our industrial development, &c., &c. Experiments, &c., as in the Introductory Science Primer and *James' Agriculture*.

161. FOR A COMMON SCHOOL WITH ONE TEACHER.

(UNGRADED, "MISCELLANEOUS," OR "RURAL" SCHOOL.)

[As a general rule there should be at least four classes or divisions in such a school: (a) those in Reader No. 5, (b) Reader No. 4, (c) Reader No. 3, and (d) Readers Nos. 2 and 1 and Primer. The pupils in such a school must be drilled to move without the loss of an instant of time, if the teacher is to be successful. There cannot be here the leisure of a graded school.]

Reading.—(d) Four lessons a day, very short, with spelling, grammar and composition questions on them; (c) three short lessons in like manner; (b) two short lessons, one from Health Reader No. 1, with the full range of questions to them; (a) one lesson (Health Reader No. 2 on alternate days), with questions covering spelling, definitions, grammar, analysis, prosody and composition, more or less partially.

Writing and drawing.—(d) On slate or paper from blackboard or cards during specified times of the day; (c), same, more advanced; (b) copy books and drawing books, once each day; (a) the same once each day. The use of the "Universal Scale."

Language.—Text book only in (a) and once a day or every other day, with written compositions in (a) and (b) as indicated in the other courses. Class instruction or essay criticism once or twice a week. All as in "Lessons in English," taught orally.

Geography.—Oral lessons once or twice a week to (d) and (c) and (b). Text-book twice a week (b) and (a).

History.—Oral lessons once or twice a week to (c) and (b). Text-book twice a week for (a).

Arithmetic.—Each class to receive attention twice a day as a class from the teacher; (d) a very few minutes at a time; (a) more time, which might vary with the difficulty of points to be reasoned out. This will form the main subject for "seat work," while the teacher is engaged with other classes.

Music.—At least twice a day for a few minutes. Exercises short and often given are more useful for many purposes than exercises long and seldom.

Lessons on Nature.—Once every day so as to select during the year the most important points specified in the uncontracted course. Oral lessons on subject matter of *James's Agriculture*.

A specimen time table is given below for such schools.

162.

SUGGESTIVE TIME TABLE.

(DESIGNED TO AID INEXPERIENCED TEACHERS AND TRUSTEES.)

This specimen is given here for a rural school in which it is assumed there is only common school work to be done—the work of the first eight "Provincial Grades."

Every Teacher should have a *time table*, giving all these details, posted up in the school room, so that pupils can be guided by it even to their "desk" work. Inspectors are required to insist on this in every school.

TIME TABLE.

[For a "rural" or "miscellaneous" common school of eight grades grouped in four classes (a), (b), (c) and (d), as directed on the previous page, with about 44 pupils, 2 in 8th, 3 in 7th, 4 in 6th, 5 in 5th, 6 in 4th, 7 in 3rd, 8 in 2nd, 9 in 1st.]

TIME WHEN BEGUN	Duration (Minutes.)	RECITATION TO TEACHER.		SILENT WORK OF THE FOUR CLASSES AT DESKS.			
		Monday, Wednesday, Friday,	Tuesday, Thursday.	(a)	(b)	(c)	(d) †
9 : 00	15	Opening song, and Roll-call.					
9 : 15	15	(d) Reading, Spelling, etc.		Arith.	Arith.	Spelling.	Spelling.
9 : 30	15	(c) " "		Arith.	Spelling.	Spelling.	Drawing.
9 : 45	15	(b) " "		Spelling.	Spelling.	Drawing.	Arith.
10 : 00	15	(a) " "		*	*	*	*
10 : 15	5	Song and Calisthenics.					
10 : 20	30	(a), (b), (c) and (d), Arithmetic, etc.					
10 : 50	10	RECESS.					
11 : 00	15	(a) Gram. and Anal.	(a) Language.		Arith.	Arith.	Arith.
11 : 15	15	(d) Reading, Spelling, etc.	Mental Arithmetic.	Arith.	*	*	*
11 : 30	5	Writing.	Drawing				
11 : 35	25						
12 : 00	60	NOON INTERMISSION.					
1 : 00	5	Song and Roll-call.		Map Draw			
1 : 05	15	Geog., etc., (oral).	Hist., etc., (oral)		Arith.	Arith.	Arith.
1 : 20	15	(a+) Geog.	(a+) Hist.	Language	Language.	Language.	Language.
1 : 35	15	(c) Language.	(d) Language.	Arith.		Spelling.	Spelling.
1 : 50	15	(b) " "	(b) Thurs. } Health Reader.				
2 : 05	5	Song and Calisthenics.					
2 : 10	20	Arith., Alg., B. K., or Math., Drawing					
2 : 30	10	RECESS.					
2 : 40	15	"Nature" and Science lesson from objects.					
2 : 55	10	Writing or Drawing notes on lessons.					
3 : 05	15	(d) Reading, Spelling, etc.	(a), (b), (c) and (d) Recitations. (Elocutionary on Fridays.)	Math.	Math.	Arith.	
3 : 20	15	(c) " "		Math.	Spelling.	Spelling.	Spelling.
3 : 35	15	(b) " "		Math.		Arith.	Arith.
3 : 50	10	Announcements, etc., and Song.					

NOTES ON THE TIME TABLE.

*Desk work, Mathematics, when teacher is not engaged with the class.
 †Desk work, description in writing (and drawing when necessary) of natural objects or observations, when the teacher does not require the attention of the class to the "lesson" of the day. Some lessons may be adapted to all classes, others to the senior or junior. When an elementary lesson is given classes (c) and (d), the classes (a) and (b) should be working on a written description of a plant, an insect, or other phenomena observed, or experiments in physics, etc., with drawings. And vice versa.
 ‡Class (d) may be necessarily made up of two or three, if not more sub-classes, each of which must be rapidly taken in turn,—some in their letters, some in their primer, etc., but all must receive attention in these subjects three or four times a day, for they can do but very little at a time.
Reading.—Should include spelling, definition of words, grammatical notes, derivation, prosody, etc., as the matter suggests; and the literary and other ideas involved should be made clear to the pupils. There is a saving of time and effort in considering as many related things as possible together. See general prescriptions.
Language.—The "desk" work should require every day, if possible, the expression of the pupil's thoughts about something on which he can have clear ideas. To read a short story, or choice description once to the class, giving all, say, exactly five or ten minutes to write rapidly their remembrance of it substantially, is a good exercise; especially if the

errors are corrected before the class or otherwise shortly after; or to give them an object or a picture to "write up" in a limited time. This will develop facility in composition. Some grammar and analysis, of course, will be necessary in order to enable the pupils to understand the reasons why some methods of expression are better than others.

Mathematics.—Several subjects need be taken up only for a month or two, such as the elementary rules of algebra, accounts, the use of the mathematical scales, as on the Universal Scale (engraved on wood) and the compass in mathematical drawing. Some of these might be taken instead of arithmetic, say in the afternoon or on alternate days.

High School Work.—Where work of this kind has to be done, those studying the high school subjects might aid the teacher with some of the classes so as to obtain time for the high school studies which might otherwise cut down too much of the time given to the common school grades, which are of paramount importance in ungraded schools. When high school work is being done, the teacher's time, in case of a difference of view by those interested, might be fairly decided to be distributed to each grade in proportion to the number of grades and pupils in each.

Nature Lessons, &c.—See general prescriptions.

ALTERNATIVE COMMON SCHOOL COURSE OF DRAWING.

163. The following is the alternative course of Drawing for the common school grades, which is referred to in the preceding prescriptions. For partially graded, and for ungraded schools, it can be condensed as illustrated in the preceding condensations of the regular course for fully graded schools. The sub-divisions (a), (b), (c) and (d) serve to call and keep attention to lines which should be followed through all the grades, even in the condensed courses which teachers are expected to form and adapt to the conditions existing in rural schools:

GRADE I.

(a) *Drawing as an aid to Language.*—Free illustrative sketching from copy, memory and imagination.

Show pupils good outline pictures of simple objects, of scenes, and of scenery. Teach them to tell what such pictures express. Make on blackboard in presence of pupils outline pictures of familiar objects, such as a kitten, a boy with a flag, a house on hill-top, and a boy running after his hat. Let the pupils copy these pictures and combine them to form original ones.

Encourage all honest effort and criticize mildly even the poorest. When the drawing is not satisfactory ask the pupil to re-examine the object and try again, perhaps next day. This will be particularly valuable when he is drawing from memory.

Occasionally use coloured crayons and have the pupils use coloured pencils.

(b) *Drawing as an aid to Nature Lessons.*—Let every nature lesson end, when possible, with an illustrative drawing of the object studied.

This will lead the pupils to observe and examine with greater care, and render the impressions more lasting. Outline drawings of animals, trees, leaves and fruits, most interesting to children, are appropriate for this grade. Sometimes this work may be done in colour with the brush, using diamond dyes.

(c) *Formal Drawing Lessons.*—A half-hour lesson once or twice a week.

Make the pupils draw from objects such as apples, half-apples, oranges, leaves, tubers, roots, etc.—from any simple object not involving perspective. They should frequently make models of objects in clay or other material and then make drawings of them. Some attention should be given to the primary colors with their tints and shades.

For manual drill, let the pupils draw circles and curves on the blackboard.

They should occasionally, in symmetrical exercises, use both hands at the same time, and sometimes the left instead of the right hand.

All the drawings should be large. Much injury is done to children and time is wasted in striving for minuteness of detail and accuracy of finish, before the eye and hand are sufficiently developed.

In small country sections, or in schools where the teacher has but one grade and not too many pupils, stick and tablet laying, also paper cutting and folding should be practised. A series of such exercises will develop the idea of symmetry and be the best preparation for original designing.

Good teachers will, at this stage, be sparing in the use of technical terms.

Young children should always draw from interesting objects. Type forms represent abstractions which should not be used until the pupil has reached them by his own generalizations.

~~437~~ Colored crayons may be used to advantage in all the grades, when water colors cannot be obtained or effectively used.

GRADE II.

(a) *As an aid to Language.*—Encourage and help the pupils to illustrate simple scenes and events by pencil sketches.

Excellent selections in literature suited to this grade are now attainable, such as fairy tales, etc. Pupils generally take much pleasure in pictorial representations of them. Their attempts at first will be crude, but experience has shown that the great majority of pupils will improve rapidly, that their conceptions will be made more vivid, and consequently that the constructive imagination so useful in the study of history and geography will receive proper development.

(b) *As an aid to Nature Lessons.*—As in Grade I. More difficult objects and some detail; simple grasses and flowers, occasionally using water colors. The leaf in the various stages of its growth. The cow or horse and the dog from memory.

Let the pupil be asked to observe these animals carefully whenever he can and then make a memory drawing of them in school. Point out mistakes and let the pupil correct them by renewed observation until the work is fairly good.

Trees.—Characteristic foliage in mass of spruce, oak or beech, poplar or elm. Apple on branch with leaves.

(c) *As an aid to Mathematics.*—Teach the pupils to draw accurately from one point to another, using a ruler. Draw parallel lines.

Number work may be made more interesting by having the pupils make pictures of a given number of birds, apples, etc., by making them divide a line or any regular surface into equal parts to illustrate the nature of fractions, halves, fourths and eighths.

(d) *Formal Drawing Lessons.*—Two half hours a week. Continue same work as in Grade I, introducing the grouping of two or more simple objects. The manual drill on the blackboard should include ornamental curves.

Construct with coloured paper an historic border. Represent it by a drawing. Vary the pattern.

GRADE III.

(a) *As an aid to Language.*—As in Grade II (a). Excellent copies of masterpieces of art may now be obtained at so small a cost as to place them within reach of the poorest school.

Before studying and discussing the pictures appropriate for this (or any other) grade, the pupils should see and examine as many as possible of the objects mainly represented, clouds, forests, mountains, rivers, lakes, ravines, animals, churches, etc.

(b) *As an aid to Nature Lessons.*—As in Grade II (b), but somewhat more difficult.

Cat, rabbit, hen, duck, herring, trout, the parts of a flower, turnip and potato, leaves, etc.

(c) *As an aid to Mathematics and Geography.*—Drawing squares and rectangles of given dimensions. Dividing them into square inches. Measuring distances in the classroom and representing them by lines one quarter of an inch to a foot.

Drawing correct plan of the schoolroom and of the play-ground.

Divisions of lines and surfaces into thirds, sixths and twelfths.

(d) *Formal Drawing Lessons.*—As in Grade II, but more advanced. Ornamental curves more complex, copied and original, on blackboard.

Borders formed by repetition of flower forms.

GRADE IV.

(a) *As an aid to Language.*—Continued as in Grade III (a).

(b) *As an aid to Nature Lessons.*—Common plants, shrubs, trees (of each three or four), so as to be readily recognized by their characteristic branching and foliage. Fruits. A few of the larger bones of the human body. The frog and the butterfly in the various stages of development. The sparrow and the robin.

Natural colors to be used when convenient. As it will generally be impossible to obtain human bones, corresponding ones from other large animals may be used instead.

(c) *As an aid to Mathematics and Geography.*—Fifths and tenths illustrated. The use of the compass in drawing circles. Right angles, triangles and squares geometrically constructed. Map drawing. Plans to scale. Working drawings of a few simple objects.

(d) *Formal Drawing Lessons.*—As in Grade III (d). Study of good pictures. Principles of repetition and alternation in exercise on borders and rosettes. Study of color in objects. Pleasing combinations of color in design.

GRADE V.

(a) *As an aid to Language.*—Continued as in Grades II and III.

The reading lessons will afford abundant material for pictorial drawings and illustrative sketches. Besides, there are incidents in child life, his games, etc.,—"playing ball"

“fishing for trout,” “snowballing.” “what I saw on my way to school,” “the hay makers.” Drawings in mass of animals and children in interesting attitudes. Here appropriate colours will greatly improve the effect.

(b) *As an aid to Nature Lessons*.—Plants, thistle, horsetail, iris, woodsorrel. Animals—sheep and goat, turkey and goose, salamander, beetles, butterfly. Analysis of leaves and flowers for colour schemes.

(c) *As an aid to mathematics and geography*.—Accurate drawings of polygons with compasses and ruler. Development of surface of pyramid in card board. Paper cutting to produce forms of regular solids. Plan of the school section. Map of province. Working drawings for a bracket.

(d) *Formal Drawing Lessons*.—Studies of good copies of famous paintings. Exercises in complex curves on blackboard—occasionally with both hands. The most elementary principles of free hand perspective as applied to simple objects,—the circle and the cube in different positions. The study and reproduction of historic ornament. Colour lessons—tints and studies in objects, and pleasing combinations of colour in design.

GRADE VI.

(a) *As an aid to Language*.—As in Grade V (a).

(b) *As an aid to Nature Lessons*.—Organs of the human body—hands, feet, ears. Plants—lady's slipper, red maple. Animals—bear and fox, hawk and owl, insects in various stages of development. Study of colour in natural objects.

(c) *As an aid to Mathematics and Geography*.—The measurement of angles and lines. Plotting geometrical figures, and simple geometrical problems. Map drawing—North America, showing Canada somewhat in detail. Working drawings of simple rectangular objects.

(d) *Formal Drawing Lessons*.—As in Grade V (d), but more advanced. The idea of type forms, cubes, pyramids, ovoids, etc., developed from the drawing of simple objects.

GRADE VII.

(a) *As an aid to Language*.—As in Grade V (a). Special attention to the drawing of the best buildings and landscapes of the section.

(b) *As an aid to Nature Lessons*.—Structure of bones and muscles, eyes. Plants. Animals—spider and web, kingfisher, squirrel. Analysis of beautifully coloured natural objects.

(c) *As an aid to Mathematics and Geography*.—Plotting. More difficult geometrical problems. Map drawing—Europe. Working drawings.

(d) *Formal Drawing Lessons*.—Object drawing. Freehand perspective. Decorative design. Study of tints and shades. Pleasing arrangements of groups of fruit, vegetables, or other objects; vase-forms, etc.; arrangements of objects to express some complex thought, as a bottle of ink, a pen and a sheet of paper.

GRADE VIII.

(a) *As an aid to Language*.—Occasional practice in pictorial sketching.

(b) *As an aid to Nature Lessons*.—Plants and animals. Heart and lungs of a sheep or an ox. Apparatus used in science lessons, etc.

(c) *As an aid to Mathematics and Geography*.—Accurate plotting and measurement by mathematical instruments. Working drawings of common objects to scale. Geometrical problems. Map of the British Isles.

(d) *Formal Drawing Lessons*.—The study of good drawings from master artists. Drawing of groups of models, flowers, fruit, etc. Historic ornament. Adaptation of natural forms to purposes of decorative designs. Colour harmony applied in design.

REPORTS ON PHENOLOGICAL OBSERVATIONS, 1901.

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 it in 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 much to suggest improvement in both the schedules and the methods of observation. The schedule should be revised within a year or two.

This year, schedules based on our form have been published and circulated in British

Columbia by the Natural History Society of the Province, and in Denmark by school authorities. Botanical observations covering the principal quarters of Europe have been published for some years in the annual report of the "Gesellschaft für Natur-und-Heilkunde" in Giessen, Germany,—for the last few years by Dr. E. Ihne of Darmstadt. Our schedule is used in a few stations in each Province of the Dominion, the central and western provinces substituting the nearest allied western species for our exclusive eastern species.

The Province was divided into its main climatic slopes or regions not always coterminous with the boundaries of counties. Slopes, especially those to the coast, were subdivided 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 Co's.	" " " " " " " "
III.	Annapolis and Kings Counties,	(a) Coast, (b) North Mts., (c) Annapolis Valley, (d) Cornwallis Valley, (e) South Mts.
IV.	Hants and Colchester Counties,	(a) Coast, (b) Low Inlands, (c) High Inlands.
V.	Halifax and Guysboro Counties,	" " " " " " " "
VI.	Cobequid Slope (to the South),	" " " " " " " "
VII.	Northumberland Sts Slope (to the N'th)	" " " " " " " "
VIII.	Richmond and Cape Breton Counties,	" " " " " " " "
IX.	Bras d'Or Slope (to South East),	" " " " " " " "
X.	Inverness Slope (to Gulf, N. W.)	" " " " " " " "

The observations of Regions I and III were investigated and reported upon by Miss Antoinette Forbes, B. A., of Windsor; those of Region II by Principal B. McKittrick, of Lunenburg; Regions IV, V and VI by Principal E. J. Lay, of Amherst; and Regions VII, VIII, IX and X by C. B. Robinson, B. A., of Pictou Academy.

REGIONS I AND III.

Region I, comprising Yarmouth and Digby Counties, had 49 observers, 27 from Yarmouth and 22 from Digby. This region was divided into three Belts,—(a) Coast. (b) Low Inland and (c) Highland.

In Region III, which consists of Annapolis and Kings Counties, there were 36 observers, 19 for Annapolis and 17 for Kings. The Schedules from these observers were grouped into five Belts,—namely, (a) Coast, (b) North Mountains, (c) Annapolis Valley, (d) Cornwallis Valley and (e) South Mountains.

It is well for the observer to keep in mind the Belt to which his Station belongs, and to carefully fill in the blanks at the head of his Schedule.

As not more than 10 Schedules are selected from each Belt for the purpose of averaging, it was a difficult matter to make a choice, particularly in the case of Yarmouth County.

The various points for consideration in choosing Schedules are a fair distribution of Stations over the Belt, the number and accuracy of the observations, the sex and temperament of the observer, the neatness of the work, the method of stating dates and in some cases the Compiler's personal knowledge of the observer.

It is interesting to observe in connection with the last point noted that careful, faithful pupils have developed into accurate and painstaking teachers.

On the whole the observations have evidently been carefully made, but for the sake of future observers it may be well to note a few apparent mistakes and careless statements.

There appear to be several cases of plants being confounded with each other, e. g.

- (1) The gold thread (*Coptis trifolia*) and the star flower (*Trientalis Americana*).
- (2) The pale laurel (*Kalmia glauca*), the sheep laurel (*K. angustifolia*) and *Rhodora Canadensis*.
- (3) The great willow-herb (*Epilobium angustifolium*) and *Rhodora Canadensis*.
- (4) Bluets (*Houstonia caerulea*) and blue-eyed grass (*Sisyrinchium*).
- (5) *Ranunculus acris* and *R. repens*.

There is a great variation given in the dates for *Rubus strigosus* and *R. villosus*.

It would appear in many cases that the observer has given the date of his first seeing a plant instead of the actual date of its first appearances in a locality. Frequently the date "when becoming common" is given the same as "when first seen" In such cases the former is probably the correct one.

If observers would change with great care the day of the month to day of the year the work of the compilers would be greatly facilitated.

The abbreviations th., st., rd., are confusing to the eye and quite unnecessary in stating dates.

Perhaps it might be well to give examples of the most striking errors.

1. A school section belonging to the "Inspectoral District of Kings and Lunenburg."

2. A place in Region No. III having an altitude of 5280 feet.
3. Frogs and snakes going south a few days alter their first appearance.
4. The shearing of sheep in March.
5. A humming-bird appearing in March.
6. The great willow-herb appearing in April.
7. A ripe raspberry found May 22nd.
8. A ripe blueberry found May 26th.

Several flowers, such as Hepatica, Adder's Tongue Lily, Bluets, Marsh Calla, Common St. John's Wort and Buckwheat are reported from very few places. Are they not found or would a more careful search discover them in more localities?

Some observers seem to have reported the leaf instead of the flower of the Pitcher-plant.

Thanks are due the Inspectors for their care in classifying and describing the location of places where observations were taken.

REGION II.

Shelburne.

Thirteen observations were sent in from this county. These came from District of Barrington, Coast 4, Inland 1; District of Shelburne, Coast 4, Inland 4. I tabulated ten and formed them into one general schedule. The sections omitted were Barrington Head, Rockland and West Sable. I used several observations from these sheets, however, in filling vacancies in the other.

Queens.

There were twenty-eight observations from Queens County, as follows: District of South Queens, Coast 11, Lowlands 5, and Highlands 2; District of North Queens, Lowlands 2, and Highlands 8. I made three schedules of these, viz., South Queens, Coast; South Queens, Lowlands and Highlands; and North Queens, Lowlands and Highlands. The only section sending observations which I did not count is Brooklyn, with but 49 observations.

Lunenburg.

The two districts of this county sent in fifty-three observations, as follows: District of Lunenburg, Coast 7, Lowlands 9, Highlands 24; District of Chester, Coast 6, Highlands 7.

I arranged these in the following four schedules: Lunenburg Coast, Lunenburg Lowlands, Lunenburg Highlands, Chester Coast and Highlands. The observations not tabulated are Middleton, Cookville and Riversdale, in the Lunenburg Lowland Belt; and Upper Chelsea, New Cumberland, Nineveh, Simpson's, New Canada, Branch LaHave, Conquerall Mills, Lakefield, Watford, Farmington, Upper Northfield, Newburn, Upper Cornwall, Middle Cornwall, in the Lunenburg Highland Belt. In the Chester District I omitted Fox Point, Beech Hill and Charing Cross. These have all been marked with the words "not counted."

