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*CHIEF SUPERINTENDENT OF EDUCATION,*

BY  
**J. GEORGE HODGINS, LL.D., BARRISTER-AT-LAW,**  
*DEPUTY SUPERINTENDENT.*

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# INDEX TO THE TWENTY-SEVENTH VOLUME, 1874.

N.B. THE FIGURES DENOTE THE NUMBER OF THE PAGE.

<b>A.</b>		
Agassiz, Professor . . . . .	8	
Agriculture, Provincial School of . . . . .	74	
<b>AGRICULTURE AND NATURAL HISTORY, Papers on :</b>		
Progressive Agriculture . . . . .	60	
The Study of Nature . . . . .	61	
Kindness to animals . . . . .	61	
Our feathered friends . . . . .	61	
Albert University . . . . .	143	
Ambery, Rev. John, M. A., appointed member C. P. I. . . . .	70	
American National Educational Association . . . . .	19	
American Schools, Defects in . . . . .	54	
Appeals from decisions of Local Boards of Examiners . . . . .	147	
Apportionment, Legislative, to Poor Schools, 1873 . . . . .	30	
Apportionment, Legislative, to Public Schools, 1874 . . . . .	65	
Apportionment, Legislative, General Regulations on making . . . . .	167	
Architecture, Right kind of, for Schools . . . . .	50	
Assistant Teachers, Regulations for . . . . .	147	
Assistant Teachers, Examination of . . . . .	168	
Assistant Teachers, Duties of . . . . .	171	
Astronomical Geography . . . . .	120	
Athens, Education in . . . . .	3	
Australia, Education in . . . . .	57	
<b>B.</b>		
Beaver Dams, Battle of . . . . .	141	
Belleville, Education of Deaf and Dumb Instructors . . . . .	113	
<b>BIOGRAPHICAL SKETCHES :</b>		
Professor Agassiz . . . . .	8	
Dr. Charles Smallwood . . . . .	8	
Professor William Russell . . . . .	9	
J. W. Gamble, Esq. . . . .	9	
Chief John Seneca Johnson . . . . .	9	
D'Alton McCarthy, Esq. . . . .	9	
Rev. James Middleton . . . . .	9	
John Worthington, Esq. . . . .	9	
Mrs. Harris and Mrs. Fox . . . . .	9	
William Barker, Esq. . . . .	9	
Mr. William Walden . . . . .	9	
E. C. Stewart, Esq. . . . .	29	
Hon. Samuel Mills . . . . .	29	
Robert M. Roy, Esq. . . . .	45	
Judge Logie . . . . .	46	
Captain James Johnson . . . . .	46	
Mrs. Bogart . . . . .	46	
Hon. H. H. Killaly . . . . .	62	
Richard Miscotte, Esq. . . . .	61	
Adiel Sherwood, Esq. . . . .	63	
B. C. Davy, Esq. . . . .	63	
Rev. James Porter . . . . .	91	
S. B. Freeman, Esq., Q. C. . . . .	91	
Col. George K. Chisholm . . . . .	92	
Dr. Duggan . . . . .	92	
Mrs. William Gunn . . . . .	92	
Archdeacon Patton, D.D. . . . .	106	
Rev. Wm. Bell, M. A. . . . .	106	
Rev. W. Macaulay . . . . .	106	
A. B. Dana, Esq. . . . .	107	
Alfred Todd, Esq. . . . .	107	
Denis Lake, Esq. . . . .	107	
Mr. William Davison . . . . .	107	
Jacob Keefer, Esq. . . . .	107	
Miss Agnes Strickland . . . . .	139	
Col. William Ketcheson . . . . .	139	
Robert Smith, Esq. . . . .	139	
T. B. Stokes, Esq., M. D. . . . .	139	
The Late John Sandfield Macdonald . . . . .	185	
Albert Pellew Salter . . . . .	186	
Books, Short critical notices of . . . . .	46, 47, 63, 80, 187	
<b>C.</b>		
Canada, Illiterates in . . . . .	43	
Canadian Military College . . . . .	58	
Carlyle, Good advice from . . . . .	44	
Carman, Bishop, elected Member C. P. I. . . . .	99	
Central Committee of Examiners . . . . .	69, 146	
Certificates granted at Dec. Examinations, 1873 . . . . .	28, 29	
Certificates granted at July Examinations, 1874 . . . . .	153, 180	
Certificates, Normal School, by Chief Superintendent . . . . .	99	
Certificates, Monitors, Regulations on . . . . .	168	
Certificates, Special Regulations on . . . . .	166	
Certificates, Suspension of, Regulations on . . . . .	166	
Cheques to teachers . . . . .	167	
Chief Justice Richards, Case, on prices of books, submitted by Chief Supt. . . . .	148	
Colborne Competitive Examination . . . . .	144	
Colonial Geography and National Schools . . . . .	102	
Columbus, Ohio, Deaf and Dumb Institution at . . . . .	3	
Competitive Examinations in Townships . . . . .	97	
Competitive Examinations, Regulations for holding . . . . .	98	
Compulsory Education, Duty of Trustees, Census returns . . . . .	161	
Compulsory Education in Lincoln . . . . .	24	
Compulsory Education in New York . . . . .	175	
Compulsory Education in California . . . . .	175	
Congress, Library of . . . . .	5	
Constantinople, Newspapers at . . . . .	5	
Consolidated Public School Laws . . . . .	36	
Corporal Punishment in Schools . . . . .	13	
Corporal Punishment in New York . . . . .	37	
<b>CORRESPONDENCE :</b>		
Resident vs. Rate-payer . . . . .	24	
Prayer in School . . . . .	24, 60	
Teaching German in our Schools . . . . .	60	
The Teacher is not a Despot . . . . .	185	
<b>COUNCIL OF PUBLIC INSTRUCTION, Minutes of :</b>		
of 69, 98, 146 . . . . .	162, 163	
List of first-class Certificates . . . . .	146	
Resolution on Mr. James Hughes . . . . .	70	
Resolution on Reporters . . . . .	146	
Sangster & Smith contest . . . . .	112, 128, 129	
Regulations on Monitors and Assistants . . . . .	147	
grants Medals for best Examination . . . . .	146	
The, Reconstructed . . . . .	33, 81, 145	
adopts General Regulations for Public Schools . . . . .	163	
Cree Language, Alphabet for . . . . .	4	
<b>D.</b>		
Davison, John L., appointed 2d Assistant B. M. S. . . . .	70	
Deaf and Dumb Convention of Instructors, Belleville . . . . .	113	
Deaf and Dumb Institution at Columbus, O. . . . .	8	
December (1873) Examinations, Certificates granted at . . . . .	28, 29	
Denominational Education in England . . . . .	160	
Departmental Notices (end of each No. . . . .	—	
Derby, Lord, Address to boys . . . . .	32	
Disinfectant, An available . . . . .	106	
DUFFERIN, LORD, at Montreal . . . . .	47	
" " at Collegiate Institute, Ottawa . . . . .	126	
DUFFERIN, LORD, grants medals for N. and M. S. . . . .	70	
DUFFERIN, LORD, on Spurious Literature . . . . .	178	
DUFFERIN, LORD, Visit to New York . . . . .	187	
Duties of Pupils . . . . .	172	
" " Rural School Trustees . . . . .	172	
Duties of Boards of School Trustees . . . . .	173	
<b>E.</b>		
<b>EDITORIAL :</b>		
School Legislation . . . . .	1	
Administration of the School Law . . . . .	17	
The recent School Legislation . . . . .	33	
The Council of Public Instruction . . . . .	33	
High Schools and Collegiate Institutes . . . . .	33	
Public Schools . . . . .	34	
Selection of Public School Sites . . . . .	49	
Competitive Examination in Townships . . . . .	97	
Votes cast at Smith and Sangster election . . . . .	129	
On Text Books, Case submitted to Chief Justice Richards . . . . .	145	
On Compulsory Education . . . . .	161	
Establishment of School Libraries . . . . .	177	
Education, Notes on . . . . .	142	
" in Ontario . . . . .	2, 144	
" " Quebec . . . . .	23	
<b>EDUCATION IN VARIOUS COUNTRIES :</b>		
Higher Education in Ontario . . . . .	2	
High School Examinations . . . . .	2	
Religion in the Schools, vs. Denominationalism . . . . .	3	
National Necessity for Normal Schools . . . . .	3	
Deaf and Dumb Institution at Columbus, Ohio . . . . .	3	
Education in Athens . . . . .	3	
Roman Celebrations, Prizes in Schools . . . . .	3	
Wanted—an Alphabet for Japan . . . . .	4	
Alphabet of the Cree Language . . . . .	4	
Women in Colleges . . . . .	4	
Tests of the School System . . . . .	5	
School Houses at the Vienna Exhibition . . . . .	21	
Normal Schools . . . . .	21	
Inefficient Teachers . . . . .	22	
Industrial Schools . . . . .	22	
Industrial or Technical Education . . . . .	22	
Education in Quebec . . . . .	22	
Illiteracy in the U. S. . . . .	43	
" in Canada . . . . .	43	
The Ops School Difficulty . . . . .	43	
Study of School Law in Michigan . . . . .	44	
Defects in American Sch's . . . . .	57	
Education of Women in England . . . . .	57	
Education in Australia . . . . .	57	
Relics of an old Roman School . . . . .	57	
Irish Catholics and Education in Canada . . . . .	58	
The New Brunswick School Law . . . . .	58	
A Canadian Military College . . . . .	58	
Feeders to the proposed Military College . . . . .	59	
Ontario Institution for Deaf and Dumb . . . . .	59	
Convention of Instructors of Deaf and Dumb . . . . .	59	
Military Academies . . . . .	82	
Ottawa Normal School . . . . .	84	
University Local Examinations . . . . .	85	
Endowment of Victoria College . . . . .	86	
Compulsory Education in New York State . . . . .	86	
American National Educational Association . . . . .	86	
Book and Stationery Store, London . . . . .	109	
Rugby School . . . . .	109	
Notes on Education . . . . .	109	
Vote for English Education . . . . .	120	
Irregular School Attendance . . . . .	120	
<b>EDUCATION, The Question of Public :</b>		
How Education can Elevate a Nation . . . . .	18	
The American National Educational Association . . . . .	86	
Mr. Goldwin Smith on English Education . . . . .	19	
A Great Error in Modern Education . . . . .	20	
Claims of Science to Public Aid . . . . .	20	
<b>EDUCATION IN ONTARIO, Papers on :</b>		
Public School Teachers' salaries . . . . .	23	