It is only fair to state that many of these observations were excellent, but as I could only average ten of them I was obliged to omit those mentioned.

General Remarks.

The entire region sent in ninety-four observations. I examined all of these and selected seventy-one for compilation in the eight schedules forwarded to you. I am pleased to say that a large majority of the teachers evidently took great pains to obtain correct observations, and deserve the highest praise for their general accuracy. Several gave correctly the day of the year instead of the day of the month. The compiler is duly grateful to these.

Errors in Observations.

(1.) One or two observations are obviously guesses. I strongly suspect that they were all filled out about the close of the term, possibly from memory or aided by the pupils.

(2.) Three teachers, in attempting to give the day of the year, unfortunately took the day given in the printed schedule as the *first* instead of the *last* of the month, and so put nearly all their observations a month too late.

(3.) Some seem to have put the date for "first seen" and then added a few days for "becoming common" without waiting to notice the exact date. Others reversed the arrangement. Teachers should remember that no observation is of the slightest value unless it is accurate. The compiler likes to feel that the teacher is perfectly correct in every observation.

(4.) A few have given very early dates for "first seen." Possibly they were anxious to have the credit of recording the earliest flower of the locality. This is clearly a mistake.

A "sport" appearing very early in some sheltered spot gives no correct idea of the date at which the plant may generally be found to blossom. Others have recorded *too late* a date for "becoming common." This should evidently be taken as indicating the time at which the plant may fairly be said to be flowering in the locality.

(5.) Some again have evidently mistaken one plant for another. (a) 10 Alder's Tongue Lily or Dog's Tooth Violet (*Erythronium*) has been taken for *Clintonia borealis*. (b) 12 Gold Thread (*Coptis trifolia*) for Star Flower (*Trientalis*), and possibly a few others have mistaken some of the other plants.

(6.) Perhaps the most frequent mistakes have been made with species. I have grave doubts about the accuracy of several observations in the following cases:—(a) 19 and 20 *Ranunculus acris* and *repens*. Unfortunately I did not carefully notice the difference in time of flowering of these species last summer, and therefore I was unable to determine accurately the correctness of the observations from my own experience. The majority of these reporting have given a later date for *R. repens* than for *R. acris*.

(b) 32 and 33 *Kalmia glauca* and *K. angustifolia*. Many of the dates given for these were too early, and I am inclined to think that possibly *Rhodora* has been very generally mistaken for one or the other of these. I carefully observed these two last summer, and I found *K. glauca* 146-152 and *K. angustifolia* 168-173. I look with suspicion upon any dates for the former less than 140-150, and for the latter 160-170.

(c) 34, Pigeon Berry (*Cornus Canadensis*) is in some instances given too early. Possibly some observers mistook the corolla-like involucre for the petals and gave the date for its appearance instead of noticing the different small flowers of the cyme.

(d) 59 Timothy (*Phleum pratense*) was given too early in several observations. I am inclined to think that orchard grass (*Dactylis*) was confused with Timothy.

(7.) Very few observations were recorded of 8 *Equisetum*, 11 *Hepatica*, 38 *Linaria*, 39 *Rhinanthus*, 41 *Brunella*, 42 *Epilobium angustifolium*, 44 *Hypericum*, 45 *Leontodon autumnale*, 48 and 49 *Crataegus*, 62 *Triticum vulgare*, 63 *Avena sativa*, or 64 *Pagopyrum*. The dates for the fruiting of the different plants were almost entirely not recorded. As the dates for many of these occur after the schools close for the summer vacation, I suppose the teachers did not think it worth while to record them for the next year. It would be interesting for teachers to keep a record of their holiday observations. Only about half a dozen teachers have made any autumn observations.

(8.) The dates given for the appearance of birds vary greatly. In one instance I found a difference of 86 days. Possibly the dates are correct as to the day the observer first saw the bird, but obviously such birds had been in the neighborhood weeks before. The same remarks apply to the "piping of frogs" and the "appearance of snakes."

(9.) The thunder storms seem to have been very generally observed. In some instances there is a difference of a day, but that might reasonably be expected if the storm occurred in the night.

Suggestions.

(1.) 32 *K. glauca*. Possibly it might be better to substitute some other plant for this. From the fact that it grows in a bog very few lady teachers are likely to find it. And besides it seems to be generally mistaken for some other kind.

(2.) 79, closing of (a) lakes, (b) rivers. Reverse the order of (a) and (b) to correspond with 73 (a) and (b). As it stands, the two different orders are apt to lead to confusion unless teachers are very careful.

(3.) Perhaps one of the Hawthorns might be changed for some other tree.

(4.) It might be wise to make the recording of 80, thunder storms, more definite.

REGIONS IV, V AND VI.

(1.) The shedding of pollen of plants is certainly confounded by a great many observers with the first display of the catkins. Divergencies in dates of neighboring sections can only be explained by that.

(2.) Very few seem to recognize No. 2 under either "Aspen" or its scientific name, otherwise that observation should be very generally recorded as so many plant it as an ornamental tree. Call it the "Wild Poplar" or the "Popple" and doubts would vanish.

(3.) No. 7 is confounded with "*Sisyrinchium*," which is often called "Bluets." It is not very common, and something else might take its place.

(4.) The *Kalmias* are certainly not known. The dates have been given so early that in no case have I ventured to average them. *K. glauca* is not at all common, and the other is everywhere called "Lamb Kill." The "*Rhodora*" must certainly spell "Laurel" with the majority.

(5.) Many give such an early date for the flowering of Timothy that I imagine they call the "heading out" flowering.

(6.) The shearing of sheep is not a very sure criterion of the weather. Adjoining sections differ by a month or three weeks, because one waits for mild weather, and the other shears

"in the light of the moon," for shearing in the "dark of the moon" will cause deterioration next year in the quality of the cut.

(7) Potato-digging, with some, plainly means the date of the first mess of early potatoes.

(8) The earliest date given for ducks and geese in any district might well be taken for the whole, for the casual flight over any particular school section is not due to any local conditions existing there.

(9) The birds are not known. Could not be averaged except in a very few instances. The Robin, Song Sparrow and Humming Bird are pretty generally observed.

(10) Different observers have very different ideas about what is meant by "becoming common." Two observers, equally careful, will make three or four days' difference, even when near each other and under the same conditions.

(11) I think there should be an aquatic plant, as the Yellow Pond Lily. Its appearance is determined by the temperature of the water, which is certainly a measure of the season's advance.

(12) Observers should be exhorted to reduce their observations to the "year day," the other makes the compiler's work very slow.

(13) Would not sowing and reaping of the same crop be interesting?

Miss J., Sugar Hill, Cumb. Co., reports flowering of 11 plants not in Schedule.

The Miss K's give very full reports from Parrsboro district.

One teacher gives Erythronium, 138, and Dog Tooth Violet as addendum, 127.

C., Anand Lake, places section on coast (coast of lake probably), plants potatoes the 109 day, and does not begin ploughing until 186.

Others give date of fall ploughing.

Frogs did not pipe in Georgefield until May 27th.

G. is very early with 55, 57, 60, in Musquodoboit Harbor, but as Rev. Mr. Rosborough is there and instructs the teachers often in Botany, I accepted them.

In Chezzetcook the first strawberry bloom and first ripe berry were just two days apart.

Many have *K. angustifolium* earlier than glauca.

Many instances of questions unanswered in footnote and left unmarked in schedule, but plant name the local and known one.

Fall Dandelion is often not filled in, while date of August Flower is given in margin.

Stormont has currants red and white, ripe before the lilac blooms, and in case of red currant, 15 days after flowering.

Cross Roads reports hail storm August 1st.

New Prospect.—Robins hatched 133, left nest 146. Also gave the number of cloudy, rainy and fine days for six months.

Another thing,—these observations are for the astronomical year; the teacher is in the section generally only for the school year. One teacher, in almost every case, fills out a schedule. Such a schedule for 1902 takes in the phenomena for that year only up to the beginning of July.

REGIONS VII, VIII, IX AND X.

Experience has shown that a great many errors are due to the following causes:

(1) A plant is counted as flowering before the flowers are actually open.

(2) Unusually early dates are often given, based upon plants growing in exceptionally favourable situations.

(3) In computing dates, the figures given are taken for the first and not the last day of the month. Thus, May 15th should be 135 (April 30th = 120 + 15), not 165 nor 166.

(4) Dates are put on wrong lines or between lines.

The most frequent errors are as follows:

Nos. 1 and 2. Catkins formed, but not dropping pollen. *Alnus viridis*, D. C., is sometimes taken for *A. incana*.

6. Flowers seen on tree, and dated before open.

7. Confused with *Sisyrinchium* and *Iris*.

8. In highland districts especially, this seems often to be confused with *E. sylvaticum*.

L. Many dates are late.

10 and 21. Sometimes confused. The latter is very common, the former of limited range.

12 and 23. Too often mistaken for one another.

19 and 20. Sports should be carefully excluded and the two species carefully distinguished. Both are common.

22. *T. erectum* L., is occasionally reported instead.

For Nos. 28 and 30, 32 and 33, dates are more often wrong than not. *Rubus triflorus*, Rich., is very frequently taken for the common raspberry, which is about three weeks later; while one of the trailing species of blackberry is often taken for *R. villosus*, Ait. In some sections the latter may not be found.

Kalmia glauca is a bog plant, rather rare, with stiff narrow leaves. On almost all schedules *Rhodora*, a very common bog plant, is reported instead. The latter also seems to be the source of most of the dates given for *angustifolia*, which is also very common, but grows in drier places, and which is very unlikely to be found in bloom before the middle of June. The flowers of *Rhodora* come before the leaves.

34. The white leaves around the flowers of *Cornus Canadensis* are not the petals.
 38. Dates given are for *Linarea vulgaris*, Mill, which is likely our only species.
 25 and 39 to 44 are all much more widely distributed than the schedules indicate, but Willow Herb, and St. John's Wort come into bloom in many sections after school closes. Pussy Willow is usually *Salix discolor*, Muhl.
 45. The Fall Dandelion or August Flower may be looked for in June.
 49, 62 and 63. Do not record until either stamens or pistils are visible.
 60. *Trifolium hybridum* is likely reported for this in a great many cases, but as the dates of flowering are almost the same, no definite statement is possible.

Suggested Changes.

- (1) Insert *Sanguinaria Canadensis*, as it is widely reported, especially from highland districts, and would be useful for comparison with other provinces.
 - (2) Either substitute *Rhodora* for *Kalmia glauca*, or simply insert former.
 - (3) Change *Linaria Canadensis* to *L. vulgaris*.
 - (4) Insert *Chrysanthemum Leucanthemum*, *Nepeta Glechoma*, *Iris versicolor*.
 - (5) Drop *Hypericum perforatum*, *Avena sativa*, *Fagopyrum esculentum*.
- All names are as in Spotton.

The suggested changes are published as given by each, to set observers a-thinking, so that when the schedule is revised in a year or so, we may be able to incorporate the best suggestions and make the present provisional list a more satisfactory one.

C. B. Robinson, B A., of Pictou Academy, was one of the best practical botanists in Western Canada a few years ago, since which time he spent two years in the study of Botany at Cambridge University, England. We may therefore well assume him to be one of the ablest botanists in Canada. He intimates to the Superintendent of Education that he will be glad to be consulted by students on any botanical difficulties that may present themselves. The Superintendent hopes that so valuable an offer of assistance may be enthusiastically and appreciatively accepted by many students.

EDUCATION IN GREAT BRITAIN AND FRANCE.

From the Special Reports on Educational Subjects, Volume 7, published by the British Government, 1902.

"In many parts of the world the question of country schools is one of special interest and difficulty at the present time. There is a widespread feeling that something ought to be done to bring them into closer touch with the practical needs of country life. But opinion is greatly divided as to how this could or should be done. The question is felt to be in the main a social and economic problem, not simply a school problem. The work done in the schools affects the question at issue, but no mere change in school programmes could arrest or reverse a great process of economic or social change. Perhaps I may be permitted to sum up in the following paragraphs, for the information of the readers of this report (with a brevity which will, I trust, not be mistaken for dogmatism), what appears to be the conclusions of many of those best qualified to form an opinion on this intricate but urgent question.

"The country school is in a position to render a great service to the nation. The country districts are the recruiting districts for the towns. Urban communities have a direct interest in the welfare of the rural schools. The better the training that is given to the boys and girls in the country schools, the better will it fare with the industries in which those boys and girls may be engaged in later life. Moreover, it is hoped that the drift into the great cities may some time be reversed, and that a current of population will pass out from the great cities into the country districts again. Electric traction, electric power, rapid means of communication, and the growing congestion of many city areas may cause a

greater decentralization of industry. In order to encourage such a movement back into purer air and more open surroundings, it is desirable that the country schools should not be allowed to drop below the intellectual level of the town schools. We have now, and have always had, many excellent country schools which may serve as a model for imitation. What is wanted is to level up the average to a higher standard.

Education is a much greater and a much more difficult thing than the mere imparting of intellectual instruction. A good school makes the children think; it makes them interested in what lies around them; it makes them ask questions; it makes them keen. It does not cram them with undigested knowledge. It trains them to think for themselves; it teaches them how to learn; it makes them want to learn; it interests them in the why and wherefore of the common details of life; it makes them realize that the simplest questions are often the hardest questions, and that the simplest things are often the best. But a good school does not stop here. It trains the body as well as the mind, and it cares most of all for character. Its deepest and noblest work is a moral work. It makes the children not simply brighter and cleverer, but better, than they were before. It aims at producing not only self-reliance but self control and readiness to sacrifice selfish interests to duty.

It cannot do this, however, unless it is inspired by a strong and noble tradition. All good education involves sacrifice. And the essential things in a good school are not a well-chosen time-table or skilful organization (though both are necessary), but the personality and example of a good teacher. That is the force which makes the school. And, in order to attract the best men and women to the work of education, no pains should be spared to make the position of schoolmaster and schoolmistress as honorable and as well-found as possible. We need schools of first-rate quality and in good heart. This can only be when the teachers are the best, and when they are happy in the conditions of their work.

It is useless to turn a school into a mere labour-house. Men and citizens have to be trained, not only workmen and "hands" for employment. But the best education combines what is practical with what is ideal. It does not overlook the economic future of the pupil in attempting to safeguard his spiritual and intellectual future. The best schools teach the children to value and reverence what is near at hand and "common," as well as what is distant and rare. But no school can flourish which aims at keeping the scholars down, or back from the best at which they can aspire. It should always be remembered that in times past many of our greatest scholars and leaders were bred as lads in country schools.

A few at all events, of the children in a country school are likely to earn their living in some calling which is not very closely connected with country life. It would be inexpedient, therefore, to omit from the course of study in such schools the elements of that education which is necessary as a foundation for success in commerce or industry. Still less reasonable would it be to model the curriculum on the assumption that every boy in a country will be, or ought to be, an agricultural laborer. It is partly as a safeguard against any such assumption being made that the literary elements in the curriculum have tended to oust the practical elements. Most people will agree in thinking it right that the elements of a liberal education should be given in all schools, urban and rural alike, but that, in all cases, an education need be none the less liberal for being partly through the medium of practical studies. At the same time there is a no less general conviction that, even in the remotest village school, the desire to keep labourers "in their place" should never be allowed to encroach on the proper claims of a liberal training.

The elementary school seems to be not the place for the technical study of agriculture in any specialized form; but the general influence of the school and the drift of its work may do much to foster, or to discourage, an interest in country life. Some generations ago it was the practice to sacrifice elementary education to the claims of industry. There followed a sharp reaction, and a too violent recoil from practical studies in the elementary schools. Happily there is now an increasing disposition to regard literary and practical studies as compatible elements in education. Perhaps the most effective of all kinds of rural education is that which combines the practical with the more literary elements, and which teaches a child to love nature and to admire skill in handicraft, while at the same time making him share in the great inheritance of moral ideas and noble literature.

But such a training, though it sounds simple, is really the outcome of long study on the part of the teachers, coupled with practical skill in the selection of subjects and in the choice of methods in teaching them. Children learn to love a subject through learning from a teacher who loves it. The best country schools have always been those which are taught by teachers who love country life, who appreciate its beauty and varied interest, who themselves prefer to live in the country than in the town, and who are in every way the intellectual equals of their colleagues in the town schools. The country is the ideal place for the education of children, and the greatest efforts should be made to keep the country schools up to a high level of educational efficiency, enthusiasm, and equipment. Country teachers need special encouragement in their work and any special opportunities for keeping up their studies. They need books, pictures, opportunities of travel, opportunities for

cultivated intercourse. Above all, they need to feel that the nation at large appreciates the immense importance of their task, and honours them for their patience in overcoming the difficulties which beset it. No part of the national system of education needs, or will repay more systematic encouragement or more constant care."

MICHAEL E. SADLER,

Director of Special Inquiries and Reports.

From pages iii, iv and v.

[From page 240, Vol. 7, Special British Reports on Education.]

(Mr. Cloudsley Brereton's report.)

"As for the men, the best of them have too often migrated to the towns. Higher wages and greater freedom have been the main incentives. Those who are left are frequently the least enterprising, the least strong, and the least desirable; skilled labor is getting scarcer and scarcer as the old generations die out. What is wanted in the present race is more skill of hand and eye, a greater keenness to get on, and less of the spirit of shirk.

"How can the school help? By making the education given in its class-rooms a better preparation for the life the majority of rural children have before them; not by cutting down its so called literary and intellectual side, but by bringing it more into sympathy and accord with rural life. The recent circular on the drawing up of time-tables gives all the local option that is desirable in the matter. In this curriculum can be given, as in France, an agricultural tinge without injuring its main features. The pictures on the walls, the books the pupils use, the subject matter of the teacher's lessons, can be chiefly concerned with the country and agriculture. In connection with this a great point should be made of nature-study, and the "school-journey" should figure prominently on the programme.

"Manual Training for boys, with cooking and laundry work for girls, should be promoted everywhere. School gardens, more of the Bosccombe than the French type, should be started, and this side of the school work might be encouraged by prizes given by the agricultural societies. Love of the country should be inculcated, the noble side of honest toil, and the advantages of self help should be the dominant notes of the instruction given. Evening continuation schools should be more widely established and rendered as practicable as possible.

"But this involves further desirable changes. Practical Agriculture should be taught in the training colleges, or at least an abundant supply of holiday courses on the subject arranged, such as the Cambridge County Council and other County Councils have established, with a diploma for successful candidates. The position of the country teachers to be improved, especially in regard to the fixity of tenure, and it might be advisable to earmark grants for salaries."

[From page 305, Vol. 7, Special British Reports on Education.]

(Mr. John C. Medd's Report.)

"In regard to the primary school itself, I did not see any work out of doors of a more practical character than what has now been done for some years at several of our rural schools.

Such instruction, however, should be supplemented by visits to experimental or demonstration plots, and by country walks in which the children should be encouraged to collect plants, insects and geological specimens. Descriptions of these visits and excursions should invariably be written by the children afterwards. Each school should be furnished with a museum similar to the one at Olivet, and with a library of attractive and reliable books upon every phase of rural life.

"A leaving certificate which children could only obtain by regular attendance and after examination in the subjects prescribed for one of the higher standards would tend to raise the whole level of elementary education. It would provide a definite terminus *ad quem*, and would insensibly promote the extension of elementary school life. This matter has been dealt with on several occasions by Sir Joshua Fitch. In France the certificate has partly failed of its object, because the standard of the examination is too low, but if it were made a real test of a child's knowledge at the age of 12 or 13, it would soon become a passport to good employment. Parents would learn to recognize its value and be anxious for their children to secure it. Nature study, instruction in which should be practical as well as theoretical (as is now imperative in the case of agriculture and horticulture under the new code for evening continuation schools), might well be made an obligatory subject of examination at rural schools. Mere ability to answer questions out of a text book is in itself worthless.

"Facilities must be afforded to all students at the Training Colleges to acquire at least an elementary knowledge of the principles of agriculture and horticulture, and their applica-

tions. It ought not to be difficult to organize such instruction upon the lines of that given at Chartres and Orleans, at those colleges which are already provided with gardens, and might well be given by the lecturers of the County Councils. The fact that most of the students come from the towns and return to the towns is no objection. No one can be the worse for such instruction. Some of those who had received it, having their interest aroused in the pursuits of the country, and feeling themselves qualified to take part in them, might be led to prefer a rural to an urban life. The present system tends wholly in the opposite direction. In the words of Mr. W. Scott Coward's last report: 'To prepare the teachers of a nation with a life so rich in diversity, so varied, so complex—we have but one syllabus of a highly academic character. The colleges whose influences are moulded by it into an inevitable uniformity, and, as they can turn out annually not nearly as many students as are needed, who are at once absorbed by the large town schools, it follows, by a natural reaction, that their methods are shaped to prepare teachers for the more complex and artificial life of towns.'

"So long, however, as there is such an inequality between the salaries of the urban and the rural teacher, it is but natural for men to go where they will be better paid. Here again we may possibly learn from France, where teachers are paid, not according to their particular school, but according to their qualifications as ascertained by examination. The rural teacher's position is often a more trying and responsible one than that of the town teacher, and he is entitled to equal treatment. The readjustment of salaries (a change which might involve their payment by the State) would do more than anything else to end the difficulty of providing for the rural schools. Contented teachers are essential to the success of any system of education. The legitimate grievances ought to be removed, and they should also have some right of appeal against what they believe to be unjust decisions."

EDUCATION IN SCOTLAND.

(From the *School World*, London, March, 1902.)

The following short extracts from an article by H. S. Carslaw, M. A., D. Sc., F. R. S. E., Lecturer on Mathematics in the University of Glasgow, and Fellow of Emmanuel College, Cambridge, will be of value to those taking an interest in the development of the Nova Scotian education system:

"The present satisfactory position of secondary education in Scotland is due in great measure to the work of the Scotch Education Department, and to the changes which the last Universities Commission introduced in our four universities. Under the former conditions there was no organized supervision of the secondary schools other than those under government, while in all the universities it was found necessary to provide for the teaching of elementary work, in many cases to classes of over one hundred."

"Now there is a severe preliminary examination, which must be taken at the beginning of a student's course, and an immediate result has been the almost complete abolition of the junior classes, and a corresponding rise in the average work of the schools."

"A still more important change has been the institution of the admirable system of Leaving Certificate Examinations, conducted by the Scotch Education Department, which is accompanied by an inspection of all the schools, public or private which desire to submit their pupils for these examinations. The care that has been taken in the setting of the papers, and in the drafting of the schedules for the different subjects, and the growing value attached to the certificates by professional bodies, have caused these examinations to grow yearly in importance. Their influence in the improvement of school work cannot be over-estimated."

"So much for the Universities,—we must now look more closely at the schools. The battle of mathematical teaching seems at present to centre round the subject of Geometry, and demands are being made in several quarters for the abolition of Euclid's system, and in others for the complete removal of the subject itself from the school curriculum. It may be that this is a natural reaction from the period in which absolute adherence to Euclid's propositions, sequence, figures, and even words, was in many cases sternly enforced; but anyone who knows the work of the Scotch schools must be aware that most of the suggestions of which practical people in England are now bringing forward as improvements in the teaching of this subject have been the stock-in-trade of many a teacher with us for years.

"Every one admits that before demonstrative geometry is taught the pupils should have gone through a course of practical geometry; that they should know by the use of the ruler, the compasses, and the protractor, the properties of the figures they handle, and about which they are later to reason; and it is unfair to assume that this is not in many cases already done."

"The subject of Arithmetic offers special opportunities to a good teacher, and much depends upon the way in which it is taught. It is true that an immense waste of time and labor is involved in the acquisition and use of our complicated system of weights and measures, and until these are abolished the present state of things must remain; yet in at least the square and cubic measures, illustrations by simple models can be given, which make the memory lighter. Such aids are not as generally used in arithmetical work as they might be.

"The antiquated system of teaching proportion ought now to disappear, and the general use of the unitary method would reduce what are called the higher rules to simple examples of a few general principles; yet I know of cases in which the old system has been encouraged, and head masters blamed by higher authorities for using the newer methods, which they are pleased to say involved great waste of time. In this matter the elementary-school teachers seem to blame."

(In Nova Scotia the state of matters appears to be reversed, for it is the higher authorities that have been blamed by the archaic school-master.)

CONSOLIDATION OF SCHOOL SECTIONS IN IOWA.

Richard C. Barrett, Superintendent of Public Instruction for the State of Iowa, U. S. A., has published as Chapter II of his Biennial Report for 1901, in some seventy pages, an admirable discussion of the advantages and disadvantages of the plan of transportation or conveyance of children from small settlements to school centres. As our Legislature has just passed a law enabling school sections to assess for the conveyance of children to school, nothing can be better fitted to inform our people of the views taken on the subject than a perusal of this valuable document.

In Australia, the Minister of Public Instruction reported the closing of 241 small schools in Victoria, at a saving of £14,170 per annum. Eighteen States of the U. S. A. have laws for the conveyance of pupils to school and a summary of the progress made in several of them is given. But Iowa is the main study of the pamphlet; and the foundation of the discussion is the answers to the following questions which were sent to every county superintendent in the state:

(The word DISTRICT in Iowa is the equivalent of our word SECTION.)

1. In how many districts have pupils been transported?
 2. In what school corporations has consolidation been tried, and with what effect?
 3. So far as you have been able to learn, what is the general sentiment in your county regarding the closing of small schools, and the transportation of pupils to others?
 4. What in your opinion are the advantages and the disadvantages of the consolidation of districts and the transportation of pupils?
 5. Where the system has been tried, what do the patrons think of it?
 6. If any objections are made to the plan, what are they; and how may they be removed?
 7. What distance may pupils be transferred with safety to themselves and profit to the district?
 8. If in any instances pupils have been transported in your county state briefly the history of the case, and with what success it has been tried.
- We shall be glad to have briefly any thoughts or suggestions on this subject, not covered by these questions, which are simply suggestive.

The replies from about one hundred counties are summarized, giving much information and showing the obstacles to be overcome in order to secure success in many places. The advantages and disadvantages are clearly put; but the most conspicuous features of the summation are:

First,—That the county superintendents (the equivalent of our inspectors) are almost unanimously in favor of the plan and nearly all of them give good reasons in support of this position.

Second,—That the chief objection to the proper application of the system in Iowa is the bad condition of the roads at certain seasons of the year. The same is probably true of Nova Scotia.

Superintendent Barrett first points out that in this large state, there are no less than 333 districts, the equivalent of our school sections, which have an average daily attendance of less than FIVE; 3,205 of less than TEN; 6,373 of less than FIFTEEN; and 9,329 of less than TWENTY.

Of 21,034 teachers licensed, 7,228 held only a third grade certificate, 6,167 of whom were females, presumably young girls just out of school. Second grade certificates were 13,828, of which 11,703 were issued to females. After indicating the proportionally great number of inexperienced teachers which have to be engaged on account of these conditions he proceeds thus:—

The number of inexperienced teachers would not be so great if it were not for the great number of small schools and the difficulty of securing teachers for them. If the standard of teaching in hundreds and hundreds of districts was not necessarily very low, it would be impossible for so many persons to secure employment as teachers without any preparation whatever for their work, beyond what they have secured in the common schools. Many of them have had little or nothing beyond the district school which they propose to teach. The best thought of the common school men and women of to-day is given to the question of how to improve the rural schools. The city schools are in the hands of the best educational talent that can be secured by the payment of liberal salaries to teachers, by supplying the best buildings that money and brains can produce, and by holding out the inducement of attractive surroundings to the teacher—an atmosphere of culture, the opportunity to be in and a part of the strenuous life of the city, with its many varied interests, entertainments and associations.

The country school labors under disadvantages in its competition for teachers and pupils, especially where it has but a small attendance. It is impossible for the teacher to properly systematize her work and classify the school. The classes are small, many times of only one or two pupils, so that there is no incentive to competitive excellence. The teacher's time is so cut up and spread out over a great number of subjects that it is impossible for her to do her best work in any of them and the interest of teacher and pupil is likely to lag. There are, it is true, many excellent rural schools, but this is due either to the fact that the attendance is large, or that by good fortune an exceptionally capable teacher has been secured. If the latter is the case, it is quite certain she will not stay more than a term or two, because better inducements will be offered her elsewhere.

There are hundreds and hundreds, and it is safe to say thousands, of districts in Iowa where these conditions are almost certain to prevail for many years to come. These districts are so small and their resources so limited that their revenues, without excessive taxation, are bound to be limited to such an extent that they cannot afford to employ teachers whose ability commands good salaries. It is only by consolidating those weaker districts and forming one strong district which can afford to have the best teachers, building and equipment, that the best educational advantages can be secured without heavy additional expense.

The great educational need in Iowa, in the opinion of many of the strongest educators, is of a better trained teaching force. This need is felt most by the rural schools, because under present conditions only a few of them comparatively pay salaries sufficient to induce teachers who have had professional training to work in them. The salaries are so low that young men and women are discouraged from preparing themselves to teach because they can do better in other occupations. At least, if a young man or woman prepares for the teaching profession, it is with the view of securing a position in a good graded school, and having gained the professional training, such positions are easily obtained. The common schools get little or no benefit at present from normal schools except during the experimental stage of the teacher's career, while she is acquiring the experience which will qualify her for a position in the graded schools. The average salaries paid to teachers in Iowa during the year 1900 were: To males \$40.20 per month, and to females \$30.24.

The complaint is often made that the farmers' boys and girls want to leave the farm and go to the towns. The atmosphere of the cities and towns with its excitement, its society and its many attractions and allurements appeals to the young people. Younger and younger every year, it is said, they feel this discontent with rural life and they desire to get into town. How many towns and cities there are in Iowa where a goodly proportion of the population is made up of retired farmers who have left the country and moved into town to satisfy this craving on the part of their children! They have come, they say, to

educate their children and give them the best they can afford. They have left the farm, often at great sacrifice, and many times, it must be admitted, with results not the best for the children. Not every boy and every girl who comes fresh from the country with good health and pure morals is able to retain those blessings under changed conditions in town. They have not been prepared for it; they have grown up under different surroundings and the new life may not be the best for them.

If these people who remove into town to educate their children could have a good graded school within easy reach of the home farm, offering to their children educational advantages equal to a town school, with well paid, capable teachers, a comfortable, well lighted, sanitary school building, and the enthusiasm of numbers and the inspiration of competition, is it not reasonable to suppose that they would have stayed on the farm and been better satisfied then they are now, having broken up the associations of many years and moved into town? In some parts of Iowa a strong and intelligent effort has been made to bring the country schools to a standard of efficiency equal to the best graded schools of the towns by closing several small schools and uniting the revenues of the districts in which they are located into one good central school to which the children are transported at the expense of the consolidated districts. Where this plan has been given a fair trial under approved methods it has been highly satisfactory. Indeed, the concensus of opinion in the educational work is practically unanimous that this is the only method by which districts which are now supplied only with small schools can be given adequate educational advantages, even for children up to the seventh or eighth grades. The system has been on trial in the east, notably in Massachusetts, Connecticut, Indiana and Ohio, with results highly gratifying to the advocates of the system.

For the purpose of learning to what extent this remedy has been applied in Iowa, what the results are where it has been tried and how a trial of it would be likely to be received by the people where it has been discussed, this department asked the county superintendents of schools to report the situation in their several counties, giving both sides of the question, and especially were they asked to state the effect where experiments had been made. Their reports, which are summarized elsewhere, furnish reliable and quite complete information upon the progress of this forward movement in education in Iowa.

The purpose of this inquiry was to bring out, not merely the favorable side of this problem, but to present also all the objections that have been made to the adoption of the plan of consolidating small schools and transporting the pupils to a central school. In the solution of this problem it is necessary to know all that we have to meet to satisfy the people that it is a wise policy, just as every good lawyer in preparing for a trial tries to put himself on the other side to understand as fully as possible what he must overcome in order to win his cause. We have set forth the objections in detail in every county, no matter how trivial they may be. If the objections are trivial they will be all the more easily overcome. If they have weight, then we should not try to avoid them, but seek to remove the causes for these objections. It will not do to ignore them. The people whose children are affected by this proposed change will not be satisfied with being told by a school-man that it is for their interest and they should not complain. They must be convinced through their own judgment that the plan is right. Those who know most about the new system and who have had experience in its practical operation are very confident that almost any reasonable person would be convinced of its merits if he would take the trouble to inform himself thoroughly concerning it and learn what it has done where it has been given a thorough trial. We hope in this brief study to bring together some practical suggestions and give to both the patrons of the schools who are discussing it and to the school-men of the country something new to think about bearing on this problem.

THE ADVANTAGES.

Briefly summarized, the advantages claimed for the system by the county superintendents, 95 per cent. of whom favor the plan, are as follows:

1. It will secure better teachers.
2. It will reduce the per capita cost of education in the districts affected in nearly every case and without exception after the first cost of buildings, where buildings are required, has been paid.
3. It will insure better classification of pupils, so that both teacher and pupils may spend their time to better advantage.
4. Larger classes will stimulate competition and better effort and greater interest and enthusiasm among the pupils.
5. Supervision will be more thorough and more easily accomplished by the county superintendent and by the principal of the township or central school, where it is large enough to require a principal and assistant teachers. Certainly the county superintendents can give better attention to the schools if their number is reduced.
6. The attendance would be larger, as experience has shown.

7. Greater punctuality would be secured, as the children would all be brought to school before 9 o'clock in the morning.

8. Consolidation would provide better buildings and more apparatus and libraries without additional expense.

9. Longer and more regular terms of school would be the result of uniting the forces of several small districts into one strong central school which could be kept running eight or nine months in a year.

10. The health of the children would be better guarded where they are conveyed from their homes to the schools in comfortable vehicles than where they have to travel through mud or snow for a mile or so to the school, as they often do under the present system.

11. The older children would be kept at home and in school longer than they can be at present, because the central school could provide advanced courses of study under a capable teacher. So the necessity of going to town to school would be put off several years. The course of study would be so arranged as to accommodate these older pupils at such time as they can be spared to attend school. This would tend to keep the boys and girls on the farm instead of encouraging them to leave it and go to the towns. This is one of the main purposes of this system.

12. It will improve the farm surroundings and add attraction to country life by stimulating a desire to know more about the works of nature. Colonel Francis W. Parker has pointed out the wonderful opportunities for elementary education to the child living on a farm.

13. In the central school there would be opportunity for the study of special branches which cannot be offered in the district school because the teacher lacks either the time or the ability to teach them.

14. In short, and to sum up, the opinion of the county superintendents is almost unanimous to the effect that the consolidation of small schools and the transportation of the pupils to a central school at the expense of the district would result in better schools at less or no greater expense.

THE OBJECTIONS.

The disadvantages which the county superintendents report are urged by the people, and by themselves in some cases, against consolidation and transportation, are numerous, and some of them have much force and cannot be successfully met in all cases without radical changes in conditions, and the erection of safeguards. This refers chiefly to the objection of bad roads. The picture presented in the table accompanying this report summarizing the objections to this system is a powerful argument for better roads. In fact, the chief objection brought against the system is the impassable condition of the country roads at certain seasons of the year. In brief the objections pointed out, which are mostly suggested by school patrons, most of whom are imperfectly informed regarding the working of the plan, are as follows:

1. First, and in almost every instance, bad roads.
2. Fear that the expense will be greater than under the present system.
3. That the children are kept too long on the road and too long from home. It is said that children who live farthest from the central school would have to leave home before daylight and would not return until after dark in the winter time. Mothers fear that children will suffer from these long rides.
4. Careless drivers may be employed who will not attend to the comfort of the children, and whose influence upon the children will not be good.
5. The people object to the removal of the little schoolhouse from the neighborhood, since it furnishes in many places the only public meeting house. They say it will break up the Sunday school, the literary society and other neighborhood gatherings. There is a sentiment concerning the little schoolhouse that objects to its obliteration from rural life.
6. Many farmers think that the closing of the school near their farm and the location of a central school several miles away would greatly increase the value of real estate near the central school and reduce the value of the farms farthest removed from it.
7. In some places it is claimed it will take the older boys out of school earlier than if they could attend nearer home where they would have more time nights and mornings to help about the farm.
8. The objection is often made that the children are wanted at home before and after school to help "do chores," and that if they must start early for a distant school and return late they will not be able to render this assistance, and will miss learning much of the practical work of the farm which they should acquire when young.
9. That the evil influences will be much greater in the central school with its large number of pupils of all ages and conditions, because they will not have the close supervision of the teacher which they received in the little district school.
10. That this centralization of schools will remove the school from the people and will be a step away from democracy toward paternalism.
11. That many teachers will be thrown out of employment. It is even suggested by some of the superintendents that some of the little district schools are kept in operation to furnish jobs for relatives and friends of the directors.

12. That the children receive less individual attention in the large school than they receive in the small district school, where the teacher has time to give private instruction to nearly every pupil.
13. That it is doubtful if the graded school is better than the ungraded school.
14. That the children must wear better clothes when they attend the large central school than they would have to wear in the little district, thus adding to the burdens of the parents.
15. That there will be greater danger of spreading contagious diseases where all the children in a township are brought together.
16. That children will suffer from having to carry cold lunches to the central school.

CAREFUL CONSIDERATION.

These objections must receive respectful, careful, and intelligent consideration if we expect the system of consolidation and transportation to be at all successful or generally adopted. Many of them can be easily removed by furnishing information upon what has already been accomplished in consolidation both in Iowa and in other states where it has been longer in vogue. This we have attempted to do in the reports from places in Iowa where it has been tried, and in quotations from reports from other states. Some of the objections, however, cannot be removed by argument, at least in many places. Conditions must be changed before the system can be successfully operated. The details of the plan must be modified to fit the peculiar circumstances of the locality in which it is proposed to introduce it.

If the country roads in Iowa were what they should be, transportation would become quite general in the state. In the spring and fall for a number of weeks every season, especially in the spring, the roads in many sections of the state are well-nigh impassable and it would be out of the question to undertake to make regular trips for any distance over a mile or two, and sometimes that would be equal to traveling ten times the distance under ordinary conditions. Improvement of the roads will therefore be the surest preparation for the transportation of the children in rural districts to better schools.

The superintendents were asked to give their judgment on how far children could be transported with safety to themselves and profit to the district. Their answers are widely different and are of course influenced by local conditions. In rough, hilly country and in places where the roads are especially bad, it is said that a journey of a mile or two is equal to traveling twice the distance where those difficulties do not appear. Under ordinary conditions, with fair roads and in fair weather, the majority think that five or six miles is not too far. But the average distance which it will be safe to undertake is not above three or three and a half miles, and if the routes can be so arranged that the children are not gathered from a distance greater than two miles from the central school, a great many objections now brought by parents against the system will be speedily removed. As the roads improve and the people understand the system better and see its advantages, probably longer routes may be planned, especially where the children to be transported are not the youngest. Many of the superintendents report that mothers hesitate to send their young children so far from home for the entire day when they are not entirely sure what care they will have.

Objection is made to the character of the drivers who are likely to be secured. This is certainly a well-grounded objection, which should receive the most careful attention from boards in making their arrangements for the transportation of children. In some places farmers' wives have acted as drivers and often parents have taken the contract to transport the children. In this connection the form of contract for transportation which has been in successful use in Madison township, Lake county, Ohio, is given herewith. All whose bids are accepted are required to sign a contract by which they agree :

- " 1. To furnish a suitable vehicle with sufficient seating capacity to convey all the pupils properly belonging to their route, and acceptable to the Committee on Transportation.
- " 2. To furnish all necessary robes, blankets, etc., to keep the children comfortable ; and in severe weather the conveyance must be properly heated by oil stoves or soap-stones.
- " 3. To provide a good and reliable team of horses, and a driver who is trustworthy, and who shall have control of all the pupils while under his charge, and shall be responsible for their conduct. Said driver and team shall be acceptable to the said Committee on Transportation.
- " 4. To deliver the pupils at their respective stations not earlier than 8.30 A. M., nor later than 8.50 A. M., and to leave at 4.05 P. M. (sun time).
- " Each contractor shall give bond for the faithful discharge of his contract in the sum of \$100, with sureties approved by the president and clerk of the board.
- " The committee reserves the right to reject any and all bids."

One of the most important details in the system is to secure drivers who can be trusted to take care of the children and see that they are kept comfortable, and that proper discipline is maintained.

The effect of this system upon real estate values is often referred to as one of the objections raised by farmers. Many a farmer reasons like this : " If the little district school near my farm is closed and the children of this neighborhood have to be carried, three or four miles perhaps,

to a central school, the farms near that school will become more valuable and my farm and others around here will depreciate in value. So I would better not consent to this scheme, because if I want to sell my farm I cannot get as much for it as I could if the school were within half mile or a mile." This objection has often the appearance of being reasonable and sometimes unanswerable, but it is really one of the easiest objections to be met. Where the system has been given a thorough trial the land values have not been affected as feared by some of the farmers. On the contrary, the value of all the land in the consolidated district tributary to the central school has been increased in value. It is not the accessibility within walking distance to a poor school that makes a farm valuable, but the accessibility, whatever may be the means of reaching it, to a good school. It is reported in the eastern states where the system has been tried, that now when a farm is advertised for sale it is said that children are transported to a first-class central school, instead of offering as an inducement that the district school is within a mile of the farm. In Winnebago county, near Forest City and Buffalo Center, farms have been sold in the districts where consolidation has been adopted and transportation is furnished and the buyers have been well satisfied to pay an increased price for the land because of the exceptionally good educational advantages offered to the children. In fact, there is no instance on record where, after trying both systems fairly, the farmers preferred the inferior district school to the superior central school, providing the conditions of transportation and the details have been properly attended to.

The demand that the children shall be at home before and after school to do chores is an objection hard to meet. If parents desire to bring up their children to "do chores" to the neglect of their education, there is little use in appealing to them for better educational advantages for these children. Many farmers in Iowa send their children to towns to school on Monday morning and go after them Friday night. Thousands of children in Iowa are receiving their education in this way. Would it not be better if these children could leave home, let us say in some instances even as early as 7.30 in the morning, and not return until 5.30 in the evening, and be at home under the care of their parents and enjoying the home life? This is under the supposition that the children live at the extreme end of the route to the central school. If the central school was as good as the school in the town which these children now attend, would not the children and the parents both be better satisfied? In this connection it is suggested that the drive to school should begin at the point farthest from the central school. Much of the success of the system depends upon the arrangement of the routes.

With many patrons, and taxpayers who are not patrons, the question of expense is the first consideration, and many of them think that the cost of keeping up the consolidated schools will be greater than that of maintaining the little district schools. In one county it is reported that the directors think it is cheaper. In one county it is reported that "in small districts teachers receive a small salary for six or seven months. Patrons claim that this is cheaper and more convenient than to have pupils transported." In this county, where ninety-seven different persons were licensed in 1900, twenty-five had no experience and thirty-five more had taught less than one year. The number of third grade certificates issued was 136, and the number of first grade certificates issued was three. So the third grade teachers were licensed again and again, though unable to improve in grade. Notwithstanding the fact that in the county referred to is a large city with an excellent system of graded schools, the average monthly salary paid to the women teachers in that county is \$28.01. Comment is scarcely necessary. If the people are content to put up with cheap teachers six or seven months in the year it is probably "cheaper" than to have good schools.

We believe that the prevailing sentiment in Iowa is that we can afford to have the best; that we want the best, even if it costs more. In Sioux county the superintendent reports that "rich farm lands, prosperity and the young, inexperienced teaching force will hasten the elimination of the small, weak districts. Men of easy means are complaining of the meagre school advantages, and, since consolidation means a step toward graded schools, these men, who can and are willing to pay for better school advantages, will become real soldiers in the march of educational progress."

GENERAL VERDICT.

Several other superintendents reported, and this is the general verdict: Where the people can be satisfied that they are getting their money's worth, that the educational advantages are to be improved and their children given better opportunities for securing an education near home, they will not hesitate, even if the expense is greater. Those who have given this subject the most study have complete faith in their ability to overcome this objection with all reasonable persons by showing them the numerous benefits which their children will derive from the better schools that will be provided for them by consolidation and transportation.

But it is by no means conceded that consolidation and transportation mean increased expense, although in some instances when the system is first adopted, and while the initiatory expenses are being paid, it may be somewhat increased. There is no doubt whatever that under ordinary conditions it costs much less to operate schools under this system than it does the small, scattered, inferior district schools. Experience has proved this. The cost of tuition per capita per year has been greatly reduced in many cases and in almost every instance the number of weeks of

school has been increased. Reference is made to the reports from other states and to the reports from Iowa counties, notably from Winnebago, Pottawattomie, Black Hawk, Dickinson, O'Brien, Hancock, Wapello, and others, to substantiate this statement.

The objection to the removal of the schoolhouse from the neighborhood is one that will have to be given local consideration. Churches are now being built all through the rural communities of this state for the accommodation of the people for various kinds of public meetings, as well as for the use of the particular church organization which may own the building. These buildings are built by subscription from people of all denominations. They are for the common use of the community. If it is agreed that consolidation is a good plan the sentiment concerning the little schoolhouse ought not to interfere with it. Most of these buildings have but small value, and a district could afford to keep them in repair for meeting places if need be or the people could do it themselves, if they had no other meeting place and thought it worth while to keep up the school building for this purpose. It is not likely, however, that people will be willing to go as far as the children and use the central school building for these purposes? These, however, are minor considerations which will not control if the chief objections are removed.

The claim that consolidation and transportation will take the older boys out of school sooner than if they could attend the little district school may have some foundation in some cases. Here again we come to the question of whether parents want their children to have the best education possible for them to obtain, or not. If they do, the boys will not be kept out of school to "do chores," not even if they have to go away from home altogether to obtain adequate educational advantages. Boys and girls of this class, who want to get an education and whose parents are ambitious for them to secure it, will be greatly benefited by the central school. They will be able to secure at home what otherwise they would have to get at the trouble and discomfort of leaving home entirely, at least for five days in the week. There may be isolated cases where the boys on the farm are obliged to be at home to work about the farm mornings and evenings, but the boy who wants to get an education will not be balked by this. He will get up a little earlier, perhaps. But these are the extreme exceptions and no system can be made to fit the exceptions to the disadvantage of the vast majority. Children who are so unfortunate as to have parents who think more of their "doing chores" than of securing an education will perhaps suffer some disadvantage from this system, but in Iowa such children, it is to be hoped, are exceedingly rare. Here again we see the disadvantage of long routes. We are convinced that in the introduction of consolidation and transportation in Iowa the routes should be as short as possible. It will be easier to get the system adopted in this way and it will be much more satisfactory to the patrons.