Music in our Public Schools 23  
 Compulsory Education in Lincoln 24  
**EDUCATION PRACTICAL, Papers on :**  
 Elementary Science in School 6  
 Prizes in Schools—Humane Education 6  
 Criticism in School 6  
 School-room Errors 25  
 Let our Children look at Nature 25  
 No time for Singing 40  
 Johnny becomes acquainted with something he can't see 40  
 Words without Ideas 41  
 Prof. Agassiz as a teacher 41  
 Maxims of Methodical Teaching 42  
 Where Teachers fail 42  
 A Teacher's Gatherings 53  
 How to make School pleasant 54  
 Value of the Morning Hours 54  
 Power and use of Music in Schools 54  
 Elementary Science in our Schools 55  
 Practical Life Education 55  
 Sunday School Superintendents 55  
 When Lessons should be learned 88  
 Shall we have a Botany Class? 88  
 Not in Vain 102  
 Hints for the School-room 103  
 Help the Children 103  
 Know your Children 103  
 Military Drill at Schools 104  
 The Teacher 120  
 Astronomical Geography 120  
 Valuable Hints on School Management 137  
 Tact in Teaching 138  
 Teachers should be Visitors to Parents 138  
 School Missionary Work 138  
 Ludicrous Incidents in Schools 138  
 Signalling Classes 157  
 Spare the Rod 158  
 Free-hand Drawing 158  
 Object Lessons 181  
 The Kindergarten System of Education 181  
 The Kindergarten 181  
 Learn to Draw 182  
 Schools and Social Manners 182  
 Educational Intelligence 15, 47, 64, 78, 94, 110, 126, 175, 187  
**EDUCATIONAL SUBJECTS, Papers on :**  
 Public School Life 73  
 Convocation Season 74  
 The Provincial School of Agriculture 74  
 County of Hastings 75  
 Sex in Education 75  
 England's Export Book Trade 13  
 England, Denominational Education in 160  
 English Dictionary, New 71  
 Education, Goldwin Smith on 19  
 English Literature 71  
 Language, Spread of 90  
 Examinations, Dec., 1873, Result of 28, 29  
 Examinations, July, 1874, Result of 155, 180  
 Examiners, Appeals from decisions of Local Courts 147  
 Examiners, Public School 167  
 Central Committee, First-class Certificates granted 146  
**F.**  
 Fletcher, Morris J., appointed 3rd Assistant M. S. 98  
 Forms of Prayer, Public Sch'l 164  
 Blank Responsibility of Inspectors 166

Forms, furnished by Copp, Clark & Co. 175  
 Freilev, The Knave's Cross of 10  
**G.**  
 Gases, Professor Tyndall on 123  
 General Regulations for Public Schools 164  
 German Geographical Societies 5  
 German in our Schools 90  
 Germany, Short-sighted persons in 160  
**GEOGRAPHICAL AND OTHER SUBJECTS, Papers on :**  
 Geography of the Year 42  
 Geographical names of New York 42  
 Names of Rulers 42  
 A School Scrap-book 43  
**GOVERNOR GENERAL, The,**  
 at Montreal 47  
 Grants medals for N. and M. S. 70  
 at Ottawa Collegiate Institute 126  
 Grant, Legislative, for Public School, 1874 65  
 Grant, Legislative, for Roman Catholic Separate Schools 1874 65  
 Grant, Legislative, for Poor Schools, 1873 30  
 Grasset, Very Reverend Henry J. B. D., appointed Chairman C. P. I. 146  
**H.**  
 High School Examinations 2  
 High Schools, summary of recent legislation 33  
 Hodgins, Dr., Speech at Deaf and Dumb Convention, Belleville 114  
 Hodgins, Dr., speech at National Educational Institution, Detroit 144  
 Holidays and Vacations, Public Schools 164  
 Hours of Daily Teaching in Public Schools 164  
 Hunter, Mr. rejected as member C. P. I. 130  
 Hughes, James, resigns membership of B. M. S. 70  
**I.**  
 Illiteracy in the United States 43  
 " in Canada 43  
 Imperial Census 93  
 Industrial Schools 22  
 " Education 22  
 Inefficient Teachers 22  
 Inspectors' Opinions on Text-books invited 160  
 Inspectors not to interfere in C. P. I. elections 163  
 Inspectors' Qualifications and Duties 165  
 Inspector as umpire, ex-officio examiner 167  
 Inspectors' Salary 167  
 Irish Catholics and Education in Canada 58  
**J.**  
 Japan, an alphabet for 4  
 July Examinations, 1874, Result of 155, 180  
**K.**  
 Kindergarten education 25  
 Kingston Military College 165  
 Knox College, laying corner stone of 78  
**L.**  
 Legislative Apportionment, 1874 65  
 Library of Congress 5  
 Libraries and Reading Rooms, Village 177  
 Lincoln, Compulsory Education in 24  
**LITERATURE AND SCIENCE, Papers on :**  
 Mr. Lowe on Cheap Literature 89

The Value of Literature to Teachers 89  
 The Spread of the English Language 90  
 Associations of Young Men 90  
 Notes on the Science of Weather 90  
 The Size of Countries 91  
 On spare hours and reading 121  
 Preparation in vacation 122  
 The Comet 122  
 Safety of Lightning Rods 123  
 Population of the Globe 123  
 What makes the sky blue 123  
**LITERARY AND SCIENTIFIC SUBJECTS :**  
 The New English Dictionary 71  
 English Literature 71  
 Pleasant Reading 72  
 Changes in Language 72  
 Book for Boys 72  
 The Parting of Douglas and Marmion 73  
 The Uses of Philology 155  
 Phonetic Spelling 156  
 Physiology in the Schools 156  
 Literary Societies 122  
**M.**  
 McCaul, Dr. elected member, C. P. I. 70  
 McDonald, Judge, number of votes cast for 130  
 McGill University 94, 110  
 McPhedran, Alexander, appointed 1st. assistant, B. M. S. 70  
 Masters' opinions on text-books, invited 160  
 Masters, powers and duties of 170  
**MATHEMATICAL DEPARTMENT :**  
 Professor Muller on Circles 8  
 New System of Weights and Measures 8  
 Examination Questions, 1st class, 1873 27  
 Examination Questions, 1st class, 1874 156  
 Dr. Young submits Mr. Glashan's Solutions 61  
 Arithmetical rules for stock remnants 62  
 Solution for six problems 75  
 " of questions at Normal and C. B. Examinations 125, 156  
 Letter from Clericus, and Bombelli's rule 139  
 Solution of "Clericus" Question 185  
 Solution of Nat. Philosophy Paper 195  
 Medals granted by GOVERNOR GENERAL to N. & M. S. 70  
 Medals granted C. P. I., for best examination 146  
 Meteorological Monthly Reports, 14, 26, 39, 57, 77, 108, 124, 14, 159, 176, 183  
 Michigan, Study of School-law in 44  
 Military College for Canada, 58, 59  
 " Academies 82  
 " College, Kingston 175  
 Mills, Mr., number of votes cast for 130  
**MISCELLANEOUS :**  
 The Knave's Cross of Freilev 10  
 The mutual relations of the U. S. and Canada 11  
 Historical Associations 12  
 I've got orders not to go 12  
 What to be careful of 12  
 Farmers' homes 12  
 Is it worth while? 13  
 Abolishing corporal punishment in schools 13  
 Diet of school girls 13  
 England's export book trade 13  
 Lord Derby's advice to boys 32  
 What's the use? 32  
 The snow prayer 46  
 He died for me 46  
 General rules about law 46  
 School time 92  
 The Imperial Census 93  
 The best emigration 93  
 Fair Canada 94

A plea for little ones 141  
 Anniversary of the battle of the Beaver Dams 141  
 Rural Schools — Township Boards 141  
 The Swiss Schools 142  
 Notes on Education 142  
 Memory Bells 186  
 To Promote Peace in a Family 186  
 Model Schools, medals granted by the GOVERNOR-GENERAL 70  
 Monitors, Examination of 168  
 " Regulations for 147  
 Montreal, The GOVERNOR-GENERAL at 47  
 Music in our Public Schools 23  
**N.**  
 Nelles, Rev. Dr., appointed member C. P. I. 146  
 New Brunswick School Law 58  
 Newspapers at Constantinople 5  
 New York, Geographical Names of 42  
 New York, compulsory education in 175  
 Normal School Certificates 99  
 " Ottawa 82  
 " Schools, National, necessity for 3, 21  
 Normal and Model Schools, Medals granted by the GOVERNOR-GENERAL 70  
**O.**  
**ONTARIO SCHOOL MATTERS.**  
 Papers on :  
 University Consolidation in Ontario 178  
 Chair of Natural Science in Toronto University 179  
 Hon. E. Blake on Educational Franchise Test 179  
 Proceedings of Council of Public Instruction 179  
 The Higher Education of Women in Canada 180  
 Ontario Teachers' Association 130  
 " Education in 144  
 " Higher Education in 2  
 Ops' school difficulty 43  
 Ottawa Public Schools 52  
 " Normal Schools 82  
 " Collegiate Institute, Visit of GOVERNOR GENERAL 126  
**P.**  
 Patton, Archdeacon 106  
 Philology, uses of 155  
 Phonetic Spelling 156  
 Physiology in the Schools 154  
**PHYSICAL SCIENCE, Papers on :**  
 School Hygiene 104  
 A committee of the whole against death 104  
 Popular ignorance of sanitary science 105  
 An available disinfectant 106  
 Playgrounds, necessity for 53  
**POETRY :**  
 The knave's cross of Freilev 10  
 Is it worth while? 13  
 The two angels 44  
 The snow prayer 46  
 School time 92  
 Fair Canada 94  
 Not in vain 102  
 The Teacher 120  
 A plea for little ones 141  
 Memory Bells 186  
 Politeness in the school-room 41  
 Population of the Globe 123  
 Poor School Apportionment, 1873 30  
 Porter, Rev. James 91  
**PRACTICAL SCHOOL QUESTIONS, Papers on :**  
 Houses and lands for teachers 100  
 Colonial Geography and the National Schools 101  
 Prayers in school 24, 60, 164  
 Public School Laws Consolidated 36  
 Public School Terms 164

- Public School Trustees, duties ..... 172, 173  
 Public School Meetings, rules for ..... 174  
 Public School Legislation, Summary of recent ..... 34  
 Public School General Regulations ..... 164  
 Pupils, duties of ..... 172
- Q.**  
 Quebec, Education in ..... 23  
 Queen's College ..... 111, 175
- R.**  
 Reciting, Rules for ..... 89  
 Regulations, General, for Public Schools ..... 164  
 Religious Instruction in Public Schools ..... 164  
 Religion in the Schools ..... 3  
 Richards, Chief Justice, case submitted, on prices of Books, by Chief Superintendent ..... 148  
 Robertson, W. J., receives Certificate from C. P. I. .... 193  
 Roman School, Relics of ..... 57  
 Roman Catholic Separate School Apportionment, 1874 ..... 65  
 Rulers, names of ..... 43
- S.**  
 Sangster, Dr., Candidate for election to C. P. I., 112, 128, 129  
 Queries by Mr. MacLennan in C. P. I., on Dr Sangster's Election, and replies of Chief Superintendent ..... 98
- SCHOOL HOUSE ARCHITECTURE**  
 Ventilate the School-house Des Peres School-house ..... 7  
 The right kind of school architecture ..... 50  
 Neglect of ventilation in schools ..... 51  
 Plans of school interiors ..... 52  
 How I kept my school-room clean ..... 53  
 Necessity for play-grounds ..... 53
- SCHOOL DISCIPLINE, Papers on**  
 School discipline and management ..... 37  
 Corporal punishment in New York ..... 37  
 Suspending a bad boy ..... 38  
 School Legislation ..... 1
- SCIENCE AND NATURAL HISTORY, Papers on:**  
 Marvels in telegraphy ..... 76  
 The signal service for 1873 ..... 76  
 Spare the insectivorous birds ..... 76  
 How long animals live ..... 76
- SCIENTIFIC SUBJECTS, Papers on:**  
 When and Where does the Day Begin ..... 184  
 The First Transatlantic Steamer ..... 184  
 Unknown Places ..... 184  
 Lake Superior ..... 184
- Scott, William, appointed Master Boys' M. S. .... 70  
 Shortsighted persons in Germany ..... 160
- Smith, Goldwin, Candidate for C. P. I. .... 112, 128, 129  
 Smith, Goldwin, elected member C. P. I. .... 146  
 Smith, Goldwin, speech at Ontario Teachers, Association ..... 130  
 Smith, Goldwin, on English Education ..... 19  
 Snodgrass, Dr., elected member C. P. I. .... 69  
 Special Certificates ..... 166  
 Spelling, bad ..... 25  
 Strickland, Agnes ..... 139  
 Superannuated Teachers, Recent Legislation on ..... 35  
 Superannuated Teachers' Fund payments ..... 116  
 Swiss Schools ..... 142
- T.**  
 Tabaret, Rev. J., elected member C. P. I. .... 162  
 Teachers, houses and lands for  
 " Inefficient ..... 22  
 " Salaries ..... 23  
 " Cheques ..... 167  
 " Assistant ..... 171  
 " Duties of ..... 170  
 " Retired from the profession ..... 100  
 Teachers' Association, Co. Prescott ..... 160  
 Teachers' Association, Ontario ..... 130  
 Terms, Public School ..... 164  
 Text Books, Case submitted to Chief Justice Richards, by the Chief Superintendent ..... 148
- Text Books, opinions of Inspectors and others invited ..... 160  
 Township Boards ..... 14  
 Trinity College ..... 113  
 Tyndall, Professor, on gases ..... 123
- U.**  
 United States, relations with Canada ..... 11  
 United States, Illiteracy in ..... 43  
 University, Albert, local examinations ..... 85  
 University, McGill ..... 94, 110
- V.**  
 Vacations, Public School ..... 164  
 Ventilate the school-house, 7, 51  
 Ventilation, Public School ..... 165  
 Victoria University ..... 94  
 Vienna Exhibition, School-houses at ..... 21
- W.**  
 Wilson, Professor Daniel, elected member C. P. I. .... 146  
 Wood, S. C., M. P. P., elected member C. P. I. .... 146  
 Women in Colleges ..... 4
- Y.**  
 YOUNG MEN, Papers on:  
 The two angels ..... 44  
 Good advice from Carlyle ..... 44  
 Early formation of habits ..... 45  
 How to get rich ..... 45  
 Respect the body ..... 45  
 Young, Rev. Dr., Mathematical Solutions ..... 61, 125, 156

If not called for within one month, the Postmaster will please send to the School Inspector.

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## CONTENTS OF THIS NUMBER.

	PAGE
I. SCHOOL LEGISLATION .....	1
II. PAPERS ON EDUCATION IN VARIOUS COUNTRIES.—(1) Higher Education in Ontario. (2) High School Examinations. (3) Religion in the Schools vs. Denominationalism. (4) National Necessity for Normal Schools. (5) Magnificent Institution for the Deaf and Dumb at Columbus, the Capital of the State of Ohio. (6) Education in Athens. (7) Roman Celebrations—Prizes in Schools. (8) Wanted—An Alphabet for Japan. (9) Alphabet of the Cree Language. (10) Women in College. (11) Tests of the School System .....	2
III. PAPERS ON PRACTICAL EDUCATION.—(1) Elementary Science in Schools. (2) Prizes in Schools—Humane Education. (3) Criticism in School .....	6
IV. PAPERS ON SCHOOL HOUSE ARCHITECTURE.—(1) Ventilate the School House. (2) Des Peres School House .....	7
V. MATHEMATICAL DEPARTMENT.—(1) Professor Müller on Circles. (2) New System of Weights and Measures .....	7
VI. BIOGRAPHICAL SKETCHES.—(1) Prof. Agassiz. (2) Dr. Charles Smallwood. (3) Professor William Russell. (4) J. W. Gamble, Esq. (5) Chief John Seneca Johnson. (6) D'Alton McCarthy, Esq. (7) The Rev. James Middleton. (8) John Worthington, Esq. (9) Mrs. Harris and Mrs. Fox. (10) Wm. Barker, Esq. (11) Mr. William Waiden .....	8
VII. MISCELLANEOUS.—(1) Young Canada in Denmark. (2) The Mutual Relations of the United States and Canada. (3) Historical Associations. (4) "I've got orders not to go." (5) What to be careful of. (6) Farmers' Homes. (7) Is it Worth While? (8) Abolishing Corporal Punishment in Schools. (9) Diet of School Girls. (10) England's Export Book Trade .....	10
VIII. MONTHLY REPORT ON METEOROLOGY OF THE PROVINCE OF ONTARIO .....	14
IX. EDUCATIONAL INTELLIGENCE .....	15
X. DEPARTMENTAL NOTICES .....	15
XI. ADVERTISEMENT .....	16

## SCHOOL LEGISLATION.

Among the measures submitted to the Legislature at the present session is one relating to the improvement of our Public High Schools. We shall not go into details as to the various provisions of the Bill, but will simply indicate a few of its features, so far as it affects the Schools themselves.

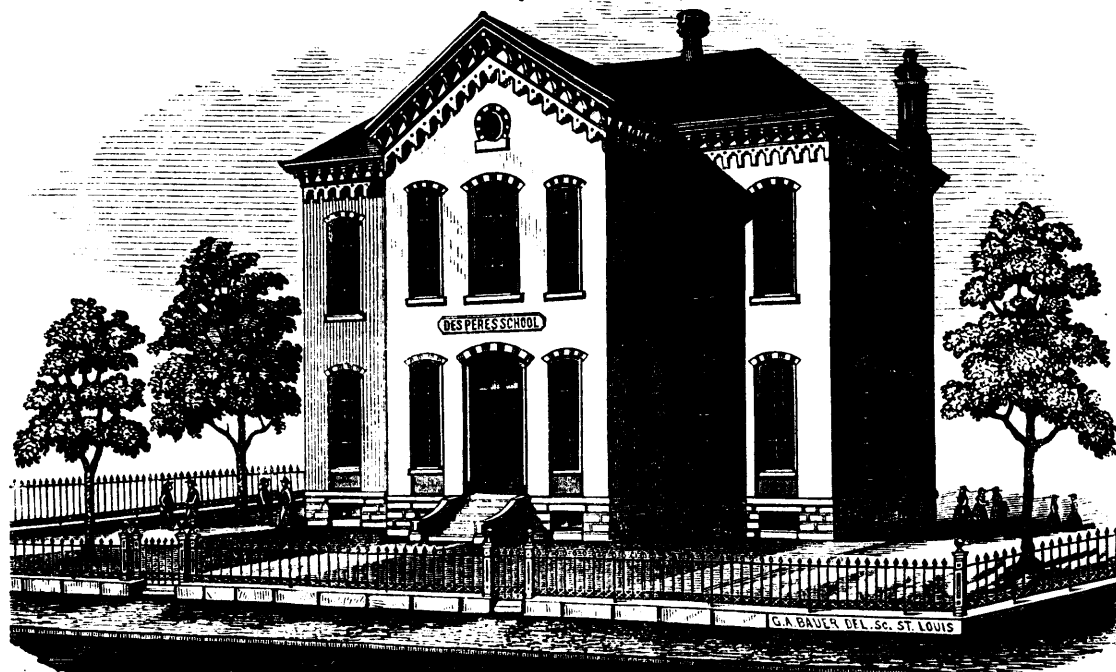
It is proposed to apply the same principle to the High Schools as to the Public Schools, so far as it relates to the proportion of the sums raised by County Councils for the support of High Schools. These Councils now raise a sum at least equal, clear of all charges, to the amount apportioned to them from the Legislative grant. This principle is just and equitable, and is the true one to apply in cases of Legislative aid.