Some guarantee must be given to anxious parents who fear that the moral influences surrounding their children in the central school will not be good. They say that where a large number of children, old and young, with good and bad impulses, are brought together and spend the long noon intermission together without restraint, many of the children will learn things which it is better for them not to know and will be subject to the evil influences and bad companionships which they would largely escape in the little district school. This objection must not be overlooked, because there is some reason for it. Sometimes the reply to this complaint is that the children must go out into the world some time and they may as well prepare for it one time as another. But this will not answer it. Many private schools are maintained solely because parents hesitate to subject their children to influences which go contrary to the pure atmosphere of the home. They think it is better for the child to arrive at a little riper age before he is subjected to these things and that he has time enough to learn them without taking the risks of meeting with all the temptations of life in his childhood. Therefore, it is highly important that safeguards shall be thrown around the children in the central school and on the way to and from the school. The teacher should know what is going on during the noon hour. Some supervision must be had to protect the children from the evil influences of the occasional bad boy or girl.

Children have been carrying lunches to school for ages and have come out of it pretty well and with good health. A large majority of the children who attend the district schools to-day carry lunches and no serious complaint is made about it. This objection is not of much consequence.

That the centralization of schools will remove the school from the people and will be a step away from democracy toward paternalism is a sentiment which probably does not prevail to any large extent, although it is mentioned by several county superintendents. A good many sub-directors now controlling district schools and using the patronage thereof for their own personal benefit will doubtless see the force of this objection, but the people will not feel it. Very few people will care who runs the school as long as it is a good school and the taxation to support it is not excessive. People will have the same voice in the election of the directors and the school will not be removed from their control.

It is earnestly to be hoped that all poor teachers will be thrown out of employment. That is one of the main objects of consolidation and transportation, and it should be clearly understood. The incompetent teacher must go and it is to be hoped that she will go by the thousands. From one or two counties this objection is heard. In one of those counties about half the teachers had taught less than one year.

Sometimes it is said that we ought "to stand up for the country school" which has turned out so many good men and women, without criticizing it. Occasionally it seems that some one thinks the effort to raise the standard of rural schools is in some way a reproach upon rural life. These are two great mistakes. Concerning the first, it may be said that no amount of assertion that he is well will cure a sick man, if he is really sick. The true physician tries to learn what is wrong and apply the proper remedy. This is what the advocates of consolidation and transportation are trying to do. And as to rural life, the whole theory of consolidation and transportation is that rural life, the life on the farm, is the ideal life, when the advantages of education, of culture, of society, are added to it. It is the purpose of this system to make life on the farm so attractive that the children will not want to leave it; that the parents will not have to leave it and that the boys may be brought up to love it and carry it on, seeing its great possibilities, instead of running into town to begin the struggle to enter a crowded profession, or to go into a business that will not yield them the financial returns or the health and happiness that are to be had on the farm.

STATISTICAL TABLES.

Reprinted from the Education Report for the year 1901, to facilitate the study of the development of our Educational System.

SCHOOL SECTION ASSESSMENT.

COUNTY.	Sections having Schools.	Valuation of property in sections.	Valuation of Average section.	Average assessment in each section.	Rate per \$100				
					1901.	1900.	1899.	1898.	1897.
Guysboro	69	\$ 961,778	\$ 13,969	\$ 224	\$1.60	\$2.14	\$1.45	\$1.82	\$1.83
Richmond	63	627,307	9,958	125	1.25	1.19	1.18	1.18	1.02
Victoria	60	504,000	8,400	103	1.22	1.19	1.31	1.39	1.03
Inverness	128	1,208,494	9,441	85	.90	.98	.97	.99	.95
Shelburne	63	1,445,606	22,946	202	.88	.87	.83	.83	.82
Pictou	126	4,857,249	38,550	302	.78	1.05	.78	1.05	.67
Digby	78	2,136,543	27,392	210	.77	.76	.61	.62	.71
Halifax County	127	3,932,476	30,964	228	.74	.74	.73	.74	.77
Hants	96	4,148,186	43,210	300	.69	.65	.65	.57	.47
Queens	45	1,177,114	26,158	151	.58	.45	.44	.50	.73
Cumberland	146	6,479,006	44,377	246	.56	.49	.55	.49	.60
Lunenburg	147	4,437,748	30,189	164	.54	.63	.44	.55	.51
Halifax City	1	21,169,180	.....	111,700	.53	.54	.40	.44	.45
Colchester	119	5,160,996	43,370	226	.52	.41	.52	.54	.53
Cape Breton	96	6,552,517	68,255	331	.49	.97	1.27	.89	.97
Annapolis	98	4,072,793	41,559	197	.47	.47	.43	.42	.43
Antigonish	70	1,737,611	24,823	117	.47	.42	.41	.44	.44
Kings	100	4,949,882	49,499	227	.46	.43	.44	.36	.36
Yarmouth	71	6,467,667	91,094	333	.42	.43	.44	.55	.40
Nova Scotia	1703	82,026,153	48,166	276	.57	.63	.55	.57	.55
Nova Scotia without Halifax City	1702	60,856,973	35,756	211	.59	.66	.61	.68	.60

HISTORICAL AND COMPARATIVE STATISTICS.

The historical and comparative statistics given in the following tabulations are of general interest, and explain themselves without the aid of comment:

CONSPECTUS OF PUBLIC SCHOOL STATISTICS.

(A) BEFORE THE FREE SCHOOL SYSTEM.

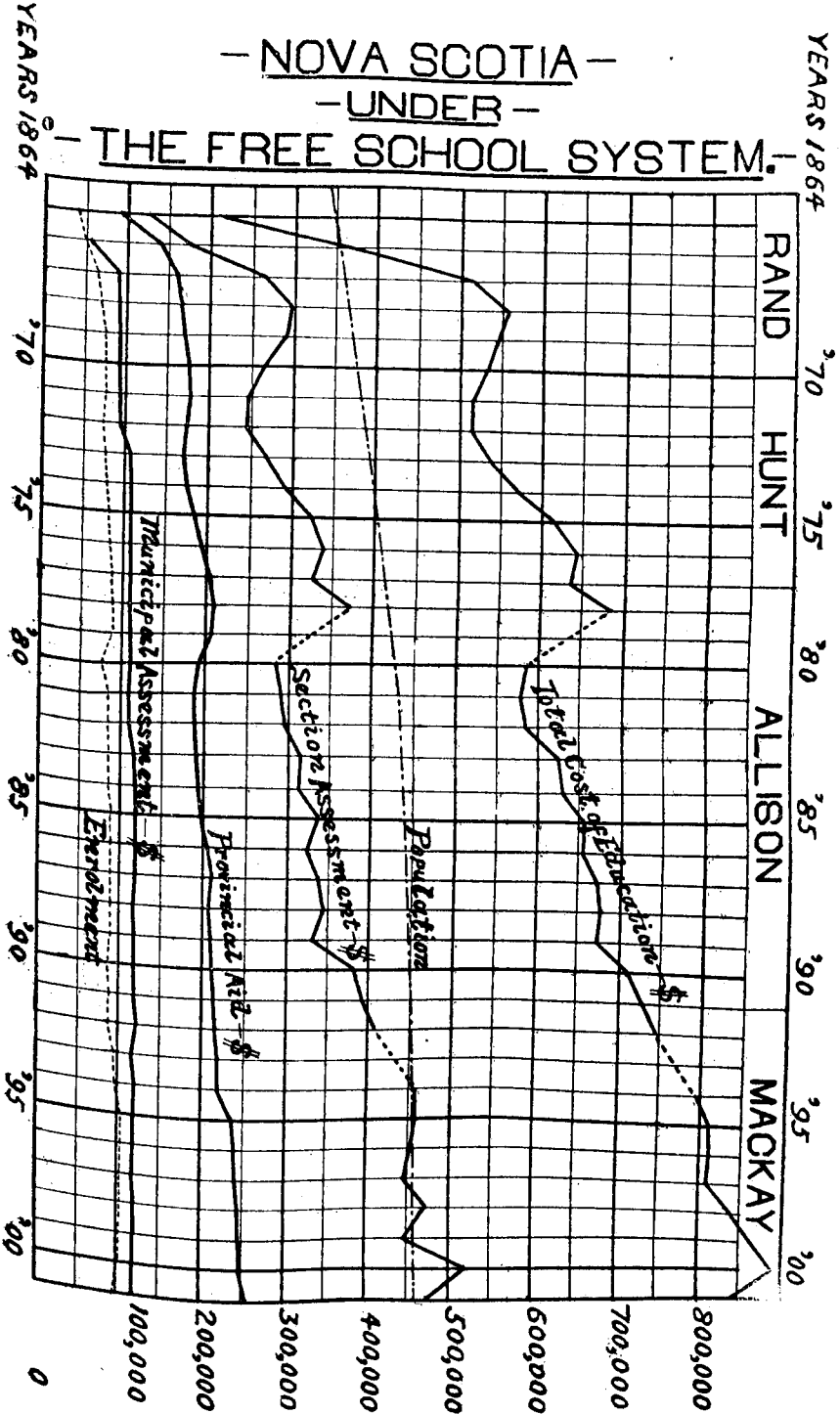
YEAR.	Average No. of Teachers, Winter and Summer.	Average No. of Pupils enrolled, Winter and Summer.	Local Funds, \$4 = £1.	Provincial Grants, \$4 = £1.	Total Cost of Schools.	Annual Cost per Pupil "enrolled."	REMARKS.
1820	.....	.....	.....	.....	\$ 34,720	.....	Common Schools only.
4	217	5,514	.....	.....	.....	.....
8	.....	6,639	.....	.....	.....	.....
9	.....	12,000	.....	.....	.....	.....
1831	375	12,941	\$ 48,792	.....	.....	.....
2	423	11,771	31,367	\$ 7,338	38,705	\$3 29	
3	457	13,161	57,602	16,628	74,230	5 64	
4	444	12,573	37,468	17,865	55,333	4 40	
5	530	15,292	49,813	27,323	77,136	5 04	
6	550	16,000	60,000	28,000	78,000	4 88	
1841	648	20,910	.....	.....	.....	.....	Common and High Schools.
2	854	29,382	83,973	36,112	120,095	4 09	
3	939	29,723	92,272	34,396	126,668	4 26	
4	935	30,979	88,190	36,255	124,445	4 02	
6	1001	33,960	79,828	37,712	117,540	3 46	
7	1041	34,729	93,172	43,394	136,566	3 93	
1850	896	25,328	100,556	42,368	142,924	5 64		J. W. Dawson.
1	878	20,579	93,611	42,675	136,286	4 61	"
2	967	32,762	107,107	47,982	155,389	4 74	"
.....
4	907	31,010	103,608	46,642	150,250	4 85	M. & R.
.....
6	.....	31,307	104,047	42,355	146,402	4 68	A. Forrester.
7	1002	34,356	128,222	53,519	181,741	5 29	"
8	1127	33,742	129,672	53,319	182,991	5 42	"
9	1061	35,581	135,041	46,891	181,932	5 11	"
1860	1059	35,293	121,873	45,742	167,615	4 75	"
1	1043	33,652	129,775	46,833	176,608	5 25	"
2	1092	36,087	129,999	47,888	177,887	4 93	"
3	1072	37,483	130,664	45,472	176,136	4 70	"
4	1112	35,405	115,226	47,930	163,156	4 61	T. H. Rand.

(B). UNDER THE FREE SCHOOL SYSTEM.

YEARS.	Av. No. Teachers, W. and S. Terms.*	Average enrollment of Winter and Summer Terms.*	Daily present on an average.	Av. % of enrollments in Daily Attendance	School Section Assessments.	County Assessments.	Provincial Grants.	Total cost of Public Education.	Annual cost per Pupil in Daily Attendance.	Remarks.
1865	916	39,461	23,572	60.0	\$ 124,673	.....	\$ 93,263	\$ 217,936	9.25	Rand.
6	1059	50,574	29,239	57.8	176,252	\$ 55,462	136,821	368,535	12.60	
7	1310	65,896	36,943	56.1	262,913	91,477	162,000	516,390	13.98	
8	1390	68,612	39,781	58.2	298,659	91,958	164,750	555,367	13.98	
9	1515	74,139	43,078	58.1	286,754	91,760	167,387	545,901	12.67	
1870	1569	75,279	42,177	56.0	266,160	91,762	174,602	532,524	12.62	Hunt.
1	1620	75,995	43,612	57.4	247,209	91,762	176,174	515,145	11.81	
2	1592	73,638	40,806	55.4	245,759	95,461	171,395	512,615	12.56	
3	1624	74,297	41,392	55.3	265,274	105,029	165,562	535,865	12.94	
4	1658	76,277	44,143	56.0	287,349	107,801	175,013	569,663	12.90	
5	1775	79,123	44,229	56.3	320,130	107,396	185,565	613,091	13.86	
6	1810	79,813	45,373	56.3	338,838	106,781	194,605	640,224	14.11	
7	1838	82,364	46,690	56.8	324,550	106,833	204,266	635,649	13.61	Allison.
8	1954	82,846	48,951	59.0	368,282	106,920	208,115	683,317	13.96	
9	1935	82,998	45,857	55.4	.....	107,181	205,575	.....	.....
1880	1809	76,393	42,580	55.7	281,561	107,181	196,217	584,959	13.74	Semi-Annual Terms.
1	1881	78,828	43,461	55.1	286,086	106,695	185,519	578,500	13.31	
2	1932	79,042	43,746	55.3	290,564	106,949	184,627	582,140	13.31	
3	1961	80,477	45,650	56.7	316,477	120,340	186,088	622,905	13.65	
4	2014	82,153	47,280	57.5	314,172	120,345	191,124	626,641	13.23	
5	2054	84,025	48,398	57.8	384,044	120,328	199,188	653,560	13.50	
6	2111	85,714	51,142	59.6	321,954	120,377	209,834	652,165	12.75	
7	2143	85,474	50,055	58.5	337,216	119,047	216,085	672,348	13.43	
9	2153	84,534	48,707	57.6	346,314	118,485	211,196	675,995	13.88	
9	2182	84,429	50,038	59.2	341,716	118,281	212,922	672,919	13.45	
1890	2214	85,482	49,620	58.0	377,529	118,349	213,434	709,312	14.29	
1	2229	83,548	49,347	59.0	393,077	118,301	213,906	725,284	14.69	MacKay
2	2268	85,077	50,975	59.8	410,017	120,127	216,430	746,574	14.65	
3	2319	94,899	50,103	52.8	413,448	89,623	166,040	669,111	13.35	($\frac{3}{4}$ year)*
4	2351	98,710	51,152	51.8	454,200	120,507	220,436	795,143	15.54	
5	2399	100,555	54,006	53.7	463,144	119,900	238,760	811,804	15.03	
6	2438	101,032	54,015	53.4	450,972	120,018	242,345	813,335	15.05	
7	2485	100,847	54,922	54.4	448,263	119,602	242,811	810,676	14.76	
8	2510	101,203	57,771	57.1	473,104	119,869	245,837	838,810	14.52	
9	2494	100,617	55,919	55.5	447,906	120,032	246,462	814,450	14.56	
1900	2557	100,129	56,224	56.1	519,620	119,923	248,309	887,852	15.79	
1	2492	98,410	53,643	54.5	470,108	119,876	254,778	844,762	15.75	Annual Term.

*In 1883 the transition was made from the school year of two terms ending on the 31st October to the school year of one term ending on the 31st July. This school year, therefore, consisted of the nine calendar months from the 1st of November to the 31st of July 1893. From this date the second column of the table above gives the "No. of Teachers during the year," and the third column gives the "Annual Enrolment."

- NOVA SCOTIA -
- UNDER -
- THE FREE SCHOOL SYSTEM. -



SCHOOL EXPENDITURES PER CAPITA OF "AVERAGE ATTENDANCE"
IN THE UNITED STATES OF AMERICA AND NOVA SCOTIA FOR
THE SCHOOL YEARS ENDED AS FOLLOWS :

YEAR.	The United States.	North Atlantic States.	South Atlantic States.	South Central States.	North Central States.	Western States.	Nova Scotia.
1871.....	\$15 20	\$18 31	\$10 27	\$9 06	\$14 87	\$21 87	\$11 81
1872.....	15 93	18 86	10 46	9 08	16 36	23 57	12 56
1873.....	16 06	19 89	9 25	8 39	16 53	25 04	12 94
1874.....	15 85	19 89	9 01	7 55	16 57	24 36	12 90
1875.....	15 91	20 17	8 98	7 51	16 69	26 85	13 86
1876.....	15 70	19 14	8 65	6 70	16 91	26 35	14 11
1877.....	14 64	17 89	7 68	6 25	15 93	24 69	13 61
1878.....	13 67	16 55	7 21	5 98	15 08	25 82	13 96
1879.....	12 97	16 05	6 76	5 65	14 22	23 39	.....
1880.....	12 71	15 64	6 60	5 40	14 39	22 59	13 74
1881.....	13 61	17 14	7 22	5 72	15 19	23 81	13 36
1882.....	14 05	17 35	7 63	6 25	15 79	24 32	13 31
1883.....	14 55	18 17	7 46	6 17	16 69	25 39	13 65
1884.....	14 63	18 37	7 44	6 26	16 90	24 69	13 23
1885.....	15 12	19 19	7 32	6 74	17 53	26 31	13 50
1886.....	15 06	19 11	7 33	6 93	17 45	25 52	12 75
1887.....	15 07	19 38	7 33	6 88	17 45	24 85	13 43
1888.....	15 71	20 60	7 61	6 60	18 29	27 38	13 88
1889.....	16 55	21 64	7 77	7 12	19 30	29 37	13 45
1890.....	17 23	23 58	7 78	7 28	19 70	30 57	14 29
1891.....	17 54	23 66	8 52	7 78	19 42	33 42	14 69
1892.....	18 20	24 89	8 74	7 82	20 13	33 55	14 65
1893.....	18 58	25 91	8 65	7 72	20 62	33 57	*13 35
1894.....	18 62	26 21	8 61	7 58	21 29	29 06	15 54
1895.....	18 41	26 84	8 58	7 69	20 26	27 32	15 03
1896.....	18 76	28 45	8 87	7 60	20 09	27 16	15 05
1897.....	18 67	28 77	9 32	7 09	19 75	25 86	14 76
1898.....	18 76	29 34	8 97	7 09	19 47	28 29	14 52
1899.....	18 99	29 11	9 79	6 92	20 32	26 52	14 56
1900.....	20 29	31 72	10 68	7 34	20 85	30 44	15 79

* Three-fourths of a year.

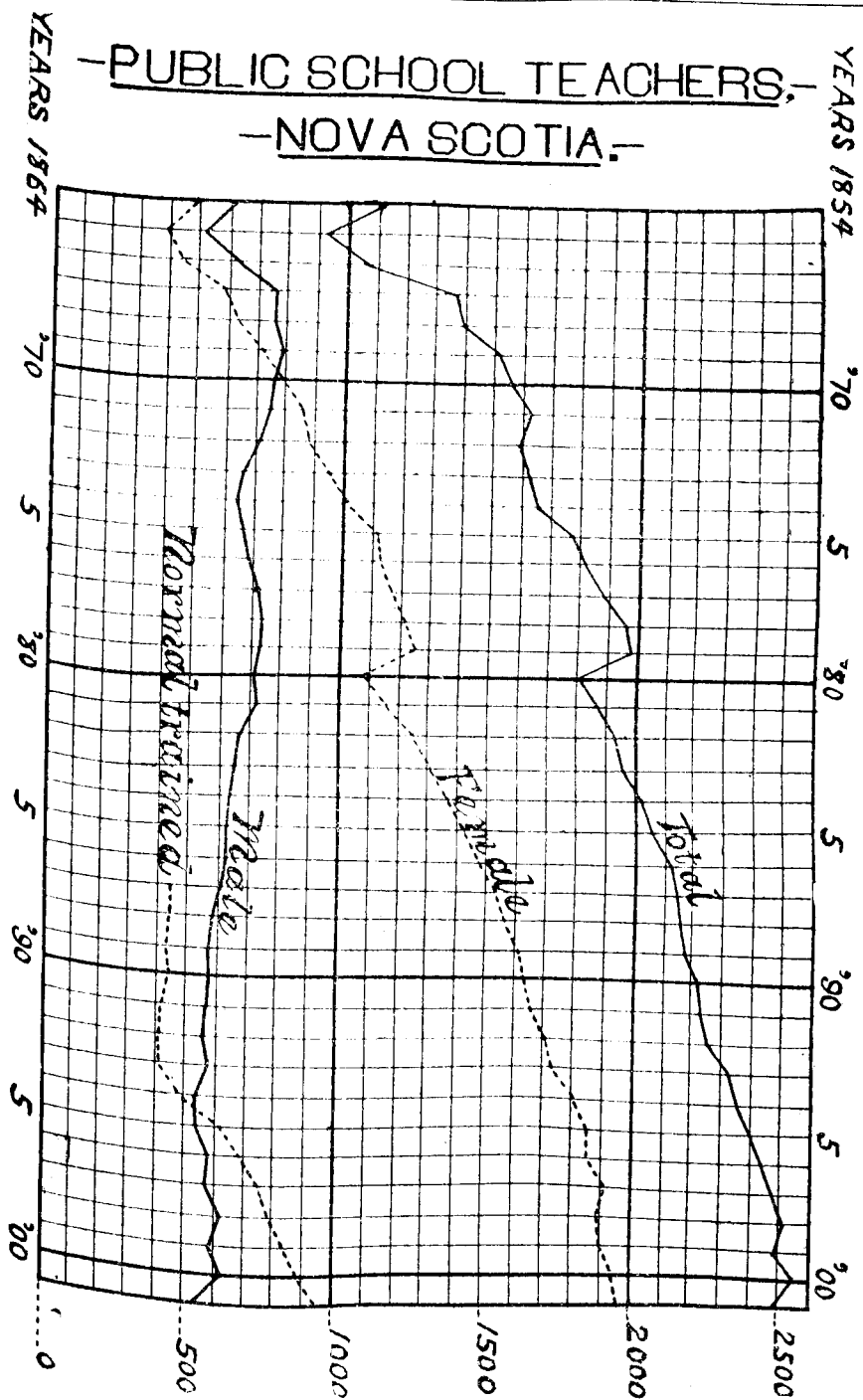
EXPENDITURE "PER PUPIL IN AVERAGE ATTENDANCE" IN EACH STATE OF U. S. A. AND IN NOVA SCOTIA, FOR THE YEAR 1900
—ARRANGED IN ORDER OF AMOUNTS.