It is proposed to provide for the uniform examination of pupils for admission to the High Schools, and to give a small gratuity to the masters of those Public Schools whose pupils pass a satisfactory examination for admission to the High School. The principle of uniform examination is universally approved.

Provision has been made for declaring a Union Board of Public and High School Trustees a corporation. Hitherto they were only quasi corporations, which led to much inconvenience and uncertainty.

Hereafter it is provided that all alterations in School Section boundaries shall be made by a Township Council before the 1st of May in each year, so as to give complaining parties ample time and opportunity to appeal to the County Council on the subject.

The powers also of the committees of the County Council for the settlement of these School Section boundary complaints have been enlarged and extended, so as to enable them to settle the matters in dispute.



DES PERES SCHOOL HOUSE, ST. LOUIS, U. S. (See page 7.)

In regard to Township Boards, it is not proposed to press their establishment, but simply to enable Township Councils to appoint parties to inquire into the value of School property in each section, so as to aid them in arriving at some equitable basis of settling conflicting interests in the matter.

It is further proposed to require the chairman of each annual Public School meeting to submit the matter of a Township Board to the consideration of the ratepayers, so as to have it thoroughly and generally discussed before adoption in the Township.

The provision of the law in regard to loans to rural Trustees has been amended.

Further provision will be made in regard to School sites; and a mode of obtaining a title for sites in the hands of minors, mortgagors, &c., has been proposed.

To enable Trustees the more readily to provide School accommodation for all of the children in the School Section, Trustees will be enabled to establish two or more Schools in a Section. This will also lead to an enlargement of the Sections, and will, so far as it goes, be a step in the direction of Township Boards.

In order to give effect to the compulsory clauses of the Act, Trustees will be authorized and required to take a School census of absentee pupils every year.

In future it is proposed to guarantee to each Public and High School teacher a retiring allowance of not less than six dollars a year for every year of service in Ontario. Teachers of sixty years of age shall have the right to retire at their option. Those under sixty may do so on certain conditions.

Teachers will be by law allowed their holidays, and at least four weeks in the year, should they be sick.

Additional allowance for special services is provided for County Inspectors and examiners.

One important feature in the new Bill is provision for the establishment, maintenance and inspection of Schools in new and unorganized townships. Trustees will also be enabled to collect rates in these townships.

High and Public School Inspectors will be authorized to grant special certificates as monitors and assistants to senior pupils or other qualified parties.

Semi-annual examinations of Public School teachers will be superseded by an annual one. Much trouble and inconvenience results from the frequency of these examinations. An interval of six months is too short. Of course Inspectors will still have the power of granting interim certificates.

It is proposed to grant special certificates to teachers educated in any Normal Schools in the British dominions.

With the exception of the provision relating to library and prize books, announced in the Speech from the Throne, the foregoing are the main features of the new amended School Bill now before the Legislature.

## II. Papers on Education in Various Countries.

### 1. HIGHER EDUCATION IN ONTARIO.

The School system of Ontario establishes three grades of Public Schools. The primary grade, which deals with the essential rudiments of a School education, is the "Common" or "Public School." As this must end as well as begin, so far as the majority of the people is concerned, their course of instruction in School, the programme of studies has been made sufficiently comprehensive to include, in an elementary sense, the principal subjects of an English education.

The intermediate grade, also the goal of the great majority of those who enter upon its course, is the "Grammar" or "High" School. The range of studies here includes the higher part of the elementary course, but carries it somewhat further, and adds to it the important department of modern and classic languages.

The highest grade is the University, which takes the pupil after he has mastered the High School course and gives him a thorough training in literature, languages, physical science and philosophy.

This plan is excellent, but its success is not very encouraging. With such a School system as we have, our people ought to be the most thoroughly educated, the most highly cultured, on the face of the globe. But no one at all conversant with the present state of education in this country will dare to speak highly of it. Thousands of children, despite our compulsory Act, never enter our Schools at all, and receive no instruction from other sources, and thousands more annually graduate into manhood and womanhood with so very little education that it may be questioned whether it is of any use to them.

No one who reads these lines will fail to fix on instances in his own neighbourhood where farmers and others possessed of abundant means have allowed the whole or a part of their families to grow up either with the merest smattering of the rudiments of an English edu-

cation, or with none at all. The apathy and indifference of some parents in almost every School section is a stereotyped complaint of teachers, and is only too well founded in fact.

The next weak point in our system is the inadequate supply of really competent teachers. There is no deficiency, and never was any, in the number of persons willing to teach, but there always has been and still is a lamentable deficiency in the number of persons possessing the necessary talent and *acquirements*. Except as assistants, the School system does not contemplate the employment of third class teachers. Their employment in other capacities has become a necessity, but it is no part of the original plan. It may be replied that many third class teachers possess as much aptitude to teach as some of the higher classes. Quite true; but they cannot teach what they do not know, and the ordinary programme for the Public Schools, in its higher class work, includes subjects that they are presumed to know nothing about, and the presumption in three cases out of four is correct. The holder of the third class certificate is in the plan of our system a three years' apprentice, and should in no case be the master of a Public School.

But at the present rate of issue there would not be enough provincial certificates issued in a century to occupy all the places. Nay, even worse, for the last three years, in order to prevent some Schools from being closed, Boards of Examiners were forced to recommend some of those who failed to pass for the ordinary third class certificates, for six months' permits, and these people had to take sole charge of Public Schools in their several counties.

The picture of the state of education that we have roughly limned is not very flattering, but there are a good many dark shades yet to fill in. In the North Riding of Waterloo, there is one High School. The population of the Riding is over 20,000. In wealth and the material comforts of life, no spot of equal size on the planet is more highly favoured. About three-fourths of its Public Schools are taught by third class teachers, who, as we have just shown, are themselves unable to complete the School programme, modest as it is. What then are the wealthy inhabitants of this Riding doing to provide their children with a thorough education? They send about 20 of them to the High School. About one-tenth, or one per cent. of the population, receive the benefits of a superior education!

Assuming that in the Schools taught by first and second class teachers, a few of the pupils receive instruction in the higher branches...and we know the number is not large—we are safe in concluding that the elements of a liberal English education are not to-day within the reach of more than four per cent. of the youth of the North Riding of Waterloo. No reflection is here intended on painstaking and studious third class teachers, many of whom, we hope, are preparing to graduate into the Provincial ranks on the expiration of their present certificates.

But the people themselves ought to give this matter the earnest consideration it deserves. It is theirs to apply a remedy which will obliterate the shameful disparity between the two ridings in respect to educational advantages.—*Waterloo Chronicle*.

### 2. HIGH SCHOOL EXAMINATIONS.

The change which has lately taken place in the High School Entrance Examinations, in order to secure uniformity of attainments among the entrants, is giving universal satisfaction throughout the Province. Previous to the last examination, the Head Master was permitted to prepare the examination papers for his own school; this was manifestly unfair and partial. We can readily understand the difficulty a Master would have in passing his pupils from one school to the other, when compelled to use questions prepared in Toronto, and how easy it would be to obtain great credit when he prepared the questions himself. We do not mean to insinuate that the questions would be deliberately prepared for a purpose, nor do we say the pupils would be "stuffed" for the occasion; but it is only natural to suppose that the questions would be in accord with the line of study each class had been pursuing, and couched in such language as would suggest an answer,—while those prepared at the Department in Toronto would present none of these advantages to the pupils. The result would necessarily be that one school would present a state of efficiency to which it would not be entitled, while another would unjustly be looked upon as totally inefficient; hence the unfairness in the former mode of examinations, arising from want of system and uniformity, to which we have referred.

On the last occasion, the papers in the six subjects of examination—viz.: Dictation, Spelling, Grammar, Geography, Arithmetic, and Composition—were prepared at the Department, and sent, with values attached, to each High School. By these means it was expected that uniformity would be attained—an improvement sorely needed—because in some places pupils were admitted for the sake of increasing the Government Grant, who very much needed more Public School instruction.—*Peterborough Review*.



### 3. RELIGION IN THE SCHOOLS vs. DENOMINATIONALISM.

The Bishop of Manchester (Dr. Fraser), who visited Canada in 1867, in his late charge, thus speaks of the religious basis of school instruction:—

"It was for the cause of religious education and not for the cause of denominationalism that his anxiety was aroused. If they could have in the National Schools religious teaching based upon the doctrines of the Apostles' Creed, enforcing the Ten Commandments, and including the Lord's Prayer, he should care very little what became of denominationalism. He was afraid that Roman Catholics would not accept this basis, and Jews, and perhaps Unitarians, might claim the protection of a Conscience Clause; but all other religious bodies in England surely might agree to sink their differences, and meet upon this common ground."

### 4. NATIONAL NECESSITY FOR NORMAL SCHOOLS.

The Iowa State Superintendent of Education thus discusses the national necessity and advantage of Normal Schools:—

"The strength and permanency of a popular government are vested in the intelligence and refinement of the people, and therefore our Public Schools are the hope of the nation. Now, if these are neglected, or through defective supervision are suffered to fall into incompetent hands, the State thereby commits the two-fold error of squandering the public funds, and, what is infinitely worse, of allowing, meantime, her foundations for strengthening the very foundations of government to go by unimproved. It is asserted that 94 per cent. of them are without any design whatever of making it a profession. Certainly there should be the same judicious legislation with reference to the school teachers' profession, as there is with reference to the office of magistrate or judge, or any civil interest whatever.

"Sometimes it is urged that ability to manage a school and facility in imparting instruction are so far natural and constitutional endowments of the individual, that the absence of them cannot be supplied by any amount of artificial training and preparation for the work. This objection is sometimes urged in such a way as would make the teacher's vocation an exception among all the learned and useful professions which are ordinarily pursued by men in civilized communities; or more properly, it would exclude it from the list of professions altogether. The very idea of a profession carries with it the notion of an acquired art, although in the acquisition of it there may be a greater or less degree of natural aptitude displayed. But if the power to govern a school and the capacity to communicate instruction are purely natural gifts, and in no sense to be acquired, then, indeed, is the teacher's vocation the most uncertain and unstable of all pursuits. Those thus endowed may not, in any considerable number, enter the school-room; and as it is only after some experience in the business that the teacher can be certain of his capacity, he will be wanting beforehand in one of the strongest motives impelling him to this line of effort—a consciousness that he possesses the gifts requisite to success. Must he apply himself to so responsible a task in the spirit of a mere experimenter, and the children in the meantime be subject to the irreparable damage his blundering efforts may inflict? Allowing that these peculiar gifts cannot be acquired, still a process of experiment will be necessary to determine their presence; and would it not be infinitely better that the work of developing the native talent go on in a Normal School, than that it be prosecuted at the expense of unsuspecting and unprotected childhood?

"It is important, however, to grant that an aptness to teach and an ability to govern are very largely the inheritance of nature, and that the want of them makes many a teacher, otherwise adequately furnished, an incubus to his profession. It is true, too, that the absence of these faculties cannot be supplied by the most efficient and rigid normal instruction that can be devised. But the fact is, that the majority of men and women inclining to this work are possessed of these faculties in greater or less degrees. It is here, as in all other professions, those entering the school-room bring with them every shade and variety of adaptation to their work, from the perfect mastery down through all the grades of mediocrity and indifference to the boundary line of absolute and complete unfitness for the calling."

### 5. MAGNIFICENT INSTITUTION FOR THE DEAF AND DUMB AT COLUMBUS, THE CAPITAL OF THE STATE OF OHIO.

A learned correspondent of the *New York Observer*, speaking of the great institutions of Columbus for the blind, for the insane, for idiots, and for the deaf and dumb, says:—

"I have never seen anything on the continent to compare with them, either in magnitude or in the completeness of their appoint-

ments. A brief account of the Asylum for the Deaf and Dumb will give some slight conception of the grandeur of these institutions, and yet only a slight idea, for the new lunatic asylum is several times larger. The building for the deaf and dumb consists of seven really distinct buildings united into one, and cost in solid cash, and not according to the Tweed arithmetic, \$625,000. It is built of brick, and elaborately trimmed with sandstone. It is, so far as may be, fire-proof, the cornices being of galvanized iron, and the balconies, pillars, railings and floor of iron. The front building is two hundred and seventy feet long, and surmounted by seven towers, the central one of which is over one hundred feet high. Attached to this front building are three wings, running north over one hundred feet, and to the two main wings are again attached two wings running at right angles. The entire building covers four acres, and contains everything that has been invented for the comfort, health and education of the three hundred and seventy pupils in attendance. Twenty-two faithful teachers, trained for their work, are employed in taking the pupils through a ten years' course, as systematically arranged as the course of any school in the land. The deaf-mutes have shown, under this system of training, that they are not inferior in intellectual capacity to those who have the gifts of hearing and speech."

### 6. EDUCATION IN ATHENS.

A "New York Lawyer," writing to the *New York Observer* from Athens last month, says:—

"One of the most singular features of Athens is her educational institutions and her splendid buildings erected for their use. Indigent young men from all parts of Greece, and even from the Turkish Empire, are found in these schools, many of whom sustain themselves by menial service in the city. There is a great ambition among all classes for education. The effect of this is fast telling upon the general intelligence of the people.

"Indeed, the city may be said to be one great school. One out of five of the people are engaged in teaching and learning—ten thousand out of fifty thousand are in her schools. No such proportion of scholars and teachers can be shown among any people in the world. Education is free, even in the Gymnasia, the theological, law and medical schools. But one peculiarity of their teaching, and probably one great weakness of their system, is, that they teach and regard the ancient Greek language as one of their principal attainments, both in the elementary and higher schools. All pupils are required to translate the best of the ancient authors into modern Greek, and this to the exclusion of more practical branches of education. It is said that the best Greek scholars are now endeavouring to form the new Greek language on the model of the ancient Greek, and that the foreign words and corrupt dialects which have crept into the modern Greek are being slowly but surely expunged. French and German are taught in the schools, and in polite society the French language is almost entirely used to the exclusion of modern Greek. Before the war of independence there was not an elementary school in all Greece. But since that time enormous sums of money for the purposes of education have been contributed by rich Greeks residing in other countries. Fine buildings erected by them adorn the city in every direction. These same parties stand ready to furnish the money for improving and developing the whole country by a grand system of railroads throughout the kingdom; but hitherto the petty party squabbles of their Parliament have prevented the passage of bills prepared by the Government for accomplishing this end."

### 7. ROMAN CELEBRATIONS.—PRIZES IN SCHOOLS.

An occasional correspondent of the *Times*, writing from Rome on the 21st ult., says:—

"The third anniversary of the 'Breach of Porta Pia' has been most successful in every way. The weather yesterday was brilliant, a real Italian day; warm and balmy, tempered by a gentle breeze, and with a light blue sky overhead. The people were in the best of good humours, for they have got the laugh against their enemies by a spirited but harmless practical pasquinade, and their day's enjoyment was crowned with the satisfaction of feeling that the year had not been unfruitful of progress, both material and moral. Two celebrations marked the day:—in the morning, the 'pilgrimage' outside the walls to the spot where the breach was made, and through which, as one of the speakers said, modern progress, civilization, and culture made their way into Rome; in the afternoon, the distribution of prizes, on the Capitol, to the scholars of the municipal schools.

"The great event, however, of the day was the distribution of prizes to the scholars of the municipal schools. The scene on the Capitol



was one of the most charming that can be imagined. The piazza was crowded with bright-eyed children, their faces beaming in anticipation of the coming rewards. The side facing the ascent was occupied by a great orchestra filled by some 700 or 800 boys and girls, who were to sing the hymn written for the occasion by Professor Santini, and set to music by the Maestro Alessandro d'Este. The windows of the municipal palaces and every available spot were crowded with spectators, even to the balustrade of the ascent to the Ara Coeli, and the spaces between the legs of the colossal horses of the Twin Brothers at the summit of the Gradidats. The banners of various provinces of Italy floated gaily from flag-staffs erected on the parapets, with a brilliant blue sky over all, and the glorious atmosphere of an early autumn day in Italy communicating a sense of joyousness to the scene it would be next to impossible to attain in England.

"But it is not with a detailed description of the ceremony, the Syndic's speech, the distribution of the prizes, or the singing of the hymns, charmingly as they were given by such a number of fresh young voices, that I would trespass on your space to day. Having commenced my letter with the account of a little by-play in the conflict of parties, it will be more to the purpose now to inquire for a moment what have been the results of the educational system brought into operation in Rome through the breach made in Porta Pia three years ago. Last year no statistics were published, but those given yesterday show a very considerable amount of progress. Up to October, 1871, fourteen day and eight evening schools had been opened for boys; now there are 25 day and 18 evening schools. For girls there were eight day and nine Sunday (*i. e. festa*) schools; now there are 19 day and 16 Sunday schools. Of rural schools (*extra muros*) only one for boys was open at the end of the first year; now there are five for boys and two for girls. In addition to these there are now two artisans' evening schools for grown-up men, on the books of which 331 scholars are inscribed, with an average attendance of 211. In October, 1871, the total number of scholars entered, boys and girls included, was 6,291. Now it is just double, being 12,586, of whom 7,126 are boys and 5,460 girls. The average attendance is 8,651. The number who have passed examination during the year is 6,908, of whom 5,089 have been promoted. At the distribution yesterday 610 girls and 438 boys received first prizes, 489 girls and 637 boys prizes, and 1,237 girls and 1,114 boys honorable mention. The prizes given were silver and bronze medals, books and work-baskets, cases of mathematical instruments, and the like."

#### 8. WANTED—AN ALPHABET FOR JAPAN.

With a people like the Japanese, by whom no institution, however time-honoured, is considered sacred; who have brought their Emperor down from the skies to the level of a human being; who have dethroned their daimios; who have disestablished their national church, and are now about to institute another formed on a conglomeration of articles collected from the creeds of the Roman Catholic, Protestant, Mohametan and Buddhist religions; who have discarded their national dress, their national habits, and their political constitution, we ought not to be surprised to find that they are now anxious to throw over their written character wholesale and to adopt an European alphabetical system in its stead. Such, indeed, was the proposal embodied in a speech delivered at the recent International Congress of Orientalists at Paris by Same-sima Naonoba, the Japanese Minister at the Court of France. "I beg," said his Excellency, "to call your attention to a question of great importance to us. Japanese writing has, as you are aware, practically ceased to be purely alphabetical, and has become, to a great extent, ideographic. As long as we kept to ourselves it sufficed for our wants, but we now find it quite inadequate for the expression of the European words and ideas which we are beginning to employ." And he then proceeded to urge the Congress to throw some light on the subject by discussing the question. According to the French papers, a long debate followed, which led to no definite result, and gave rise to the expression of many opposite opinions, the result appearing to point to the impossibility of arriving at any universal orthography for the transcription of Japanese characters by means of European letters. But the starting fact remains that the Japanese are willing to adopt any alphabetical system of writing which will be approved by and be intelligible to the nations of Europe. And these are the people who, sixteen years ago, would have made very short work of any foreigner who dared to show his face on the sacred soil of Japan!—*Pall Mall Gazette*.