Nevada	\$47 81	West Virginia.....	\$21 27
New York.....	38 97	Utah.....	21 21
Colorado	38 12	Indiana	19 28
Massachusetts	37 76	Michigan	18 68
Montana.....	35 44	Idaho	18 22
California	35 00	Wisconsin	17 73
District of Columbia.....	34 63	Kansas	17 66
Rhode Island.....	34 09	Maine	17 53
North Dakota.....	33 08	Missouri	16 99
New Jersey.....	30 26	NOVA SCOTIA.....	15 79
Arizona	29 45	New Mexico	15 31
Connecticut	28 58	Delaware	13 99
Washington	27 98	Texas	11 35
Pennsylvania	25 12	Oklahoma	10 77
Wyoming.....	24 95	Florida	10 21
Oregon	24 75	Virginia	9 70
Nebraska	24 22	Kentucky.....	8 58
Illinois	24 07	Louisiana	7 76
South Dakota	23 51	Arkansas	7 01
Minnesota	23 15	Georgia	6 64
Vermont.....	22 85	Mississippi.....	6 48
New Hampshire	22 02	Tennessee.....	5 17
Maryland	21 95	South Carolina	4 44
Iowa	21 89	North Carolina	4 34
Ohio	21 63	Alabama.....	3 10

TEACHERS EMPLOYED IN NOVA SCOTIA.

YEAR.	MALE.	FEMALE.	TOTAL.	NORMAL TRAINED.
1864	615	498	1113	
1865	520	377	917	
1866	618	442	1060	
1867	761	599	1360	
1868	763	627	1390	
1869	798	717	1515	
1870	767	798	1565	
1871	754	866	1620	
1872	704	889	1593	
1873	665	959	1624	
1874	647	1010	1657	
1875	672	1103	1775	
1876	687	1124	1811	
1877	717	1171	1888	
1878	740	1214	1954	
1879	735	1251	1986	
1880	720	1089	1809	
1881	724	1157	1881	
1882	677	1256	1933	
1883	656	1305	1961	
1884	635	1379	2014	
1885	631	1424	2055	
1886	627	1484	2113	
1887	605	1539	2144	445
1888	586	1568	2154	444
1889	577	1605	2182	426
1890	580	1635	2215	433
1891	574	1656	2230	416
1892	565	1703	2268	408
1893	582	1737	2319	408
1894	541	1810	2351	499
1895	540	1859	2399	616
1896	582	1856	2438	690
1897	576	1909	2485	752
1898	614	1896	2510	798
1899	594	1900	2494	840
1900	616	1941	2557	887
1901	540	1952	2492	947

-PUBLIC SCHOOL TEACHERS,-
-NOVA SCOTIA.-

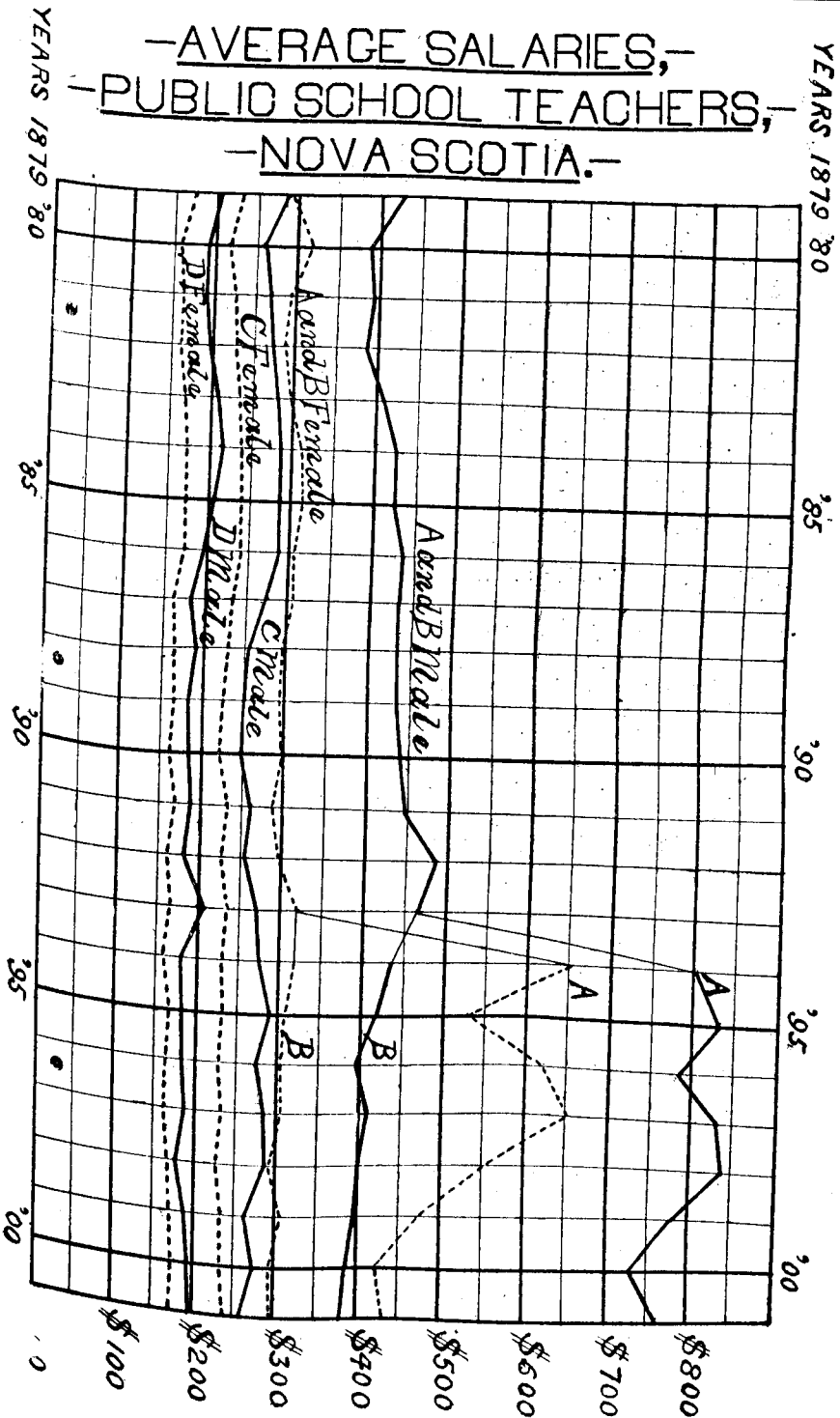


AVERAGE SALARIES OF TEACHERS.

YEAR.	A AND B (M)		A AND B (F)		C (M)	C (F)	D (M)	D (F)
1890..	\$425		\$293		\$290	\$232	\$204	\$174
1870..	393		319		262	218	194	157
1881..	397		294		267	224	193	160
1882..	389		289		272	226	198	159
1883..	409		298		279	231	206	165
1884..	423		311		287	236	212	169
1885..	422		312		287	237	205	170
1886..	439		304		288	237	199	170
1887..	438		305		274	231	183	162
1888..	438		298		254	228	190	161
1889..	438		297		250	223	182	161
1890..	440		299		249	221	182	158
1891..	449		286		261	233	186	164
1892..	489		296		255	224	180	158
*1893..	348		240		205	178	152	122
	A (M)	B (M)	A (F)	B (F)				
1894..	\$802	\$438	\$653	\$319	276	228	181	157
1895..	838	419	534	310	288	232	182	163
1896..	789	398	622	302	275	227	182	161
1897..	836	406	651	303	284	228	184	162
1898..	841	400	553	291	287	226	179	164
1899..	781	399	477	308	261	231	188	166
1900..	733	392	423	293	272	231	190	166
1901..	763	384	433	294	258	234	193	165

*Three-quarter year.

-AVERAGE SALARIES,-
-PUBLIC SCHOOL TEACHERS,-
-NOVA SCOTIA.-



	Year.	No Examined.	No. Passed.	No. Examined on Professional subjects each year.
FOR LICENSES.	1877.....	2058	554	2058
	1878.....	2003	101	2003
	1879.....	1026	210	1026
	1880.....	802	210	802
	1881.....	742	322	742
	1882.....	834	355	834
	1883.....	1027	422	1027
	1884.....	1224	539	1224
	1885.....	1485	614	1485
	1886.....	1548	540	1548
	1887.....	1424	433	1424
	1888.....	1291	468	1291
1889.....	1287	382	1287	
1890.....	1244	452	1244	
1891.....	1334	379	1334	
1892.....	1432	175	1432	
FOR HIGH SCHOOL CERTIFICATES.	1893.....	1506	598	370
	1894.....	1922	760	334
	1895.....	2399	684	399
	1896.....	2517	1313	455
	1897.....	2917	957	550
	1898.....	3304	1229	663
	1899.....	3377	1571	683
	1900.....	3459	1898	588
	1901.....	3470	1529	544

On scholarship and professional subjects combined.

FOR M. P. Q. CERTIFICATES.

On professional and scholarship subjects.

On professional subjects alone.

The Colleges of the Province have an aggregate of:

Professors	57	}	=	89
Lecturers	32			
Male undergraduates in Arts	397*	}	=	497
Female undergraduates in Arts	114			
General students	10			
*Less 24 Students in Theology.				
Male Students in Science	25	}	=	28
Female Students in Science	3			
Male Students in Medicine	82	}	=	93
Female Students in Medicine	11			
Regular Students in Law	32	}	=	47
Partial " " "	15			
Regular Students in Theology	36	}	=	40
Partial " " "	4			
Grand Total Students in the Colleges of Nova Scotia		}	=	686
Total graduates from the Colleges of Nova Scotia to date, according to returns received.....				
		}	=	2625

THE DEGREES CONFERRED IN 1901.

B. A.	75	LL. B.	12	Ph. D.	1
M. A.	19	B. C. L.	4	M. D., C. M.	13
B. Sc.	4	D. C. L.	3	B. D.	2
D. D.	7				
Total 140.					

A NATURE-STUDY EXHIBITION.

At the Gardens of the Royal Botanic Society, Regent's Park, London, on Wednesday, the 23rd of July next, will be held a great Nature-Study exhibition, under the patronage of the leading nobility of Great Britain, assisted by the leading educationists from every quarter of the Empire.

As the Province of Nova Scotia is expected to contribute its quota, and as it is important that our teachers who are yet out of touch with the new trend of educational thought should have some idea of the importance attached to a portion of our course of study which has been so misunderstood and neglected, by none, perhaps, so ostensibly as those assumed to be educated on the good old lines, the outline of the exhibit as published in the circular is presented below.

It is too late for us to do much at this date; but some of the lighter and more easily transmissible exhibits which may be extemporized might be sent on. The Hon. Secretary is JOHN C. MEDD, Stratton, near Cirencester, England.

The exhibition will include the following groups:—

Group A—Exhibits from agricultural and horticultural colleges and schools, experimental farms, and agricultural departments of universities and university colleges.

Group B—Exhibits from secondary schools (public and private).

Group C—Exhibits from primary day schools, including higher elementary and higher grade schools (public and private).

Group D—Exhibits from continuation schools.

Group E—Exhibits from normal training colleges, and day training departments of university colleges and pupil teachers' schools.

Group F—Exhibits from schools for the deaf and blind.

Group G—Exhibits from (a) home office schools and (b) workhouse schools.

Group H—Exhibits from horticultural and other societies as well as individuals that encourage Nature-Study or Nature-Lore as a subject of education.

Group I—Exhibits from the colonies of Great Britain and from the United States.

Each group may include any or all of the following classes of exhibits, for which certificates of merit or medals will be offered:—

CLASS 1. STATISTICAL INFORMATION.—Printed reports, documents and leaflets bearing upon Nature-Study, Natural Science and Natural History Object Lessons, School Gardens, School Excursions and School Rambles. Catalogues of books suitable for the Nature-Study, Natural Science, or Natural History section of a school library.

CLASS 2. PICTORIAL ILLUSTRATIONS.—Plans and photographs of school gardens, photographs of scholars at work in Gardens, or in School Excursions and Nature-Study Walks, of Scholars in the class-room during Natural Science and Natural History lessons, of scholars using microscopes and other instruments, of school aquariums, insect breeding cases and terrariums, and of school museums for Natural History.

CLASS 3. ORGANISATION.—Schemes of Nature-Study or Nature-Lore instruction, particulars of holiday and other classes in any branch of Nature-Study, organized by county councils and other bodies, and time tables shewing the periods allotted to subjects bearing on Nature-Study.

CLASS 4. APPARATUS FOR TEACHING.—Diagrams, apparatus, models in clay, plaster, wax, or plasticine, series of specimens and collections to illustrate Nature-Study teaching in the Kindergarten and in schools for older scholars. Maps of particular districts, with a school as centre, showing places of interest for purposes of Nature-Study.

CLASS 5. WORK DONE BY PUPILS.—[In urban as well as rural schools.]—Drawings, models, paintings of Natural History subjects, pupils' note books, drawing books, exercise books in connection with Nature-Study and school excursions, diagrams and collections of injurious insects and injurious plants, Natural History calendars, weather charts, observations of migratory birds, manual work (rural carpentry and the like), nesting boxes for wild birds, etc., etc.

Schools and colleges in any of the above groups are at liberty to send collective exhibits of the results of their practical instruction in horticulture or gardening, if illustrative of their exhibits in any of the above classes. Provision for these will be made in connection with the exhibition.

Certificates of merit will be awarded by the committee for any home-made apparatus suitable for instruction in subjects included under Nature-Study, which is considered deserving, and which is the *bona fide* work of a teacher at any school or college (public or private), or

of a student or pupil teacher at any Normal college or school. Rough and ready apparatus that can readily be adapted to teaching will receive due recognition.

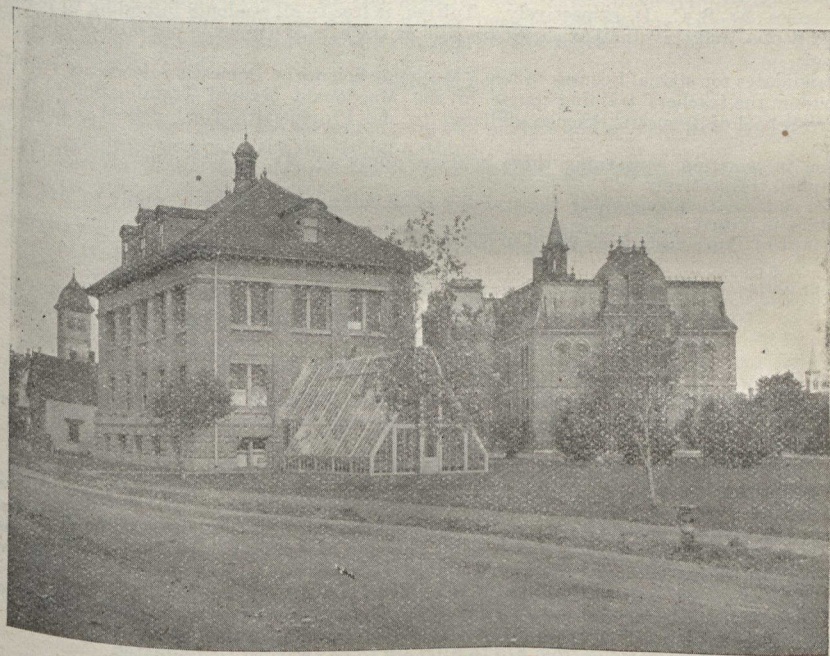
Certificates will further be awarded for the best descriptive account of how to organize a school museum, with the view of making it the centre of the Nature-Study of the school, and illustrative of the natural history of the district, and also for school museums exhibited in part or entire

Exhibits will be received free of charge from patrons, donors and subscribers, and from all members of the Nature-Study Exhibition Association.

Arrangements will be made during the exhibition for conferences of teachers and others on the subject of Nature-Study, as well as for the delivery of Model Nature-Knowledge Lessons.

There will also be a Trade Exhibition open to Educational Publishers, Manufacturers of Educational Apparatus, &c, upon terms to be decided by the committee.

As the expenses of the above exhibition will be considerable, additional funds are urgently needed, and offers to contribute prizes in all classes will be gratefully received.



PROVINCIAL NORMAL SCHOOL,
TRURO, N. S.

- DAVID SOLOAN, B. A., *Principal, Principles of Pedagogy, Language, History, German.*
 JOHN B. CALKIN, A. M., *Emeritus Professor of Psychology and Pedagogy.*
 JAMES B. HALL, PH. D., *Psychology, History of Education and Method in Geography.*
 HERMON W. SMITH, B. SC., *(Principal, School of Agriculture), Botany, Biology and Agriculture.*
 OTTIE A. SMITH, *Drawing and Calisthenics.*
 J. ALPHONSE BENOIT, B. A., *Method in Mathematics and Physics, French.*
 EDWARD W. CONNOLLY, B. A., *Hygiene, Physiology, Math. Drawing, Commercial Branches.*
 MINA A. READE, *Elocution and Music.*
 L. C. HARLOW, B. S., B. S. A., *Chemistry, Nature Study.*

AFFILIATED SCHOOLS.

T. B. KIDNER, F. B. I. C., &c., Director of Macdonald Manual Training Fund for Nova Scotia.

F. G. MATTHEWS, Macdonald Manual Training School.

BERTHA GRACE TURNER, Truro School of Domestic Science.

WINIFRED MAGKEAND, Truro School of Domestic Science.

MRS. S. B. PATTERSON, Truro Kindergarten.

Directors of Teaching-practice in the Public Schools:—W. R. CAMPBELL, M. A., and JAMES LITTLE, County Academy, Truro.

Session for Academic (A), First Rank (B), and Third Rank (D), candidates begins Oct. 1st, 1902.

Session for Second Rank (C) candidates begins Feb 4th, 1903.

For Calendar of the School, or for detailed information, apply to the Principal.

The Provincial Normal School is conducted under authority and by direction of the Council of Public Instruction, for the purpose of training young men and women to teach in the public schools. It is the recognised source of teachers' certificates of professional qualification, holders of high school certificates of grades XII, XI, X, IX, being required to procure the diploma of the Prov. Normal School before they can be awarded licenses of classes A, B, C, D, respectively. Tuition is free to all students intending to teach in Nova Scotia, and travelling expenses are paid at the rate of five cents per mile coming and going.

Candidates for special licenses to teach Mechanic Science or Domestic Science are required to pursue the teachers' training course in the Macdonald Manual Training School or the Truro School of Domestic Science affiliated to the Provincial Normal School. Tuition is free.

For information concerning these courses, apply to Mr. T. B. Kidner, or Mr. W. R. Campbell, respectively.

For information concerning the training of Kindergarten teachers, apply to Mrs. S. B. Patterson, Truro.

Board in Truro costs from \$2 75 to \$3.00 per week.

THE PROVINCIAL SCHOOL OF AGRICULTURE, TRURO, N. S.

(IN AFFILIATION WITH THE PROVINCIAL NORMAL SCHOOL.)

H. W. SMITH, B.S., *Principal and Professor of the Biological Sciences.*

F. L. FULLER, *Manager of the Provincial Experimental Farm, Demonstrator in Dairying and Animal Husbandry.*

L. C. HARLOW, B. S., B. S. A., *Professor of Chemistry.*

J. M. SWAINE, *Horticulturist and Instructor in Entomology.*

The classes of the Prov. Normal School and the Macdonald Manual Training School are open to all students in attendance at the School of Agriculture. Provision is made for those who desire to become teachers as well as for students who expect to become farmers. Any student desiring to obtain experience in practical farming as well as in theory will be given employment on the Experimental Farm and will be paid for services rendered.

Licensed teachers who graduate from this school are entitled to an extra government grant of \$30, \$60, or \$90 per year, according to the character of their school work.

Three fellowships varying from \$75 to \$100 are to be awarded to graduates.

The laboratory work, green-house study, and class work will be conducted mainly in the Science building of the Prov. Normal School, one of the best equipped buildings for science study in Canada. No detail is wanting to complete the facilities for individual work. Each student will be provided with microscope and accessories, working table, aquaria, green-house plot, etc., in the biological rooms; and with water-tap, sink, trough, gas jet, balances, steam cup for evaporating, chemical apparatus and chemicals, in the chemistry rooms. A special chemical laboratory is provided for advanced work. At the Experimental Farm there are to be seen in operation an improved modern dairy as complete as any in Canada, the machinery of the dairy and the milk testing apparatus being driven by steam power; the latest improvements in incubation, poultry raising, etc., and the farm processes in field and barn. The dairy building contains a comfortable lecture-room for class work. The live stock of the farm is well selected and worthy of inspection, and the housing and care of stock and crop are after the most approved methods.

The winter session of the school begins on Jan 8th, 1902, and continues to the end of March.

The summer session lasts from April to December, inclusive.

Students may be admitted also on the first Monday of June, September, or November, or on the second and third Mondays of July.

☛ A SPECIAL SUMMER COURSE FOR TEACHERS WILL BE CONDUCTED DURING JULY AND AUGUST.

SUMMER COURSE FOR TEACHERS.

Regulation of Council of Public Instruction.

"If a teacher of the class A, B or C who is engaged in a section for the year shall have taken a 'mid-summer vacation' course of at least five full weeks (thirty days) at the Provincial School of Agriculture, and shall have received a certificate of satisfactory deportment and proficiency for the said term, from the Principal, he shall on the written recommendation of the trustees of his school section, be allowed to take one or two weeks of the first 'quarter' of the school year without prejudice to his provincial grant or to the county grant to the section; provided, a memorandum from the Superintendent of Education specifying the facts and approving of the said two certificates is attached to his return at the end of the first 'half year.'"

This course will extend through July and August.

Teachers should enter as early as possible, although they will be admitted up to but not later than four weeks preceding the beginning of the next school year. All the subjects offered in the course for July and August will be open for the teacher to select those best suited to his or her needs, this selection to be approved of by the Principal.

EXPENSES.

Board may be had near the school for from two dollars and seventy-five cents to three dollars and fifty cents per week, including washing.

The cost for books depends upon the subjects studied, and varies from ten to twenty dollars per year.

The student must deposit at least two dollars before beginning any study in which laboratory work is required. At the end of the term, whatever remains, which is not required to cover breakages and chemicals used, will be returned to the student.

Tuition is Free.

For particulars as to the various courses and the times of admission, application may be made to the principal for the calendar of the school.



MACDONALD MANUAL TRAINING SCHOOL FOR NOVA SCOTIA.

(IN AFFILIATION WITH THE PROVINCIAL NORMAL SCHOOL.)

TEACHING STAFF.

Principal:—T. B. KIDNER, First-Class Honors, City and Guilds of London Institute; Fellow of the British Institute of Carpentry; Certified Teacher under the Science and Art Department of Great Britain, Director of Manual Training for Nova Scotia under the Macdonald Fund, and Supervisor of Manual Training (Mechanic Science) Schools for Nova Scotia.

Chief Assistant:—F. G. MATTHEWS, First-class Trained Certificated Master, English Board of Education. First-class Diploma and Certified Teacher under Science and Art Department of Great Britain. First-class Diploma, City and Guilds of London Institute.

Assistant:—G. A. BOATE, Diploma, Special Training Course, Provincial Macdonald School.

This school has been recognized as the official training place for Manual Training Teachers for the Maritime Provinces, under the Regulations already published in the Manual. The examinations of the present course will be held during the latter half of June. The constitution of the examining body is as follows:—

The Director for Nova Scotia of the Macdonald Fund.
 “ “ “ New Brunswick of the Macdonald Fund.
 “ “ “ P. E. Island “ “ “

The faculty of the School, and the following co-opted members:—

Dr. Mackay, Superintendent of Education, Nova Scotia.
 Dr. Inch, “ “ “ New Brunswick.
 Dr. Anderson, “ “ “ P. E. Island.
 Principal Soloan, Provincial Normal School, Nova Scotia.

The proposals of the New Brunswick Education Department just issued will doubtless create a demand there for duly qualified teachers, and several New Brunswick teachers are now taking the training course. In this Province, the rapid increase in the number of schools of Manual Training in Mechanic Science is evidence that they meet a long-felt want of our educational system. Most of the larger towns have taken steps to establish these schools, and next year the demand for qualified instructors will probably be greater than this year.

For the information of Trustees and others desiring it the following list of benches, tools

and appliances is appended. A room about 25x30 feet will accommodate from 18 to 20 boys at one time, and as this room can be used for the ten half days of the school week it will be seen that from 180 to 200 pupils can be accommodated for the weekly legal lesson of 2½ hours duration. The room should be well lighted and provided with good blackboard space for drawing.

MECHANIC SCIENCE SCHOOLS—MINIMUM EQUIPMENT.

For twenty boys ;—

- 20 benches, Pattern as in Macdonald Model School.
- 20 sets of individual tools as follows :—
 - 1 "Bailey" 2 inch Jack plane, wood sole.
 - 1 Back saw, 10 inch (Diston, or other good makers.)
 - 1 small square mallet, hickory.
 - 1 marking gauge, "Stanley," No. 62.
 - 1 whisk.
 - 1 6 inch Try square, "Stanley," No. 12.
 - 1 Drawing kit (board, T square and set squares.)
 - 1 pair compasses.
 - 1 12 inch drawing rule, English, and metric.
 - 1 2 foot 2 fold bench rule, English, and metric.
 - 1 sloyd knife.
 - 1 marking knife.
 - 1 sawing hook.
 - 1 each, tang firmer chisels, ¼ in., ½ in., 1 in. (Ward's, Ibbotson's, Howarth's or other approved first-class makes), handled.

GENERAL TOOLS TO BE USED IN COMMON.

- | | |
|---|---|
| <ul style="list-style-type: none"> 4 Stanley iron smooth planes, 1½ inch. 3 " fore planes, No. 7. 2 " try squares, 12 inch, No. 12. 6 small screw drivers. 2 large " " 6 flat files, 8 inch. 4 half round files, 8 inch. } Handled. 2 round " " 2 saw " 4 inch. } 4 bevels, 10 inch. 4 plain iron braces, 4 inch throw. 4 small nail sets. 8 spoke-shaves, "Stanley," No. 64. 4 12-inch hand screws. 6 Brad-awls, handled, assorted. 12 spare blades for ditto. 2 India oil stones, mounted. 2 " " slips. 4 cabinet scrapers. 2 mortice gauges 4 pairs 5-inch wing dividers. 1 pair pincers. 1 pair cutting pliers. 2 oil cans 5 small hammers. 1 rebate plane, "Stanley," No. 78. 1 set 8 augur bits, 3/16 to 1 inch. 2 each centre bits, ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1½ inches. 6 gimlet bits (or pod bits), assorted. 2 wood countersink bits. 1 metal " " 1 screw driver bit. 2 each handled firmer inside gauges, ½ inch and ¾ inch. | <ul style="list-style-type: none"> 2 each handled firmer outside gauges, ½ in. 1 in., 1½ in. 2 each handled firmer chisels, 1/16 in., ¼ in. 2 each socket mortice chisels, ¼ in., 5/16 in., ⅜ in. 1 hatchet. 1 pad saw. 4 rip saws, 22 inch. 4 crosscut saws, 22 inch. 1 cutting gauge. 1, 3 ft. iron clamp. 2, 6 inch iron clamps. 1 grindstone, mounted on frame. 1 saw vice. 2 bow saws, 12 inch. 2 spare blades for do. 2 bow saws, 8 inch. 2 spare blades for do. 2 block planes, "Stanley," No. 17. 1 carver's clamp. 6 assorted small gimlets. 2 file cards. 1 set trammel points, "Stanley," No. 99. 1, 4 ft. blackboard, T square. 1 large " 45°, set square. 1 " " 60° " " 1 pair " compasses. 1 store closet and case for work, with glass doors above, panelled below, about 6 ft. 6 in. high and 4 ft. 6 in. wide. 1 set of shelves, divided into spaces for the class work. |
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TRURO SCHOOL OF DOMESTIC SCIENCE.

(In affiliation with the Provincial Normal School.)

TEACHING STAFF.

- MISS BERTHA GRACE TURNER, Graduate Boston Normal School of Domestic Science, formerly Truro Public Schools.
 MISS WINNIFRED MAUD MCKEAN, Graduate Boston Normal School of Domestic Science, formerly assistant Montreal School of Domestic Science.

LECTURERS.

- A. HALLIDAY, M. D., Dalhousie Medical College.
 H. V. KENT, M. D. C. M.
 F. S. YORSTON, M. D.
 MISS ANNA YORKE, Director Victoria Order of Nurses.
 W. R. CAMPBELL, M. A., Director of the School, and Provincial Supervisor of Domestic Science.

This school has been recognized by the Council of Public Instruction as the Teachers' Training School for the Province.

The Teachers' Training Course extends from October 1st to end of June, but students who already hold a license of Grade B and have had successful experience in teaching may be admitted later in the year.

For the information of trustees who purpose opening a Department of Domestic Science in connection with their Schools, the following equipment is suggested as being sufficient to meet the requirements of schools. The Room should be not less than 20 ft. x 25 ft., and well lighted.

Tables sufficient for 16 or 20 pupils to work at the same time—size as follows—2 tables each, about 3 ft. x 15 ft. over top, or about 4 to 5 sq. ft. of table for each pupil.

- | | |
|---|---|
| 1 closet about 5 ft. long x 7 ft. high x 1½ ft. deep, glass doors above, drawers below. | } 1 stove with hot water tank.
3 oil stoves. |
| 1 sink. | |

AGATEWARE.

- | | |
|--------------------------|------------------------|
| 1 hand basin. | } 3, 1 pt. sauce pans. |
| 1 tea kettle. | |
| 3, 3 pt. double boilers. | |
| 2, 2 pt. sauce pans | |

TIN AND STEELWARE.

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|---------------------------------|---------------------------------|--------------------|
| 1 coarse seive. | } 2 tin sheets, 14 in. x 18 in. | |
| 12 tin measuring cups. | | |
| 6 " dish pans. | | |
| 1 " " " large. | | |
| 16 " vegetable pans. | | |
| 1 " biscuit cutter. | | |
| 1 " doughnut cutter. | | |
| 1 " flour sifter with crank. | | |
| 1 " gravy strainer | | |
| 1 " colander. | | |
| 1 large grater. | | |
| 1 nutmeg grater. | | |
| 1 sett skewers. | | |
| 1 tin steamer to fit sauce pan. | | |
| 3 " small pans (bread.) | | |
| 3 " cake " | | |
| 3 " pie plates. | | |
| 1 " pudding mould. | | |
| " dripping pan and rack. | | |
| | | 1 " frying basket. |
| | | 1 " flour dredge. |
| | | 1 " wire boiler. |
| | 1 " 2 qt. dipper. | |
| | 2 doz. tin table spoons. | |
| | 2 " " tea " | |
| | 1 skimmer. | |
| | 1 can opener. | |
| | 1 dust pan. | |
| | 1 Dover egg beater. | |
| | 3 omelet pans. | |
| | 1 fry pan (steel.) | |
| | 2 doz. knives and forks. | |
| | 15 vegetable knives. | |
| | 1 sett gem pans | |
| | 1 match box. | |
| | 6 wire whisks. | |
| | 1 " potato masher. | |

EARTHEN AND GLASSWARE.

- | | |
|----------------------------|------------------------------------|
| 12 salt shakers. | 5 soap dishes. |
| 12 pepper " | 1 tea pot |
| 6 yellow bowls (small). | 1 platter. |
| 3 2 qt. " | 6 white plates. |
| 1 1 pt. oval pudding dish. | 2 doz. white round serving dishes. |
| 2 1 " round " dishes. | 1 lemon drill. |
| 1 2 qt. pitcher. | $\frac{1}{2}$ doz. tumblers. |
| 1 butter crock. | 6 tea cups and saucers. |
| 1 bean dot. | |

FOR NEEDLE-WORK (SEWING AND MENDING).

Each child should be supplied with a bag containing needle and pin cushion, scissors, thimble and thread. Most children will prefer supplying these themselves, but extra scissors, needles, thread, &c, should be supplied by Board.

WOODENWARE.

- | | |
|---|--------------------------|
| 1 chopping tray and knife. | 10 small scrub brushes. |
| 3 rolling pins. | 1 large " |
| 3 bread boards. | 1 towel roller and rack. |
| 6 mixing spoons (12 in. long, 1 $\frac{1}{2}$ in. across bowl). | 1 sink scraper. |
| 6 cake spoons (14 in. long, 1 $\frac{1}{2}$ in. across bowl). | 1 whisk. |
| | 1 stove brush. |
| | 1 dauber. |

LINEN, &c.

2 doz. rollers, towels, dish towels, dusters, &c., &c.

LAUNDRY WORK.

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|-----------------------------|--|
| 8 small tubs fibre or wood. | 3 sets irons, with stands. |
| 8 " rubbing boards. | 2 skirt boards, 3 to 4 ft. |
| 1 pail. | Cover for table (unbleached cotton and blanket). |
| 1 clothes basket. | 1 clothes drier. |
| 1 small boiler. | |

SUMMER SCHOOL OF SCIENCE FOR THE ATLANTIC PROVINCES OF CANADA.

BOARD OF DIRECTORS, 1902.

- President*—Professor L. W. Bailey, LL. D., the University, Fredericton, N. B.
Secretary—J. D. Seaman, Esq., Charlottetown, P. E. I.
 Geo. J. Oulton, M. A., Moncton, N. B.; W. R. Campbell, M. A., Truro, N. S.;
 S. A. Starratt, Yarmouth; J. B. Hall, Ph. D., N. S.

PLACE OF MEETING.

St. Stephen, N. B. On the other side of the River St. Croix is Calais, in the State of Maine. The electric cars cross the bridge from St. Stephen, run up the river on the Maine side some miles, re-cross the river at Milltown, and return on the Canadian side. Four towns with a population of 12,000, divided by the frontier line, but connected every other way.

TIME OF MEETING.

From the 22nd July to the 8th August, 1902. The sixteenth annual session.

161. SPECIAL PRESCRIPTIONS FOR HIGH SCHOOLS.

(Year ending July, 1903.)

An examination intended for those who require certificates of High School Scholarship is given annually on this course; but teachers and school boards are required by law to grade their schools according to local conditions. The subjects of any *six* papers will be a minimum "full course" to constitute a *regular* pupil or student under Regulation 59 in County Academies or any other high schools. The course to be taught in any school shall be determined by the joint agreement of the principal and the school board, with an appeal to the Inspector, and from him to the Council in the case of disagreement or dissatisfaction.

The High School certificates of Grades IX, X and XI, the examination for which is entirely optional on the part of pupils, a group of eight papers is imperative for a "High School Pass," with a minimum aggregate of 400 and no paper below 25. For a "Teacher's Pass" an aggregate of 400 is imperative, with no paper below 40 on any except the foreign languages.

The subjects, number and values of the papers for the different grades of examinations, and the general scope of examination questions, are indicated in the curriculum which follows. The text books named indicate in a general manner the character of work expected on each subject. Examination questions are assumed to be on the subjects, not on the text books, and may demand description by drawing as well as by writing in all grades. In any subject, also, a question may be put on work indicated under the head of "general prescriptions," Course of Study for Public Schools.

As it is practically impossible to obtain text books covering the subjects to the exact extent desirable by a majority; and as it would be pedagogically unsound to require even pupils in the same class—the one who may have a special ability and liking for the subject, as well as the one who has no ability or taste for it—to do the same amount of work; and as it is generally desirable that a text should contain more exercises and matter for students who may have the power and the wish to do more than the average, the text books recommended are selected with the view of containing more rather than less of what would suit the poor or even the average student.

The excess of the text recommended is therefore equalized by the device of *optional* questions at examination. Examination questions are distributed as regularly as possible over the field prescribed. When only *five* questions are required for a full paper, *six* questions are equivalent to the reduction of the text by one-sixth, *seven* questions by two-sevenths, (nearly one-third), and so forth. History and Geography in IX and X will have ten questions equally distributed, for instance, of which *five* will make a full paper, two of which must be on one subject and three on the other. This is virtually easier than halving the whole prescription, for the three questions can be selected from the favorite subject. It will be practicable for a teacher under these circumstances to reduce the prescription to one-half of each, if he thinks he can do better work; but the memorization of details is never good except for those who may do it naturally without effort.

The device of optional questions for the equalization of texts and the peculiarities of pupils for examination purposes appears not to have been understood or appreciated by some teachers, who would restrain both the clever teachers and the able and well grounded pupils of the whole province to a course which could be mastered by immature or poorly prepared pupils.

GRADE IX.

Subject.	Paper.
ENGLISH.	1: LITERATURE — Kingsley's <i>Heroes</i> , Macaulay's <i>Lays</i> (T. C. Allen & Co.), with critical study, word analysis, prosody and recitations; (b) English Composition as in <i>Sykes</i> , 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.
	2: As in GRAMMAR (excepting notes and appendix) with easy exercises in parsing and analysis.
LATIN.	3: As in <i>Collar and Daniell's First Latin Book</i> , to end of Chapter LIV., or any equivalent grammar, with very easy translation and composition exercises. [The <i>Roman</i> (Phonetic) pronunciation of Latin to be used in all grades].
FRENCH.	4: As in Fasnacht's <i>Progressive Course, First Year</i> , with <i>Progressive Reader, First Year, Sections 1 to 15</i> .

- HISTORY AND GEOGRAPHY. } 5: (a) Review of Canadian history as in Calkin with oral lessons on civics as suggested in "How Canada is Governed." (b) Geography as in *advanced* text,—astronomical (the easier problems), physical, and the various portions of the British Empire. (Exam. questions, one-half optional.)
- SCIENCE. } 6: (a=80). Botany as in Spotton or an equivalent. (b=20) Physics as in Primer or equivalent (winter months). Texts to be used only as aids to the study of the objects. Drawing of parts of plants, etc, while being studied.
- DRAWING AND BOOKKEEPING. } 7: (a=20). Construction of plans, geometrical figures and solution of mensuration and trigonometrical problems by mathematical instruments. (b=30) High School Drawing Course No. 1, with Model and Object drawing and *Manual Training* No. 2 completed. (c=50) Commercial forms and writing, with Single Entry Book-keeping problems.
- MATHEMATICS. { 8: ARITHMETIC—As in the *Academic* to page 66.
9: ALGEBRA—As in *Hall & Knight's Elementary* to end of Chapter XVI.
10: GEOMETRY—Euclid I, with the easier exercises in *Hall & Stevens* to page 86.

GRADE X.

- ENGLISH. } 1: (a) Same subjects as in previous grade, but more advanced scholarship required. (b) 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.
2: As in GRAMMAR (excepting appendix) with exercises in parsing and analysis.
- LATIN. } 3: As in *Collar and Daniell's First Latin Book* complete, and "*Cæsar's Invasion of Britain*, by Welch and Duffield.
- GREEK. } 4: As in *White's First Greek Book*, lessons I to LIX.
- FRENCH. } 5: As in *Fasnacht's Progressive Course, second year*, with *Progressive Reader, first year*, selections 16 to 62.
- GERMAN. } 6: As in *Jaynes-Meissner's Grammar*, first 18 lessons, with *Buchheim's Modern German Reader*, Part I, first division only
- HIST. AND GEOG. } 7: Review of British History as in "Outlines." (b) Advanced Text-book of Geography completed. (Exam. questions, one-half optional.)
- SCIENCE. } 8: (a=70) Chemistry as in *Williams or Waddell*. (b=30) Agriculture as in *James* or Mineralogy as in *Crosby*.
- DRAWING AND BOOKKEEPING. } 9: (a) Mathematical Drawing as in previous grade but more advanced. High School Drawing Course, No. 2, and model and object drawing, with simple drawing from Nature. (b) Bookkeeping; Double Entry forms and problems.
- MATHEMATICS. { 10: ARITHMETIC as in the *Academic*.
11: ALGEBRA as in *Hall and Knight's Elementary* to end of Chapter XXVII.
12: GEOMETRY, Euclid I, II and III to Prop. 20, with the easier exercises in *Hall and Stevens*.

GRADE XI.

- ENGLISH. } 1: LITERATURE — [a=80] Byron's *Childe Harold*, Canto I. Macaulay's Essay on the *Elder Pitt* (first of the two articles in the "Edinburgh Review"). [b=20] A general acquaintance with the prescribed literature of the previous grade as above.
- } 2: GRAMMAR - History of English language and Text Book complete with difficult exercises. [b] History of English literature as in *Meiklejohn*.
- LATIN. } 3: Grammar and easy composition partly based on prose author read.
- } 4: [a] *Cæsar's De Bell. Gall.*, Book I (II and III for 1904), and [b] *Virgil's Æneid*, Book III; (for 1904 Book I), with grammatical and critical questions.
- GREEK. } 5: Grammar and easy composition based partly on author read and *White's First Greek Book* completed.
- } 6: *Xenophon's Anabasis*, Book I, (for 1904, Book II), with grammatical and critical questions.

- FRENCH. 7: As in Fasnacht's *Progressive Course, Third Year*, Lamy's *Voyage du Norice Jean-Paul*, and Mrs. Fraser's *Scenes of Child Life*. (Macmillan & Co.)
- GERMAN. 8: As in *Joyes-Meissner*, to lesson 44, with Buchheim's *Modern German Reader*, Part I., complete.
- HIST. AND GEOG. 9: General History and Geography as in *Swinton*
PHYSIOLOGY. 10: As in prescribed text, "*Martin's Human Body and the Effects of Narcotics*."
- PHYSICS. 11: As in *Gage's Introduction to Physical Science*.
- MATHEMATICS. 12: PRACTICAL MATHEMATICS as in *Eaton*.
13: ALGEBRA AND ARITHMETIC as in *Hall and Knight's Elementary Algebra*, omitting chapter XLI.
14: GEOMETRY as in Euclid I to IV, with the easier exercises, the more important definitions and algebraic demonstrations of Euclid V, and Euclid VI (text) to Prop. 19, as in *Hall and Stevens*.

GRADE XII.

The examination on this syllabus may be known as the Senior Leaving Examination of the High School. This portion of the course of study may be profitably undertaken on the lines best adapted to the staff of instructors or the demands of students in the larger High Schools or County Academies. There is in this grade a bifurcation of the course into a classical side and a scientific side, with minor options leading to the certificates of grades XII (classical) and XII (scientific) respectively. This grade is not only not compulsory on any school section, but it should not be attempted in any school with less than four High School teachers.

(A) IMPERATIVE FOR BOTH SIDES.

- ENGLISH. 1: As in *Lounsbury's English Language*. Chaucer's *Canterbury Tales: The Prologue, The Knights and the Nonne Prestes Tale*. (Skeats 2/6 edition). (Also for 1904)
- 2: *Stopford Brooke* (Copp, Clark) for reference. Burke's *Speech on Conciliation with America*. (For 1904, Carlyle's *Heroes and Hero Worshipers*.) Shakespeare's *Julius Caesar* and Milton's *Paradise Lost, Books I and II*.
- HISTORY. 3: As in *Green's Short History of the English People*, and *Clement's History of Canada*.
- PSYCHOLOGY. 4: As in James's *Text Book of Psychology*, Titchener's *Primer*, or Maher—edition of 1900.
- SANITATION. 5: As in the Ontario Manual of Hygiene.
- 6: Grammar as in *Bennett*, and Composition as in *Bradley's Arnold* or equivalents. Latin translation at sight.
- LATIN. 7: TACITUS.—*Histories*, Book I. (Also for 1904.)
- 8: CICERO.—*De Senectute* and *De Amicitia*. (For 1904, *Pro Lege Manilia*.)
- 9: VERGIL.—*Georgics*. (Also for 1904.)
- 10: HORACE.—*Epistles*, Books I and II, and *Ars Poetica*. (For 1894, *Odes*.)
- 11: ROMAN HISTORY AND GEOGRAPHY.—As in *Liddell's*.
- 12: Grammar as in *Goodwin*, and composition as in *Fletcher and Nicholson*, or equivalents. Greek translation at sight.
- GREEK. 13: LUCIAN.—*Vera Historia*. (For 1904, *Plato: Apology and Crito*.)
- 14: DEMOSTHENES.—*De Corona*, omitting documents. (Also for 1904.)
- 15: SOPHOCLES, *Antigone*. (Also for 1904.)
- 16: GRECIAN HISTORY AND GEOGRAPHY.—As in *Smith's*.

(C) IMPERATIVE FOR SCIENTIFIC SIDE.

- 17: PHYSICS.—As in *Gage's Principles of Physics*.
- 18: CHEMISTRY.—As in *Storer & Lindsay's Elementary*.
- 19: BOTANY.—As in *The Essentials of Botany* by Bessey (latest edition); with a practical knowledge of representative species of the Nova Scotia flora.
- 20: ZOOLOGY.—As in *Ontario High School Zoology*, or equivalent, with dissection of typical Nova Scotia species as in list specified in *Journal of Education*.
- 21: GEOLOGY.—As in Sir William Dawson's *Hand Book of Canadian Geology* (excepting the details relating to other provinces from pages 167 to 235, or an equivalent text).

- MATHEMATICS. { 22: ASTRONOMY.—As in *Young's Elements of Astronomy*.
 23: NAVIGATION.—As in *Norie's Epitome* or equivalent.
 24: TRIGONOMETRY.—As in *Murray's Plane Trigonometry*.
 25: ALGEBRA.—As in Hall & Knight's *Higher Algebra*, omitting " * " paragraphs and chapters xxiv to xxxi.
 26: GEOMETRY.—*Euclid*, particularly VI and XI, as in *Hall and Stevens*, with exercises. "Loci and their equations," as in chapter I, *Wentworth's Elements of Analytic Geometry*.

(D) OPTIONAL FOR EITHER SIDE.

- FRENCH. { 27: FRENCH GRAMMAR AND COMPOSITION.—As in *Brachet* or equivalent.
 28: FRENCH AUTHORS.—(a) *Berthon's Specimens of Modern French Prose*, complete; and *Daudet's Tartarin de Tarascon*. (Macmillan & Co) (b) *Berthon's Specimens of Modern French Verse*, Part I and the pieces beginning on the following pages of Part II of Macmillan & Co.'s edition; 112, 120, 125, 129, 134, 139, 146, 151, 158, 170, 176, 178, 183, 187, 197, and 206.