#### 9. ALPHABET OF THE CREE LANGUAGE.

Twenty years ago, says the Rev. E. R. Young, of the Wesleyan Church, in an address on the North-west, an alphabet of the Cree

language, upon the phonetic principle, was devised by the Rev. Jas. Evans, a missionary. Mr. Evans gave years of labour to the perfection of this alphabet, with study of the language. He first carved the letters in wood, and then cast them from lead collected from the tea boxes at the trading posts. Books are now printed in these characters at London, which books are easily read by the Indians. Nearly all of them can read. Children master the alphabet in a few days, and that accomplished are at once able to read. Adults learn in a week or two to read the whole Bible. In their version of the Holy Book, some excusable changes of language are however made so as to adapt it to their understanding. Thus the words "Give us each day our daily bread," are translated for the Crees, "Give us this day that which will keep us in life;" for they have no knowledge of bread.—*Woodstock Times*.

#### 10. WOMEN IN COLLEGES.

The returns from our colleges begin to show, for the present academic year, how far women are availing themselves of the privileges of entering the institutions originally designed for the exclusive advantages of young men. Eighty-six have already entered the Michigan University, four the Colby University, of Maine, and one the Wesleyan, Ct. This is not a very large number, but there must be added to those the young women who have entered the mixed colleges—that is, those in which persons of both sexes have always been received as students. The Council of the University of London has decided to throw open to women its classes of jurisprudence, which are conducted by Sheldon Ames, an eminent lawyer. It is also announced that seventy students, male and female, are about to enter the homœopathic school of medicine connected with the Boston University. The Miss Rogers, who was the first in merit in the local examination at the University of Oxford, has been offered the exhibition which she won. This makes her a full member of the University, and would entitle her to compete for a degree.

These facts show that women, both in England and America, have entered upon the career of culture offered to them. We look upon these facts with great pleasure. They are, incidentally, a rebuke of the superficial quality of female education as hitherto conducted. They are a declaration that women are not satisfied to be rated as incompetent to reach high scholarship, and that they are willing, if the opportunity is offered, to show what they can do. There are difficulties in this new departure, and some evils may grow out of it; but its substantial benefits cannot for a moment be questioned.

We regard, therefore, with much satisfaction, the reflex effect of these demonstrations of the capacity of women for higher study upon female education as a whole. The intellectual deficiencies of the average woman are due to her wretched miseducation. She has been treated as though to be inaccurate and shallow were essentials of her being. A rebellion against this low estimate of her faculties is a hopeful sign. All she asks is an opportunity to prove what she can do, and that the great schools of the world respond to her demand is a matter for rejoicing.—*Methodist*.

The South has not taken amiably the speech of the Rev. Dr. McCosh at the National Educational Convention. It naturally dislikes any intimation that outside of its large towns not much interest is felt in education; and this is what Dr. McCosh is charged with saying. Prof. Jaynes, of Virginia, in a letter of defence to the Dartmouth *Anvil*, presents his own State as an educational representative of the South. He finds in the report of 1872 an aggregate of 3,695 public schools, an increase of 648, with 166,377 pupils, or an increase of 35,289. There were 20,497 pupils at private schools, 7,701 at high schools, and 2,666 at universities, colleges and technical schools.

The Hon. John D. Philbrick, of Boston, says that he was surprised at the interest, the excellence, and the extent of educational institutions generally in Vienna. Some of the higher schools for extent and magnificence were not surpassed, nor for thoroughness. One school that he saw extended entirely around the square, and even its main hall was as large and superbly finished as one of our churches. The great superiority that he found was the mode of teaching by practical illustrations, and by the teacher working with his class, the text books being subordinate and the recitations being at a discount. The thoroughness of special preparation on the part of teachers, and the extent of the apparatus provided and actually used, was one reason of the superiority of Vienna schools, this system running down even into the lowest schools.

The Finance Committee of Michigan University has reported as follows: Total receipts, \$124,456.56; total disbursements, \$124,

468.52. The estimates for the year ending June 30, 1874, are: Receipts, \$107,051.71; disbursements, \$106,087.50. This estimate is made on the basis of the 1-20 mill appropriation being made available next spring. Regent Rynd has given notice that at the next meeting of the Board he would offer a motion providing for the higher acquirements in the Medical Department. The report of Professor Hillyard, in the Department of Geology and Zoology, recommends that Geology and Mineralogy be arranged in the course of the senior year. During the year, besides miscellaneous contributions, the following additions have been made to the museum: A collection of Alaska plants, of 200 species and 1,000 specimens, presented by Captain Dall, U. S. N.; and also an animal collection, presented by Professor Harrington, embracing 3,000 species and 5,000 specimens.

Mr. Goldwin Smith does not approve the histories studied in our schools. He doubts "whether a more active or more virulent poison was ever infused into the veins of a nation than that which is infused into the veins of the American nation by such school histories as are used in the United States." And he proceeds to inquire what can be expected if people are fed through their children on such stimulants of national vanity and malignity. If complaints such as this will have any effect in inducing historians of the highest ability to write school histories, then the more of them we hear the better. That such a work should be beneath their literary dignity, is an idea unworthy of men of culture and good sense. The preparation of text books is too much left to inferior, prejudiced, small-minded writers—men who have never got beyond the education and ideas of their youth. We are glad to know that so excellent and thorough a literary worker as Mr. Bayard Taylor does not disdain to write history for the young people who will by and by help to make it.

Liberal education for women is at present generously provided in England. Girton College is open to those who have gone through the regular course of study in ordinary feminine seminaries. Then there are the lectures provided by the various "Ladies' Educational Associations," now formed in many large towns. This plan originated with a few schoolmistresses in Manchester and its neighbourhood, and was soon adopted by the North of England Council for promoting the Education of Women. The lectures have proved extremely popular, and have excited interest without rousing alarm. Besides these, another most important help to female education has been recently introduced in the form of teaching by correspondence, of which Rugby and Cambridge are at present the centres. On this plan ladies residing in any part of the country are permitted, on payment of an annual fee of four guineas (two if they be governesses), to obtain from an eminent professor regular directions for study-exercises, and questions, the correspondence taking place once a fortnight. Lastly, there is a lesser but excellent little piece of educational machinery at work in the West of England, which owed its origin some years ago to Mrs. Helyar, of Coke's Court, Somersetshire. It is called the Society for Home Study. The young members follow out in their own homes the courses of study laid down to them annually, and write papers distributed among them for examination. They also take a yearly trip to London, and go through a little course of sight-seeing, under proper *ciceroni*—often a very much more instructive process than "cramming" any number of books.—*Hamilton Spectator*.

CONSTANTINOPLE has forty-three newspapers, of which nineteen appear daily. Of the latter five are Turkish, four are French, two English, five Armenian, and three Greek.

THE LIBRARY OF CONGRESS now includes 246,345 volumes, an increase of 9,499 in the year, and about 45,000 pamphlets. The number of copyrights entered during the year was, of books, 3,175; pamphlets, 2,728; musical compositions, 2,312; dramatic compositions, 18; photographs, 265; engravings, chromos and prints, 2,356; maps and charts, 221.

INCLUDING VIENNA, Germany now reckons eight geographical societies. That of Vienna has a membership of about 500; Munich, 400; Berlin, 308; Dresden, 270; Leipzig, 250; Frankfort-on-the-Main, 150; Kiel, 100; Darmstadt, 80.

## 11. TESTS OF THE SCHOOL SYSTEM.

The Hon. Newton Bateman, Superintendent of Public Instruction in Illinois, has been writing to men engaged in different occupations to find out what they think of the present system of education, and received, among others, the following reply from a farmer, which we commend to the earnest and careful consideration of teachers and those who have children to be taught:

"I am a farmer. My son is now eighteen years of age. He began to attend the district school at the age of six, and has attended two terms, or six months, in each year, from that time until now. He is a boy of good health and of at least average mental abilities, and has never been considered less studious than his school-fellows and classmates. His teachers have been as competent as the average of those employed in country districts. His time in school has been spent, exclusively, upon the seven rudimentary branches taught in the common district schools: spelling, reading, writing, arithmetic, geography, grammar and the history of the United States. He is nevertheless a poor speller, reader and writer; knows little of arithmetic or grammar except the rules, and has only a smattering of geography and history. I found out these things by asking him questions, and setting him to do things for me. I take an agricultural paper, and one evening I asked John (my son's name) to take pen and paper and write for me a short article for the newspaper, on the *Culture of Corn*, about which I thought I had some ideas worth communicating. I sat in my easy chair and dictated what I had to say, and John wrote it down. When the article was finished, I told John to put my initials to it, and send it to the office of the paper. Two weeks afterwards, when the paper came, I looked for my article, but found instead the following editorial note:

"If our correspondent 'B. J. T.' knew one-tenth part as much about *orthography, punctuation, paragraphing*, and the use of *capital letters*, as he does about "*Corn culture*" his article would have been gladly inserted. His ignorance of those matters, so important to editors and printers, seems as remarkable as his knowledge of the subject treated of. We advise him to write again, and get some intelligent school-boy to copy his article for him before sending it to us!"

"My reflections on reading this gentle hint must be left to the imagination. Was not my John an 'intelligent school-boy?' I would look further into the matter. I asked him to point out Salt Lake City on the map. He did so. By what name are the inhabitants of that city known? He could not tell. Is there anything peculiar in their religious notions and social customs? Not that he knew of. How much sooner does the sun rise in Boston than in San Francisco? He did not know. Why should it rise *any* sooner? He could not say. Though only a farmer I am fond of Shakspeare, and asked John to read me a scene from *King Lear*. It could not be called reading, and, in much pain, I soon desired him to stop. How many different sounds are there in the word *eight*? *Five*, of course. Did the Colonies, prior to the Revolution, all have the same form of government? Yes. What was it called? Colonial government. How many different kinds of national government have we had since the Revolution? Two, democratic and republican. John, said I, to-day I sold a load of hay, weighing 1,750 pounds, and received pay for it at the rate of \$16.50 per ton; how much money did I get? He took his slate and went to work, while I read a fresh copy of the *Times*. In an hour I had finished the paper, but John had not finished his sum. He said there were so many fractions in it, and he couldn't find a rule that would fit exactly. The next evening I told John that I had a little sum in practical farming for him to do: I rented forty acres of land to Mr. Jones, he to put it in corn, and allow me one-third of the crop for the use of the land. Jones raised 2,400 bushels, the total cost of which, when cribbed, was \$355. What did Jones's corn cost him per bushel in the crib? what was the cost of the whole crop, per acre and per bushel? and if I sell my share at fifty cents per bushel, how much shall I get per acre as rent? John laboured on it most of the evening, but did not get correct answers to all of the questions. I then gave him all of the items of cost and profit, and desired him to open an account with that forty acre lot in due form, and prepare a correct balance sheet of the same. He did not know what I meant.

"Finding that my poor boy had very little to show for his twelve years of delving in the seven elementary common school branches; that he was a poor reader and a worse writer and speller; that he knew nothing of punctuation, and could not, with the matter furnished him, prepare a few pages of manuscript well enough to save them from the editorial waste-basket; that his stock of history and geography was meagre in the extreme, while his knowledge of arithmetic, beyond the verbiage of the text-book, was unequal to simple ordinary business transactions connected with his father's farm—I thought that perhaps he had made up in general knowledge what he lacked in these respects, and continued my inquiries accordingly.

"His reading books contained pieces from eminent orators, statesmen and patriots: had his teachers told him anything of their biography, characters and services—of the occasions and circumstances under which their speeches and addresses were delivered? He said they had not. He had read descriptions of many lands

and scenes, curious stories of beasts and birds, of insects and fishes ; every day, all these years, he had walked over the earth with its many kinds and qualities of soil, its wintry wonders of frost and ice, its vernal freshness and beauty, the summer splendours of its trees and flowers, and the autumnal glories of its pictured woods and ripened fruits ; he had heard the wild scream of the tempest, the Æolian murmurs of the zephyr, the deep bass of the thunder—had watched the sheen and sparkle of the stars of night, the brightening flash of coming day, and the gorgeous skies of sunset—he had lived and moved and had his being amid these omnipresent wonders of the material world ; had his teachers sought to interpret them to him, to awaken his interest in them and to bring him into loving relations with nature, with the objective, the visible and tangible—had they in any way sought to redeem the dryness and littleness of words and books by showing their relations to the freshness and greatness of ideas and things—had they bidden him to watch the curious growths and processes going on about him all the time, the perpetual marvels of plant-life and of animated beings, and to move about with every sense awake and alert, eager to note the lessons and revelations coming up from every creature and thing that God has made ? ‘ Why, no,’ said he ; ‘ they heard me recite what was in the books.’ Of course, I pursued, but did they not do more than that ; did they not supplement, and enrich the daily lessons of the books by information, facts and illustrations drawn from their own reading, observation and experience, so as to whet your appetite for general knowledge ; did they not tell you again and again that the few studies of the district school were chiefly valuable as necessary instruments for future acquisitions, that you might through them become intelligent, well-informed, useful and happy ? ‘ They had not done any of these things,’ John said.

“ A day or two after this conversation I took a walk with my son through the gardens, stock-yards, fields and woods, resolved to bring this painful inquiry to a conclusion, and bitterly reproaching myself for having so long taken it for granted that all was well. Of the ground beneath our feet he only knew that it was a portion of the earth’s surface ; of the gardens, he knew that vegetables grew in one and flowers in the other ; he knew the names of the various domestic animals, but he did not know which of a cow’s jaws was destitute of front teeth, nor, when she rose from the ground, which end of her got up first ; the grain in two adjoining fields was six inches high, one wheat, the other oats—he could not distinguish them ; all he could say of the meadows was, that they contained grass ; of forest trees, he could tell the names of but few, while of their respective characteristics and values for fuel, lumber, etc, he was ignorant. But the worst of it all was that the boy’s senses seemed inactive, his perceptions blunted and his mind stunted, by the habit, all these years, of studying mere words instead of things also, and of regarding school-work as something separate and apart from the out-door world, having but a vague and unimportant relation to every-day life. Thence forward I tried to arouse the child’s dormant senses and faculties, and to show him what great things God had done for his education ; to give him a fresh baptism into the spirit of Nature and the world of realities, from which, alas ! his schooling had seemed to separate him.”—*The New York State Educational Journal.*

### III. Papers on Practical Education.

#### 1. ELEMENTARY SCIENCE IN SCHOOLS.

Professor Tyndall thus forcibly writes :—

“ In our public schools instruction should, in my opinion, be given in elementary physics and the first principles of chemistry. \* \* \* Instruction in these subjects should, in my opinion, be rendered imperative. \* \* \* I speak from practical experience when I say that the subjects above mentioned may be rendered intensely interesting to boys, and that the love for such studies which a competent teacher could evoke, would be a powerful aid to intellectual discipline. \* \* \* Much may be accomplished by extremely simple means ; how much is only known to those who are accustomed to devise new methods of experimental demonstration. I do not think that the cost of apparatus could be regarded as an objection of the least weight to the introduction of science into our public schools. \* \* \* In addition to elementary physics and chemistry, I should recommend the introduction of botany, and to these three sciences I would, for the present, confine attention. \* \* \* With regard to the time to be devoted to science, six or seven hours a week would be of immense importance ; even less than this would, at the end of three or four years, sum itself up to something extremely valuable.”

#### 2. PRIZES IN SCHOOLS—HUMANE EDUCATION.

EXTRACT FROM REPORT OF WOMAN’S BRANCH OF PENNSYLVANIA SOCIETY FOR PROTECTION OF DUMB ANIMALS.

There is so much that is painful connected with the work of our society, that we refer with pleasure to another and brighter side ; viz. : our plan of humane education in the schools,—a plan, by the way, which, it is but just to say, did not originate with us, but was first proposed here by Mr. Angell, president of the Massachusetts Society. We have begun to work upon this system, and find it brings its own reward, it is so interesting and gratifying to us. In the first place, we had a number of large cards prepared, suitable for hanging upon the walls of school-rooms, with the following inscription : “ I promise to protect dumb animals ; and may God in His mercy protect me ! ” We have begun to visit the grammar schools ; and to each school we give two of these cards. The scholars in these schools are requested by their teachers to write compositions on the subject of the proper treatment of animals. . . . We then pay a visit to the school, award some modest prizes to the writers of the best three compositions, selected by the executive committee, have them read aloud for the benefit of all present, make two or three little addresses to the children, and are entertained with some of their exercises in singing, playing, or declamation. . . . God grant that the rising generation may improve upon the one that has preceded it !

#### 3. CRITICISM IN SCHOOL.

Must teachers be professional and practical fault-finders ? It must be confessed that the effect of teaching upon the character of those engaged in it is generally to develop and sharpen a disposition to find fault. This disposition would seem to be the “ original sin ” of some natures ; and the possessors, not content with being “ sinners by nature,” have rendered themselves much more so “ by practice.” In books and lectures teachers are told to awaken a spirit of criticism among their pupils, as the surest method not only of teaching them what is correct, but of calling their attention forcibly to their own mistakes, and of developing the power of that anticipative adjustment of language and thought by which they can so control and guide their speech that the words shall “ fall aptly in their own fit places.” So, as a means of attaining the result, after an exercise in reading or mental arithmetic, the teacher says “ Any corrections ? ” Half a dozen uplifted hands and twice as many glistening eyes indicate the eager interest these “ swift witnesses ” take in the matter, and their readiness to convict the offender, who, though embarrassed by the hum of exultation gathering around him, has had no alternative but to go on, furnishing more and more occasion for jubilation to the multiplying legion of rejoicing critics. When opportunity is given to various pupils to unburden themselves, we hear little else than the stereotyped phrases, “ Didn’t speak loud enough,” “ Read too fast,” “ Didn’t speak distinctly,” “ Didn’t repeat the question,” “ Didn’t say ‘ therefore,’ ” etc. ; every one seeming to think it a duty to find some fault.

Is this productive of good ? We would not banish criticism from the school room. It is a very efficient instrumentality, and we would give it a large place in every exercise, the devotional exercises only excepted. But criticisms should be made at a proper time and in a proper manner. They should be so made as to teach self-control, and cultivate a kindly spirit on the part of those who notice and note the errors. Therefore it may be well for the teachers not to call on those pupils who have shown greatest delight at the discovery of faults, but on those who would feel a little reluctance in performing the duty. Indeed, pupils should be trained to habits of such perfect self-control, that they will not indicate, until called on, that a mistake had been noticed. Then, instead of always asking for corrections, would it not be well that the good points should be called for ? If the pupil has done anything well, has avoided any common though trivial blunders, let attention be called to the fact, and due credit given. Let the teacher’s approving smile, tone and manner show greater interest and satisfaction in excellence noticed than in faults discovered.