- GERMAN { 29: GERMAN GRAMMAR AND COMPOSITION.—As in *Joynes Meissner* or equivalent.
 30: GERMAN AUTHORS.—As in *Buchheim's German Reader Part II*.
 To pass Grade XII (scientific) a minimum aggregate of 1000 must be made on twenty papers, including all in groups (A) and (C) and any other five papers.
 To pass Grade XII (classical) a minimum aggregate of 1000 must be made on twenty papers, including all in groups (A) and (B) and any other four papers.
 No paper to fall below 25.
 For Grade XII (classical and scientific), all the subjects in group (D) must have been taken as well as those in (A), (B) and (C). No paper to fall below 50.
 For "Teachers' pass," no paper to fall below 50.

165.

UNIVERSITY MATRICULATION.

The leading universities and colleges of the Provinces have agreed to accept the Grade XI or Junior Leaving High School certificate in lieu of their matriculation examination, when the certificate indicates a pass on each subject required by the particular matriculation standard concerned. For example, a university may fix 50 or 60 per cent, more or less, in Latin, Greek or any other subject as its standard. Again, a candidate may fail to take a "pass" High School Certificate through a low mark in a subject not required for matriculation, yet make sufficiently high marks, as shown by his "examination record," on the subjects required to admit him to the university. This constitutes a practical affiliation of the Public High Schools with the Universities, which will save division of energy in many high schools, while it will place each of the Universities in the same relation to the public schools.

166.

TEXT BOOKS.

In performing the duty of selecting and prescribing text books for the Public Schools, the Council of Public Instruction has availed itself as fully as possible of the knowledge and experience of those who are engaged in the practical work of education. The sole aim of recent modifications has been to secure at a reasonable cost, a series of texts adapted for use in schools. Change in authorized books is in itself a very undesirable thing.

The prescribing of new books is one of such importance to the country that the most extraordinary care has to be taken to make sure that the ultimate advantages of a change will more than compensate the people for temporary loss or annoyance always involved in making a change. But change there must be. It is the essential condition of all growth; and we ought under such circumstances to be always prepared for it.

Instructors and teachers are reminded:—

(1) That the course of study for common schools encourages an economical expenditure for the text books by providing a system of oral instruction for junior classes. Too many teachers try to satisfy themselves in respect to their more youthful pupils by placing in their hands text books not needed in any case, and worse than useless when unaccompanied by proper oral exposition. A text book should not be required for a child until he is prepared to use it intelligently.

(2) That the regulation which makes it illegal and improper for a teacher to introduce unauthorized texts, by no means hinders him from giving his pupils the benefit of other treatises to whose explanations he may attach importance. The progressive teacher will always have such aids within reach, and will so use them as to impart variety and interest to his instructions.

LIST OF TEXT BOOKS PRESCRIBED FOR USE IN SCHOOLS.

167.

COMMON SCHOOL GRADES.

Royal Readers, Primer and Nos. 1 to 5. (Thomas Nelson & Sons, Edinburgh and London.) [3 cts., 10 cts., 17 cts., 30 cts., 45 cts., and 60 cts., respectively.] In French sections, French-English Royal Readers, Primer to No. 3. [8 cts., 20 cts., 30 cts., 45 cts., respectively.] *Les Grandes Inventions Modernes*, par Louis Figuier, 60 cents.
 Spelling book superseded—*English Edition*. (Sullivan Bros.) 25 cents.
 Health Readers Nos. 1 and 2. (T. C. Allen & Co., Halifax.) 20 and 30 cents.
 Calkin's Introductory Geography. (A & W. Mackinlay, Halifax.) 6½ cents.
 History of England and Canada. (Copp, Clark Co.) 30 cents.
 Lessons in English. (Revised. A. & W. Mackinlay, Halifax.) 30 cents. [Grammaire Francaise Elementaire, for the use of teachers in French sections.] 30 cents.
 Common School Arithmetic. (T. C. Allen & Co., Halifax.) 15 cents each part; 40 cents three parts bound in one.
 Tonic sol-fa. *School-day Melodies*, by Ada F. Ryan. Parts I and II, 10 cents each.
 Writing: Copy Books—*Vertical*, as in Jackson's New Style, 5 cents each; or *Sloping* Royal, 7 cents each.
 Drawing Books: Public School Drawing Course (Canada Pub. Co., Toronto), 5 cents each; or Langdon S. Thompson's, 10 cents each; or home-made books of cheap paper, under direction of teacher for alternative course recommended.

168.

HIGH SCHOOL GRADES.

English Grammar (Mackinlay). 30 cents.
 Academic Arithmetic (T. C. Allen & Co.) 40 cents.
 Martin's "The Human Body and the effects of Narcotics" (Henry Holt & Co.) \$1.65.
 Calkin's Geography of the World (Mackinlay.) \$1.25. Calkin's History of Canada, 60 cents.
 Outlines of British History (Thomas Nelson & Sons, Edinburgh.) 45 cents.
 Hall & Stevens' Euclid. [I., 25 cents, I. to IV., 55 cents, I. to XI., 80 cents.]
 Hall & Knight's *Elementary Algebra* 75 cents.
 James's *Agriculture* (Morang, Toronto.) 30 cents.
 NOTE.—The character of the High School work in its various subjects is further indicated by the books referred to in the High School Course of Study from year to year.

169.

MAPS, CHARTS AND APPARATUS.

The Council has not deemed it necessary to prescribe maps and charts of particular authorship for use in the Public Schools. In such well-known series as those of Phillips, Johnston, or Mackinlay, trustees will find an abundance of excellent material from which to select. The special character of Church's Mineral Map will tend to popularize it in many parts of the province, while it fully answers the purposes of a general map.
 Prang's Natural History Series of botanical and zoological drawings is accompanied by a manual of directions.
 The "Standard Dictionary" (Funk and Wagnalls, New York and London), is recommended.
 Trustees are authorized to procure the "School Equipment," described as necessary in the Manual of the School law, from any makers or publishers, satisfactory to themselves and the inspector.

170.

RECOMMENDED FOR THE USE OF TEACHERS.

The Educational Review for the Atlantic Provinces of Canada. Important on account of its references to local and current educational progress, and for urgent or special official notices to teachers between the semi-annual issue of this JOURNAL. Therefore it is also recommended to all Boards of School Trustees. \$1 00 per annum.
Notes on Education, by J. B. Calkin.
Song-Teachers' Guide, by Miss Ryan, 30 cents. (T. C. Allen & Co.)
How Canada is Governed, by Sir J. G. Bourinot.
History of Canada, by Roberts; Weaver's *History of Canada*, 50 cents.
Readings in Canadian History, edited by G. U. Hay, \$1.00.
Elementary English Composition, by Sykes, 40 cents.
Educational Reformers, by Quick (Appleton & Co.)
Education, by Herbert Spencer.
Faunce's Mechanical Drawing
Wood's Primer of Political Economy (Copp, Clark Co.) 50 cents.

- Public School Book-keeping*, by Maclean, (Copp, Clark Co., Toronto.) Authorized for New Brunswick. 45 cents.
- French Grammar and Language on a Topical System*, Part I., by Lanos.
- New Methods in Education*, (Art, Real Manual Training, Nature Study), by J. Liberty Tadd; pages, 456, 7½ x 10½ inches. \$3.00.
- Art Instruction in Primary Schools*. A Manual for Teachers (second year), by Mary Dana Hicks. (The Prang Elementary Course.)
- High School Botanical Note Book*, Parts I. and II., for the Provincial Examinations, Ontario, paper, 150 pp., 7 x 10 inches. 50 cents each. (W. J. Gage & Co.)
- Shorthand Books*, Isaac Pitman's (Sole agents in Canada, Copp, Clark Co., Toronto.) Full list upon application. The Phonographic Teacher, 20 cts.; Key to the Phonographic Teacher, 20 cts.; Pitman's Shorthand Instructor, \$1.50; A Manual of Phenography, 50 cts.; Key to Exercises in Manual, 20 cts.

NATURE LESSONS; ETC.

- Guide to Nature Study* for the use of Teachers (Copp, Clark Co., Toronto). The best book of the kind yet published. 90 cents.
- Brittain's "Nature Lessons"* (New Brunswick); *Payne's "100 Lessons in Nature Study around my School"* (Kellogg, New York); *Object Lessons* for Standard I., II., and III. (England), by Garlick and Dexter (Longmans, Green & Co.).
- In the Acadian Land*. Nature Studies, by R. R. McLeod. Pages 166, 7 x 5 inches.
- Ways of the Woodfolk*, by Wm. J. Long. Pages 205, 5½ x 7½ inches.
- Ways of the Wilderness*, "
- Needlework, Knitting and Cutting Out*, by Elizabeth Rosevear (Macmillan & Co.). Pages 136, 5 x 7 inches.
- Handbook of Household Management and Cookery*, by Tegetmeier (Macmillan & Co.). Pages 132, 4 x 6 inches.
- Ontario Public School Domestic Science*, by J. Hoodless (Copp, Clark Co.). 196 pages, 5 x 7 inches, 50 cents.
- Elementary Text Book of Cookery*, by Helen N. Bell, 25 cents. (T. C. Allen & Co.).
- Public School Agriculture* (Ontario.) Pages 250, 4 x 6½ inches.
- The Soil*, by F. H. King. Pages XV + 303. (Macmillan & Co.)
- The Fertility of the Land*, by Isaac Phillips Roberts. Pages XVII + 415. (Macmillan & Co.)
- The Principles of Fruit Growing*, by L. H. Bailey. Pages XI + 508. (Macmillan & Co.)
- Milk and its Products*, by Henry W. King. Pages XIII + 280. (Macmillan & Co.)
- School Hygiene*, by W. Jenkinson Abel, 53 pages, 5 x 7 inches; (Longmans, Green & Co.), or *Primer of Hygiene*, by Ernest S. Reynolds, 164 pages, 4 x 6 inches; (Macmillan & Co.)

ELEMENTARY AIDS TO STUDY OF NATURAL SCIENCE.

- The Science Primers*. (Macmillan & Co., London.)
- Guides for Science Teaching*, Nos. I to XV. (D. C. Heath & Co., Boston.)
- Illustrated Guide Books* to facilitate the study of Natural History; 1, Trees; 2, Ferns; 3, Butterflies; 4, Beetles; 5, Moths; 6, Fresh Water Fish; 7, Frogs and Snakes. Each, oblong paper, 6 x 8 inches, 50 cents. (Bradlee Whidden, 18 Arch St., Boston.)
- Entomology for Beginners*, by Packard, pp. 367, 5 x 7 inches (Henry Holt, New York.)
- Practical Methods in Microscopy*, by Clark, pp. 216, 5 x 7 inches (D. C. Heath & Co., Boston.)
- Practical Botany for Beginners*, by Bower [Histology of type plants, with microscope and reagents], (Macmillan & Co.) Pages 275; 5 x 7 inches.
- The Teaching Botanist*, by Ganong, pp. XI + 270, 7½ x 9 inches (Macmillan & Co.), \$1.10.
- Plant Physiology*, by Ganong, pp. VI + 147, 5½ x 9 inches (Henry Holt & Co.), \$1.00.

171. HAND-BOOKS AND BOOKS OF REFERENCE FOR SCHOOL LIBRARIES.

BOTANY.

- Gray's Manual*, pp. 760, 8½ x 5½ inches, \$1.80.
- Illustrated Flora of North Eastern America*, by Britton & Brown, 3 volumes, each of about 600 pages, 11 x 7½ inches, \$3.00 (Scribner, New York.)
- Britton's Manual* (Holt, New York), \$2.25.

ZOOLOGY.

- Manual of the Vertebrates*, by Jordan, pp. 375, 8 x 5 inches (McClurg, Chicago), \$2.50.
- Hand-book of Birds* (of North Eastern America), by Chapman, pp. 420, 5 x 7 inches (Appleton, New York), \$3.00.

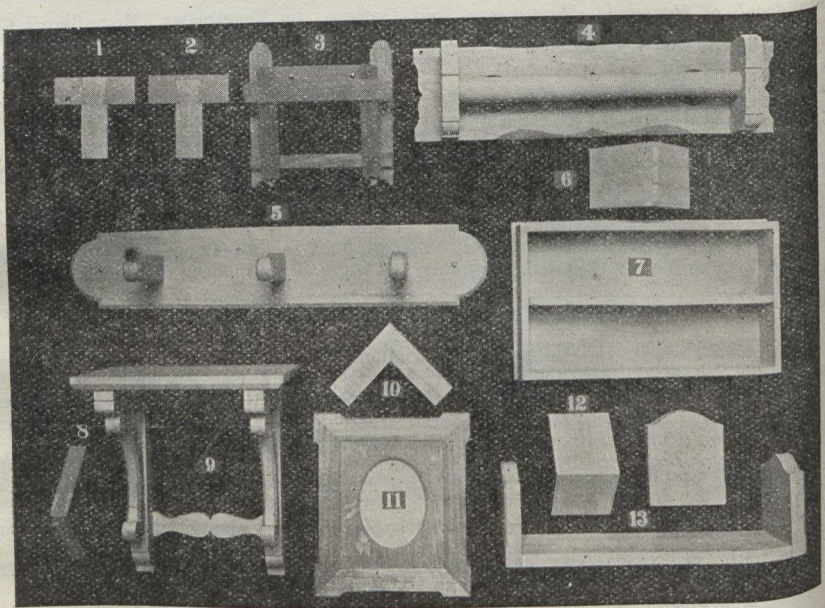
Key to North American Birds, by Coues, pages 900 +, 10 x 7 inches, \$7.50 (Estes & Lauriat, Boston.)

Manual for the Study of Insects, by Comstock, pages 700, 9½ x 6 inches, \$3.75. (Comstock Pub. Co., Ithaca, New York.)

Cyclopedia of American Horticulture, by Bailey, of Cornell (Virtue & Co., of Toronto), 4 volumes, \$20.00.

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 the proposed books, their publishers, sizes and prices, 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.



A Course of "Mechanic Science" Work,

MACDONALD MANUAL TRAINING SCHOOL, TRURO, N. S.



JOURNAL OF EDUCATION.

APRIL, 1902.

OFFICIAL NOTICES.

The full number of legal teaching days in the half year ended 31st January was 108; in the second half year, ending Friday 4th July next, there will be 108 days. Total days for year, 216.

CALENDAR, SUMMER, 1902.

- | | | |
|-------|-----|--|
| Apr. | 21. | Quarter begins. |
| May | 2. | Arbor Day. |
| " | 23. | Empire Day. |
| " | 24. | Anniversary Queen Victoria's Birthday. |
| " | " | Last day to apply for Provincial Examinations. |
| June | 31. | Inspectors' Lists of Candidates for Prov. Exam. at Education Office. |
| " | 26. | Provincial Normal School closes. |
| " | 30. | Regular Annual Meeting of School Sections. |
| " | " | County Academy Entrance Examination begins. |
| July | " | Provincial Examination, Grade XII, begins. |
| " | 1. | Dominion Day (holiday except for Examinations). |
| " | 2. | Provincial Examinations, Grades, XI, X and IX, begin. |
| " | 4. | Public Schools close for Summer Vacation. |
| " | 5. | M. P. Q., and Supplementary Examinations. |
| " | 7. | Last Day for Minutes of Annual Meeting at Inspector's Office. |
| " | 11. | Last Day for Annual "Returns" at Inspector's Office. |
| " | 19. | Last Day for Inspectors' Sheets at Education office. |
| " | 22. | Summer School of Science opens at St. Stephen, N. B. |
| Aug. | 25. | Public Schools open. First Monday, First Quarter of School year. |
| Sept. | 1. | Labor Day. |
| Oct. | 1. | Provincial Normal School opens at Truro. |
| Nov. | 10. | First Monday of Second Quarter. |

OFFICIAL NOTICES.

DISTRICT SCHOOL COMMISSIONERS.

(Appointed 5th March, 1902).

West Halifax.	Rev. P. Egan, P. P., Upper Prospect. Rev. F. P. Greateux, French Village.
East Hants.	Edwin D. MacLean, M. D., Shubenacadie.
North Inverness.	J. D. Doucet, Belle Cote, Margaree. Archhibald McKinnon, East Lake Ainslie.
Richmond.	Henry N. Paint, Point Tupper.
Victoria.	Rev. R. McKenzie, P. P., Iona. John R. Campbell, Jamesville.
Argyle.	A. P. Landry, M. D., Eelbrook.

DATES OF MEETINGS OF BOARDS OF DISTRICT SCHOOL COMMISSIONERS.

Cape Breton.....	June 4th.	Halifax, East.....	May 1st.
*Richmond.....	July 17th.	West Hants.....	May 16th.
S. Inverness.....	May 27th.	East Hants.....	June 18th.
N. Inverness.....	June 18th.	Kings.....	May 13th.
Victoria.....	June 3rd.	Annapolis, East.....	May 28th.
Antigonish.....	May 20th.	Annapolis, West.....	May 27th.
Guysboro.....	June 10th.	Digby.....	June 2nd.
St. Mary's.....	June 3rd.	Clare.....	May 20th.
N. Pictou.....	June 2nd.	Shelburne.....	June 19th.
S. Pictou.....	June 3rd.	Barrington.....	April 12th.
S. Colchester.....	June 9th.	Argyle.....	May 21st.
W. Colchester.....	April 16th.	Yarmouth.....	May 22nd.
Stirling.....	April 24th.	†Lunenburg.....	May 3rd.
Parrsboro.....	May 8th.	North Queens.....	May 14th.
Cumberland.....	May 23th.	Chester.....	May 31st.
Halifax, West.....	June 5th.	South Queens.....	June 11th.
Halifax, Rural.....	May 8th.		

†At Bridgewater.

*At Arichat.

CORRECTIONS.

JOURNAL, 1901, October, page 114, 20th line, should be omitted.

JOURNAL, 1901, October, page 121, 11th line, should be omitted.

ANNUAL SCHOOL MEETING.—From the Amendment of the Education Act given on page 33, it can be seen that the annual meeting of the School Section can be held at any hour for which it may be called by the trustees.

VACATION.—On account of the very generally expressed desire for the earlier closing of the schools than the date given by the old regulation fixing examination week to begin on the first Monday after Dominion Day, and the lack of any objection expressed against such a change, although it was conspicuously discussed in the public press, the examination week will begin on the last Monday of June this year. The general opening of the schools will be on the 25th of August, thus giving a minimum vacation of seven weeks for all schools instead of the usual six weeks. See pages 33 and 39 preceding.

“A” FRENCH AND GERMAN AT NEXT JULY EXAMINATIONS—1902.

FRENCH: The Specimens of *Berthon's Modern French Prose* are the first *five* stories to page 104—one-half of the book.

The Specimens of *Berthon's Modern French Verse* are the first part of the book—to page 108.

GERMAN: The selections from *Balladen und Romanzen* are those from I to XII—to page 40.

These selections, which were intended to have been published in the October JOURNAL, were accidentally overlooked. The “A” *French* is as *fourth* year course; the “A” *German*, a *third* year's course.

THE TEACHERS' EXAMINATION.—Attention is called to the fact that questions may be given at the M. P. Q. examinations on educational facts and problems relating to this Province or to the educational trend in other countries, which may be published in the JOURNAL OF EDUCATION, as well as to the legal amendments intimated in it from time to time.

REGULAR HIGH SCHOOL PUPILS.—Regulation 59 has been modified so as to allow County Academies to return as regular full course students those of academic standing who may be taking the subjects of any six papers instead of the eight papers hitherto forming the minimum.

As the Provincial Examinations are not compulsory on any students for grading or other purposes so far as the Provincial authorities are concerned, no provision is made for examination on this minimum course.

FREE SCHOOLS AND FREE EXAMINATIONS.—The passing of the various examinations in order is the most desirable plan for those who may need a certificate of scholarship for any purpose. It is maintained that when thus taking the regular course the examination and certification should be free also. It is maintained by others (teachers, not pupils or parents,) that there should be no free examination. This point is under consideration by the Council, and the opinions of those interested will be gladly received by the Superintendent in the meantime.

UNPROFESSIONAL CONDUCT.—As it often happens that the high school class of some particular year is not up to the usual standard for reasons beyond the control of the teachers, it is unfair to emphasize the success of other schools. Good teachers may be annoyed by the advantage taken of a temporary failure by some crank who has been worrying the school all along. It is therefore expected that if any schools are specially successful they should not advertise their successes in the public press, but quietly be satisfied with their good fortune. It is therefore intimated that educational officers regard the advertising of the successes of schools at the examinations as unprofessional. Publication merely administers to the vainglory of the one school while possibly causing undeserved pain in the other school.

GRADING OF SCHOOLS.—It appears that in some schools the law requiring grading to be adjusted to local conditions has been confessedly overlooked, under the mis-

apprehension that the "imperative" subjects of the high school course meant "imperative for study in every school" instead of "imperative for a certificate covering the scholarship requirements for a teacher." Although every register had a column for the entry of special or partial high school pupils as well as of those taking a full course; although the last page of the register explains the plan of reporting and estimating the grade of the pupil merely as a matter of statistical information without any suggestion of forming a class for each grade; although contracted courses of study had been published for years showing that provincial grades could never become classes except under very limited conditions; although Regulation 68 cautioned even the County Academies against an unwise attempt to grade on Provincial lines when it did not suit local conditions, still some teachers may have been under the impression that authority required other action. To make this point clear the high school course of study is prefaced by a brief statement intended to correct all cases of ordinary misconception.

SCHOOL LIBRARIES.—Every school section is now a library corporation. That is, it has the power of assessing itself for the support of a library in the school room, the books of which can be taken home by the children and used by their parents for the time allowed by the rules which the school board may authorize.

In rural sections there might be a number of books procured for the benefit of farmers. For instance, a library of fifty good books containing, say, only ten standard books on some branch of farming would be a good beginning for a small section. Any person in the section could in the course of a year or more have the reading of each one of these books for the cost of one of them.

Next year, instead of buying a new set of books, the library or a portion of it might be exchanged with that of a neighboring section, so that a new set of books could be had for nothing.

It would be better to leave the question of the exchanging of books to the local authorities, the teacher and trustees, for instance; for they could manage to suit themselves without much cost. The cost of looking after libraries by a Government officer would be about as expensive as inspection; while it would deprive the literary people of the section of the training given by looking after such an institution, as well as of the interest of managing it.

After the present year it is not intended to give the "Superior" school or "Academic" grant to any institution without a library, and other accommodations specified in the regulations 34 to 36, and 51 to 53.

POOR SECTIONS.—The attention of Inspectors and District School Commissioners is directed to Regulation 10. No school should be put on the "poor list" if it is less than four miles in extent, while it can be enlarged. An area swept by a two mile radius from the school house, containing approximately 8,000 acres, is the proper size of a school section even in a fairly wealthy and populous community. District Commissioners might hesitate to consolidate a number of sections into a large one requiring the conveyance of children to school, without ascertaining the willingness of the inhabitants generally to try the experiment. But the existence of a weak, small section should not be tolerated while it is capable of being enlarged under any ordinary circumstances.

CONVEYANCE OF CHILDREN TO SCHOOL.—From the 3rd clause of the amendment (p. 33) it can be seen, that the Annual Meeting has power to vote money for the conveyance of children to school. This will enable school boards and the

district school commissioners to promptly arrange for the absorption of small or weak sections into a central section, and to provide for the cost of the conveyance of distant children to the central school

Such changes may be effected in two ways. (1) By the consolidation of a number of suitable school sections into one, which the District Board can now do without a majority vote of each section concerned. At the Annual Meeting the estimated cost of the conveyance of children for the whole year should be voted so as to be levied on the whole enlarged section. The preliminary work of securing the agreement of the leading men in each section to the union of the sections, on the condition of making certain provision for the conveyance of the children and of providing a good teacher and good school accommodations, will be the most difficult as well as the most important work to be done. The secretary of each District Board is the one who as a general rule is most likely to be able to make such arrangements. And without the tactful stimulation of such movements by the inspectors we cannot expect rapid progress.

(2) Sections, without merging their existence into one large consolidated section, can now arrange with a neighbouring section which has a good central school accommodation to have their children conveyed to school on such terms as may be mutually agreed upon. This latter method might be the safer until some experience is acquired.

For further information on the advantages and disadvantages of the consolidation of sections into large ones, see a portion of the valuable report of Superintendent Barrett, of Iowa, which is published on page 67, for the information of those interested.

SPECIAL STATISTICS.—The blank columns 148, 149 and 150 in the Register and Annual Returns are to be filled in *this* year as follows:

- 148: The total number of pupils enrolled who can sing.
- 149: The total number of pupils enrolled who have been taking lessons or can play on some musical instrument.
- 150: The total number of pupils enrolled who have learned to swim to any extent.

These questions will be changed from year to year, and when the accuracy with which our teachers appear to be able to collect such information can be estimated, more important and complex information may be sought for in these three columns. Inspectors can note from the neglect to fill in these columns those teachers who habitually neglect to keep posted in the official intimations given in the JOURNAL. It is quite possible that we may have teachers who not only take no educational paper for which they may have to pay, but who do not go to the trouble, or do not see why they should make an effort, to acquaint themselves with the information sent them free at a very considerable expense to the province and of effort to very busy educational officers. There should not be one such teacher in the province; but if there is we must find him out. Each Inspector is instructed to withhold the public funds from any teacher or section presenting a defective return until the pleasure of the Council is indicated after an investigation.

EMPIRE DAY falls on the 23rd of May, when it is hoped teachers and school boards will make good use of the occasion to develop the sentiment of attachment to the Empire as a whole; and also to its constituent parts so as to stimulate reciprocity of good will and of helpful co-operation. Let us endeavour to make the boys and girls in the schools to-day what we wish the citizens of the Empire to be twenty years hence, and forever afterward. Report what is done to your inspector. See Regulation 141. The Soldiers' Monument on the Province Building grounds is expected to be unveiled, if possible, on this day.

ARBOR DAY.—Note Regulation 140. See that if possible some permanent improvement is a result of the work of the day. Interest the pupils and as many of the people as possible in the importance of intelligent attention to the proper care and treatment of our forests. The value of the economical as well as the sentimental side should be demonstrated as strongly as possible. All teachers should make a study of the science of forestry and of its possibilities in Nova Scotia.

TEACHERS' INSTITUTES.—In December an institute was held at Antigonish for the teachers of Antigonish and Guysboro. In March one was held in Pictou, for the counties of Pictou and Colchester. An institute at Hantsport for the counties of Hants and Kings, and another at Annapolis for the counties of Annapolis and Digby, have already been arranged for May. Two other institutes may also be held during the same month. In several large school sections (towns) the Principal meets his teaching staff monthly for the purpose of discussing the progress of the various departments, etc.

PROVINCIAL EDUCATIONAL ASSOCIATION.—The meeting of the Provincial Association has been suggested for the week of the opening of the rural schools—some time after the 25th of August. The date will be intimated when determined, in the *Educational Review*, if it occurs before the issue of the October JOURNAL.

As the institutes are now becoming common throughout the Province and are all as a rule very well attended, it has been proposed to make the Provincial Association more representative in its character, to consist largely of representatives elected from the different divisional institutes, in addition to representatives from educational institutions and organizations interested in public education.

WADDELL'S SCHOOL CHEMISTRY, which has been asked by a large number of our teachers of chemistry to be allowed at least as an optional text with Williams, has been reduced by the publishers to eighty cents—the same price as Williams. The examination of 1903 will have questions equally suited to those who use the one or the other text. If the teacher can teach the subject without any text in the hands of the pupils, he should do so. The text book indicates the extent of the knowledge to be expected. No student should be recommended to the Provincial Examination by a teacher if he has not been doing practical work in the subject.

LITERATURE.—According to the views of some of the best teachers of English in our high schools, enough literature has not been prescribed. But rather than frighten the other schools, it is considered better to suggest that schools which can do so, might read extra literature, selecting from some of the books which were at some time or other prescribed. It may be argued that such work may not count at examination. It is quite as likely to count as much as the extra unnecessary attention to the text for examination, if it gives the pupil more power. It is the failure to understand that the development of power can be exhibited in the treatment of an examination paper, that causes many a teacher to sacrifice not only education but a creditable examination record to an inane notion of the advantage of cram in securing marks. Sometimes the memory work of a candidate

has been doubled for a whole year in order to win a possible 10 points more, with the result that he may win perhaps one point on that line while he loses 50 points elsewhere.

READING AND WRITING.—Every teacher in the province who recommends a pupil to the Provincial Examination is a Provincial Examiner in *reading* and *writing*, for he must certify these qualifications. If the judgment and honor of a teacher can be depended upon always and everywhere to grade, promote or certify to the educational standing of his pupils, then every one of the 3500 who applied for examination last year was a good reader and writer. We have been informed in the public press very warmly that these subjects were neglected, which means that there are some people who think very little of a certification of good work from the teacher.

Yet every teacher has the power to prevent a pupil from going up to examination unless he is satisfied with his *reading* and his *writing*. It is the strongest power which has ever been given to a teacher in the history of education in this province; and if it does not produce universal good reading and writing, it will prove that our teachers as a body cannot be trusted with the examination and certification of their own pupils. Hence the use of an impersonal and uniform test such as the Provincial Examination.

COMMENTS.

THANKS.—The Superintendent of Education thanks those who aided him with suggestions for the revision of the course of study, etc., especially those who went to the trouble of making a full report. All the suggestions were of value, as showing the conditions prevailing in the different institutions, and in aiding the determination of moot points. Some suggestions which could not be carried out this year may have their influence next year.

PHENOLOGICAL OBSERVATIONS.—On page 58 preceding will be seen some critical remarks on the observations of last year, which teachers would do well to study. A great many of the observations are admirable; and it is not at all extraordinary to find that many among the great number at work made mistakes,—some accidentally, some ridiculously, and some because while they wished to be accurate they could not be. The work is altogether voluntary; and it is found to be a very easy way of interesting pupils to be observant when otherwise their way to and from school might be uninteresting and useless.

NOVA SCOTIA TEACHERS FOR SOUTH AFRICA.—The following teachers have been selected to teach for a year in the Refugee Camps of the Transvaal and Orange River colonies:—

Miss Bertha Boyd Hebb, M. A., Bridgewater.

Miss Ellen M. MacKenzie, M. A., Stellarton.

Miss Ella Dove Crandall, Walton.

Miss Blanche McDonald, B. A., Hopewell.

Miss Emma Ellis, Dartmouth.

Miss Margaret Woodhill De Wolfe, B. A., Halifax.

Orders have been received to start from Saint John on the "Lake Ontario," 18th April.

NEWSPAPER DISCUSSION.—Some people object to newspaper discussion of educational questions because there is often so much in it not only of what is misleading but of what is absolute ignorance, while rare exceptions are exploited sometimes very warmly as if they are the rule. There is, however, no better way of interesting the public in the subject; no more effective manner of stimulating those who do not know the facts to begin to study them; no better device for preventing the quiet-loving educationist from getting into a smooth rut and forgetting to think. It is the duty of those discussing problems, however, to make an effort to be accurate and fully informed; otherwise it cannot fail to discredit the individual as well as the method. No teacher can be excused who writes without showing evidence of careful investigation; for teachers ought to be leaders in using methods of accurate search after truth and in making well balanced presentations of *all* the facts bearing on the point at issue

VARIETY OF EDUCATIONAL OPINION.—Few persons who do not follow the course of educational discussion are likely to imagine the diversity of views which may be held even in the same province among teachers who look very much alike. One is in favor of a literary and classical education, another of a shop-keeping one, another of a scientific and manual training kind—and each may sometimes be proposing his scheme as the all sufficient one for the whole province.

One does not wish to be hampered by examination or course of study—and these are not always the wisest ones; while another in an eloquent paper before an institute argues that the Central Office should issue the lessons for every grade in the province weekly, so that no other text book need be required than this weekly journal of education.

Some wish to have the exact nature-lessons in the common schools specified in the general course of study, so that the teacher need not be harassed by having to select the suitable objects around his own school; while the great majority have an idea that the natural history of different localities is so variable that what might be best in one section might not be obtainable in another section at all,—and this idea is correct. At present the principal of every school is free to select or construct the exact system of lessons in this department to suit the schools under his charge; but some appear to have more faith in a scheme constructed by one who may be entirely unacquainted with his region.

Even on so simple a question as "What text would you recommend as more suitable than the *Vicar of Wakefield* for grade IX?" the variety of opinion is great. One is a great believer in "grammar" teaching, another would not have it even named, and so forth.

All this demonstrates the necessity of fuller intercommunication between teachers, through institutes and the educational press, which all should patronize.

ORIGIN OF THE PROVINCIAL EXAMINATIONS.—As in other countries this institution has already done a great deal of good. But there is nothing good which cannot by some natural or artificial process be perverted. For a history of examinations in Nova Scotia, see the Education Report for 1901, and page 84 of JOURNAL. The origin of the present system, omitted in the sketch in the report, is given in the following extracts from the minutes of the Provincial Educational Association of Nova Scotia, in the two conventions of 1889 and 1890. It is the outcome of the unanimous and persistent mandate of the teachers of the province:

PROVINCIAL EDUCATIONAL ASSOCIATION.

TRURO, 11th July, 1898.

"Resolved, that in the opinion of the High School section of the Teachers' Association, now convened, the educational interests of the province would be greatly promoted by the issuing of diplomas to the graduates of our academies, and that a committee be appointed to draw up a suitable scheme and memorialize the Council of Public Instruction in regard to the matter."

Passed unanimously.

"On motion of Prof. Eaton it was decided that a committee of seven be appointed by the Superintendent of Education to take into consideration the advisability of revising the present course of study laid down for the public schools"

Committee:—

"Rev. N. McNeil, D. D.

M. J. T. Macneil, Inspector of Schools

James. H. Munroe, " "

E. T. MacKeen, Principal Sydney Academy.

J. B. Oakes, A. M., Principal Horton College Academy.

A. D. Brown, Principal Bridgetown School

Ida Creighton, Principal Agricola Street School."

To these were added the members and Secretary of the Executive Committee of the Association:

"J. B. Calkin, M. A., Principal Normal School.

A. McKay, Supervisor Halifax City Schools.

H. Condon, Inspector of Schools.

E. J. Lay, " "

F. H. Eaton, Prof. Math. Normal School.

A. H. MacKay, Principal Halifax Academy.

R. McLellan, Principal Pictou Academy.

H. S. Freeman, Principal Amherst Academy.

Miss Burgoyne, Windsor Public Schools."

PROVINCIAL EDUCATIONAL ASSOCIATION.

HALIFAX, 31st Dec., 1890.

The above committee reported:—

"1. That provision be made in our educational system for the distinctive professional training of all teachers of public schools.

2. That the syllabus of examination for teachers' licenses be assimilated with the course of study for high schools, as revised, and it is suggested that third class or grade D certificates be based on the first year, second class, grade C, on those of the second year, and first class, grade B, on those of the the third year.

3. That in connection with examination for teachers' non-professional certificates the Department of Education be requested to provide for the issue of diplomas to graduates of county academies and high schools.

4. That as soon and as far as circumstances permit the various non-professional certificates should be taken seriatim.

5. That the professional training of teachers should be held to include fuller instruction in music, drawing, natural sciences, elementary logic, and manual training, than contemplated by the ordinary high school course."

"On motion the fuller consideration of the course of study was referred to a committee consisting of Rev. Dr. McNeil, Supervisor McKay, Professor Oakes, Principal MacKay, of Halifax Academy, and Principal Calkin."

POPULARITY OF PROVINCIAL EXAMINATIONS.—So far as can be estimated, no educational institution of modern times has been so popular. But it is for that very reason alone, probably, apt to work injury under certain conditions. It is not the regulations of the Council of Public Instruction, but the pressure of public opinion which compels the teacher. Now, as a rule, public opinion is right; but there are panics of public opinion which are as unreasoning and as dangerous as the panics of a public crowd.

The uniform written examination has done for our high schools generally what no amount of personal inspection alone would do, as Sir Joshua Fitch, Inspector

of the Teachers' Training Colleges of England, forcibly pointed out. But when the 1500 who used to come up annually for examination a few years ago swelled into 3500 each year, the examination fever reached into recesses never before approached.

The pupils of well-to-do families who attended to social and other functions to a greater extent than the poorer were handicapped in the race for certificates. All who used to be promoted from grade to grade on account of the influence of their parents came now before the just impersonal judgment of the Provincial Examiner and are found wanting. When the parents looked into the education of their children who failed they detected the defects which the examiners discovered to them.

Then followed the attack on the school, on the system, and on the poor teacher, who all along had not influence enough to prevent the premature promotion of these well-to-do pupils probably from the lowest grade upwards. Before the day of examination the ostrich had its head buried in the sand and saw nothing wrong. After the examination, although the school had been doing on the whole twice as much superior work as formerly, it is denounced on the discovery of an unpleasant truth.

The critics of the schools are correct. Very much defective work has been discovered, thanks to the examination system. But there is also more good high school work done to-day than there was ten years ago, and very much less inferior work than in the days of the solitary public examination, so-called.

Now, many of our high school teachers are not very strong, and there are often several causes over which the Principal has no control, which may prevent the success of his pupils at examination on certain occasions.

Then there is the tendency to lose sight of the object of education in the puerile notion of just winning a certificate; and all our teachers are evidently not yet able to effectively direct this sentiment.

Some again lose sight of the general conditions of the province, and are in agony endeavouring to reduce the amount of the prescription, to make the examination easier, forgetting that if such were done, the good schools would still farther leave them behind in the general results if their pupils were not indeed left with only half the amount of work they could do.

In fact there are many teachers at the present day who are receiving into their classes not only pupils who should never have been promoted with so defective an elementary education, but often persons who are too young; and in their abysmal ignorance of the general conditions through the province, are still asking for the reduction of prescription on the much abused plea "less work and better done"; when they should be doing more elementary work in lower grades.

AGE AND EXAMINATION.—Taking the average ages of students in the County Academies of the Province, we find that at the beginning of the grade IX course the age is about 15 years and 2 months, at the beginning of grade X, 16 years and 6 months, and at the beginning of grade XI, 17 years and 7 months. In other words, this means that the County Academy Entrance Examination is taken by pupils on the average at about 15 years of age, grade IX examination after they are 16, and so forth. In order to prevent the uprush of immature candidates, some think it would be advisable to fix an age limit, say one year below the average. In such an event no one should be admitted to the grade IX examination until he is 14 years old. Now some come at 13, and even at 12. Yet from such schools come complaints of the excessive amount of the course of study. With every reduction of the standard there will be, of course, a corresponding increase of the number who will try to pass. And with this increasing number

will come the proportionate failures clamoring for a reduction of standard by another peg. An age limit, it is argued, would eliminate this source of pressure.

It might be well for teachers to look into the Education Report at page 33, see to what extent the County Academy average age might suggest a fair age limit for those going up to each grade, and report to the Superintendent of Education for the information of the Council.

ONE LEAVING EXAMINATION.—There are some who think that some of the annoyances of the present system of examination would be obviated by the abolition of the grade IX and possibly grade X examination. If no change should be made in our present "junior leaving examination" of grade XI, this would mean that the "B" examination could be passed without the study of Canadian history, or British history, or Botany, or Bookkeeping, or Chemistry, or Drawing, or Arithmetic, or Agriculture. It would not therefore be the equivalent of our present teachers' pass of grade XI. The honest teachers in the fifty fairly equipped high schools and Academies would teach, let us assume, the work of grades IX and X faithfully. But some of the 1,000 rural schools doing high school work would soon "beat these high schools out of sight in passing the Leaving Examination." For acting on the lines some follow at present, they would omit all the subjects specified above as the peculiar work of grades IX and X, and prepare directly for XI. If these certificates are of any value we would soon find a certain element leave the good high schools and go to the rural schools where they could get their certificates a year earlier.

But it is suggested also, that this state of affairs might be prevented by adding the subjects specified above to the present "B" examination. This change would produce other symptoms, however. For under these circumstances the leaving class might have to review all the subjects peculiar to the first and second years of the high school course. It would be something like abolishing the examinations at the end of each year in college, and forcing the students to pass all the subjects of the college course for their B. A. at the end of the four year's course. No colleges are drifting in this direction; but they are in the opposite direction; for now the Christmas examination has become a regular institution, making eight portions of the B. A. examination instead of consolidating all examinations into one. In the public schools, too, we find the tendency to be to give the pupils several examinations, in many places monthly, from which their promotion at the end of the year is determined.

The fact is, that the tendency is not to postpone examinations to a late period and make them few, but to bring them on early, and in light instalments.

The French common school leaving examination is as low down as our grade VII—the children passing at the age of 11 very often. In Scotland the new certificate of merit for those leaving the common schools standards is lower than our County Academy Entrance. 12 and 13 is a common age. And an age limit is now suggested when it is found that some pupils come up at 11 years of age.

IN SCOTLAND.—The latest circular of the Scotch Education Department intimates a still further change in its high school examination system lately adopted. An Intermediate examination is given in addition to the Leaving Examination.

Candidates for the Leaving Certificate proper must be seventeen years of age, and must have attended at a recognized high school for four years.

Candidates for the Intermediate Certificate must be fifteen years of age, and must have attended at a recognized high school for two years.

Such conditions attached to our present examinations would cut off the 1,000-odd schools doing high school work from competition with the few high schools and academies which have a full staff of high school teachers. It would also cut off private students.

These notes are made to suggest to those who have not been thinking on such subjects the difficulties involved. It would be a very great pity to make a change before thinking out carefully how it is going to work. It is possible—more, it is very probable, that our present system involves less difficulty than any other. The difficulties which some have been feeling are altogether local, due to weak teachers, excessively crotchety trustees or school patrons, and the failure of the parties concerned to understand the true object of education, and successful methods of instruction.

APPLICATION CERTIFICATES.—Teachers should be careful not to certify candidates to examination who are not likely to pass. The good teacher who has not backbone enough to be honest cannot be excused for putting the province to the expense of giving an examination merely as an exercise to a pupil. That should be done entirely by the teacher as a part of his school work for which he is employed, and should not be put upon the Provincial Examiners, who have more than enough work to do in examining those who are qualified. Some teachers send up unqualified candidates honestly, for they are not competent to estimate qualifications; and are really doing the best they can. But even this is not creditable. Often it happens, however, that candidates fail from accidental causes, and a small percentage of failures cannot fairly be considered discreditable to any school.

It will not do for a teacher to inform anyone that the examination is not a fair test, and pretend that he has been educating the candidates while others were cramming them. If the written examination is not a good test, it is because it may allow one to pass too easily. There has been neither culture nor education of any useful kind given if the pupil is unable to show it on the ordinary and simple questions which characterize our examinations. And it is precisely in those schools where there is the greatest care taken of the pupil from the lowest grade up, and where there is the fullest culture and the least cram, that we have the best results—as a temporary visit to the regular exercises of the school would lead one to expect.

HISTORY IN THE CURRICULUM.—It had been urged for some time that in high schools where the County Academy Entrance examination is not necessary, pupils were admitted into the high school without any knowledge of Canadian history. And thence they entered into the higher grades of the Academies, with the result that they become qualified eventually to teach school without any knowledge of our own history.

To remedy this defect it was suggested that Canadian history might well be combined with Canadian civics as the history of grade IX. British history would then be relegated to grade X, as Universal has been to grade XI.

In the common school grades two texts for British and Canadian history are being used, costing together 67 cents, the Canadian history being generally considered too voluminous. In New Brunswick a combined English and Canadian history costing only 30 cents has just been adopted. The English history is an Ontario school book, the Canadian History, consisting of only 90 pages, is the work of Dr. G. U. Hay, and has received the highest recommendations from the best known authorities in the two provinces. The Council was certain, therefore, that

in prescribing this book after a slight suggested revision, they were consulting the educational and financial interests of the Province.

The larger Canadian history is not thrown out, for the pupils take this book into the high school where Canadian history should have had an important place.

It will be noticed that the Canadian and the British history of the high school grades will henceforth be merely reviews, the main lines of which should have been well understood in the common school grades.

Some teacher may say, "but our pupils skipped the history of the common schools, and therefore they must study Canadian and British History for the first time." If such a teacher should thereafter suggest that the Provincial Course should be adapted to his irregularly promoted pupils he should promptly leave the profession; for there are many without a school who can with advantage to the public and the profession, take his place.

But as is explained in the revised course of study, there is a very great reduction of the combined historical and geographical courses made by the device of evenly distributed optional questions, which practically reduces the amount of the prescription to half of what it was in the days when no optional questions were given. This allows teachers to have a full comprehensive course if they understand how to do it effectively and have the proper kind of students, or to take a narrower but more intensive course. The result of this wide option will be watched with great interest, for there is no subject which* has been more abused as an instrument of cram than these two.

No text books are all that can be desired; and it is better to bear the ills we have than fly to others worse. Their use in the higher grades will be more satisfactory to the extent that the teachers of the higher grades are superior to those of the lower grades in teaching these subjects.

In the common school grades the division of the historical study is left to the principal of each school in the meantime.

GEOGRAPHY.

(Outline Maps to be filled in by the Pupil.)

One of the most useful methods of studying geography is the filling in of an outline map by the pupil. Miss Ganong, of the Halifax Ladies' College, has published books of such maps, which can be had through A. & W. Mackinlay, Halifax. The Dominion of Canada book contains the same outline repeated five times on five leaves 10 by 13 inches, the first page giving instructions as to their use. The first map is for physical features, second for biological features, third for population and races, fourth for cities and towns, and fifth for railroads and industrial features. Ten cents per book is at the rate of two cents for each map. A book of five outline maps of Europe has also been published. In filling in these outlines the pupil has the geographical features impressed on his memory and understanding in an easy and utilizable manner.

TEXT REVISED UP TO DATE.

A. & W. Mackinlay, the publishers of the General Geography used in the high school grades, intend, we understand, to revise the text and bring it up to date. They kindly propose to take back at half price all copies of the present text bearing the dates of 1900, 1901, or 1902, in exchange for the new, wherever the new text may be introduced.

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