Let the teacher study to commend. We would not encourage the facile spirit of commendation that praises everything ; but we would exhort teachers themselves to cherish and cultivate in their pupils a disposition to approve and commend. Condemn, of course, when any good result can be obtained by condemnation ; but make it evident to all that you delight in giving approval, and that “ judgment ” is your “ strange work.” By so doing you will encourage the timid, confirm the doubtful, restrain the presumptuous, disappoint the curious, and leave in the minds of your pupils a memory embalmed with fragrant recollections. Try it, teachers ; not only in your recitations, but in the

government of your schools. Keep your eyes and heart open for the things in your pupils that you can approve, commend, and praise, and mention them at the close of the school. Let what you approve be approved heartily, and let that be your only comment for the time on what you do not approve. Faults must often be pointed out; but let it be done at such times and in such a manner as to evince and promote sympathy for shortcomings, rather than rejoicing over them. The love of right must dominate in the human soul, and reign as lord chief justice, before fault-findings and reproaches uttered by human lips will be likely to be efficient means of grace. Children, always weak and sometimes wayward, need rather sympathy, love and help.—*Pennsylvania School Journal*.

#### IV. Papers on School House Architecture.

##### 1. VENTILATE THE SCHOOL HOUSE.

Why not? There is pure air enough, just outside, that may be had for the asking; and yet how many of our school-rooms are reeking day after day with the poisonous filth sent forth again and again from the lungs of two or three scores of pupils, and with the no less poisonous and filthy exhalations from uncleanly clothing and uncleanly persons. The teacher enters the school-room in the morning, when the air is comparatively pure, and the constantly increasing impurity blunts the senses, and so is not perceived. The air becomes charged and surcharged with noxious matter, teacher and pupil grow dull and listless and irritable, the head aches, and the work of the school drags wearily and drowsily on. By and by it is discovered that the seeds of disease have been sown, and another recruit is added to the great army of broken-down teachers.

Unventilated school-houses are one of the crying evils which the friends of popular education should strive to remedy. Why, fellow-teacher, labouring in one of these dens of foul air, did you ever stop to think what you are taking into your lungs day after day? Father or mother, do you know what kind of an atmosphere your child is living in at the school? The air that he is breathing has repeatedly been down into the lungs of thirty or forty of his school-mates, and each time has been reinforced with a fresh supply of decaying matter, until it is loaded with poison which cannot be taken into the system without at least seriously weakening the vital forces. Such a state of things should not be suffered to continue, if there is any help for it.

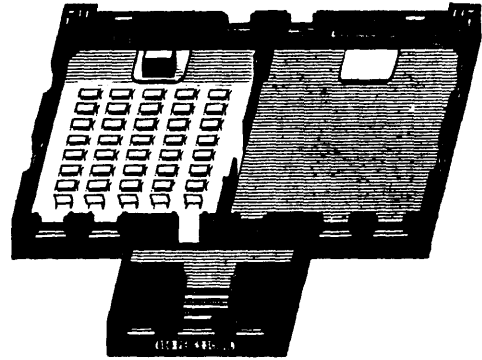
But what can be done? Much can be done. In the first place, there are now to be had, at reasonable prices, stoves and furnaces of a variety of make, with which pure air may be introduced warm into the school-room, and the foul air may be removed through a shaft by an opening at the floor. No school-room is fit to occupy without some such arrangement for securing ventilation,—certainly no new school-house should be erected without something of the kind. But parsimony says that all this costs. Yes, it does cost; it always costs to live and be decent. If cheapness is the one desideratum, the true way would doubtless be to warm the room and then close it up as tight as possible, and let the pupils breathe the air over and over until it needs warming again. It is true that ventilation costs, but the doctor and the undertaker and the lot in the graveyard cost, too, and the question is which is the best investment.

But if no such provision for ventilation can be secured, something may still be done toward making the school-room clean and healthful. The floor and walls may be kept free from anything that will contribute to the impurity of the air. Something may be done in the way of enforcing personal cleanliness upon the pupils. Where the conditions are such as to render it possible, a window may be lowered a little from the bottom on the other side. At the recesses and at noon, and oftener, if need be, the windows may be thrown open from the top and the bottom, and the pure breezes of heaven invited in to drive out the accumulated stench and nastiness. At any rate, with these miles of life-giving air above and around us, let us not kill ourselves and murder the innocents with the villainous compound so often found in our school-rooms.—*Illinois Teacher*.

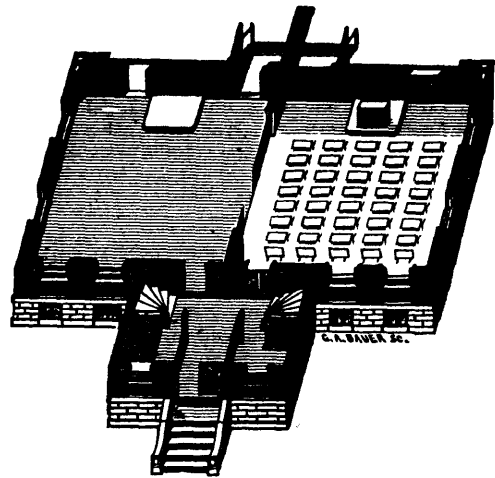
##### 2. DES PERES SCHOOL-HOUSE.

The engraving on our first page represents a four-room building called the Des Peres School House, erected by the Board of St. Louis Public Schools, in Carondelet. The building is located on a lot of 145 feet frontage and of 154 feet depth. The central part projects boldly to give room for a double flight of stairs, arranged symmetrically, and, at the same time, to serve as vestibule, hall, or lobby, as well on first as on the second floor. Main rectangle of the house embraces on each floor two adjoining rooms, separated

by large sliding doors, which enables a joining of the two classes in exercises common to both. Seats for sixty-four pupils will be placed in each room, leaving a liberal amount of space for aisles between and around the rows of seats. Its exterior is pleasing and impressive, and its construction, though simple, is most complete and substantial. Its first floor is reached after ascending over stone steps between heavy stone buttresses to a height of four feet above the ground line. The height of stories in the clear is fifteen feet. The masonry, from ground to height of first floor, is faced with rusticated rangework. The walls are of best brickwork, and respectively two bricks and one and one-half brick thick in first and second stories. Roof is slated, and a thorough system of ventilation as well as drainage of the premises is provided for.



BIRD'S EYE VIEW OF THE FIRST STORY.



BIRD'S EYE VIEW OF THE GROUND FLOOR.

The two bird's eye views of the ground floor and first story of this building furnish an admirable illustration to the spectator of the appearance of the school rooms in each flat of the building, and realize to the eye what they are like in reality. One can see at a glance the position of the desks, seats, presses, stairs, &c., of each room and passage. They will thus enable the trustees to see where these things can be placed, and will aid their imagination in determining beforehand their appearance in their proposed school building.

The cost of building, including fences and all improvements made on the premises, is \$13,700.

The building was designed by, and erected under the supervision of, F. W. Raeder, the Architect of the Board of St. Louis Public Schools.

#### V. Mathematical Department.

To the Editor of the Journal of Education.

SIR,—Observing a solution of a well-known problem in the last issue of your *Journal*, I beg leave to make a few observations thereon.

In the first place, I would much prefer seeing a direct solution for  $x$  not  $< n-1$ . I would also like to see in what case or set of cases such a result may be arrived at.

In concluding that  $x=n$  or  $n-1$ , I think something more general than the bare premises of a rigid syllogism might be afforded.  $x$

is not  $< n-1$ ;  $x \text{ not } < n$ : ergo,  $x=n$  or  $n-1$ . Besides, assuming  $x$ , if possible  $< n-1$  in order to prove that it is not, is, to my mind, arguing in a circle. It decidedly shows that G. P. Y. knew the answers before he set out.

The same observations will not be quite so pertinent with regard to the second assumption, let  $x$ , if possible,  $> n$ ; for the equation,  $x^2+2dx+d^2=nx+1$  would suggest upon inspection  $x=n$ , inasmuch as both sides of the equation, and the parts  $x^2$  and  $nx$  are whole numbers, therefore  $(2dx+d^2)$  is a whole number and very likely  $=1$ .

Premising so much, the solution in other respects is very ingenious. The first part should, however, be proved directly, the reductio-ad-absurdum system of demonstration being never resorted to by mathematicians unless the direct system fails. In Algebra this system is seldom or never employed.

The problem which has given rise to the above observations is as follows:—Find a number equal to  $n$  times the integral part of its square root plus one,  $n$  being a whole number. Let  $x$  be integral and  $d$  the decimal part of the square root. Hence  $x^2+2dx+d^2=nx+1$  and  $x(x-n+2d)=1-d^2$ .  $x-n+2d$  is positive.  $\therefore x+2d > n$ .  $2d, \angle, =$  or  $>$  than unity. In the first two cases  $x+1 > n$  and  $x > n-1$ . In the last case  $x+1$  not  $< n$  or  $x$  not  $< n-1$ . Therefore  $x > n-1$  in the two cases where  $2d$  is equal to or less than unity; and  $x$  is not less than  $n-1$  in the one case only, where  $2d > 1$ . In the latter case  $x=n-1$ ; for if we should assume it to be greater than  $n-1$ , we carry it to the first class of cases where it is incontrovertibly so.

In the first class of cases, when  $2d$  is  $<$ , or  $=$  unity,  $x > n-1$ ; and  $x$  not  $< n$  from their being both integral numbers;  $x-n$  not  $< 0$ ;  $x-n+2d$  not  $< 2d$ ; and  $x(x-n+2d)$  not  $< 2dx$ .  $\therefore 1-d^2$  not  $< 2dx$ :  $2d$  cannot be equal to unity; for if it were the decimal  $1-d^2$  would not be less than  $x$ , a whole number, which is absurd; we have therefore, in this problem, reduced  $2d$  to be  $>$  or  $<$  unity. In the case where  $2d > 1$ ,  $x=n-1$ , and in the case where  $2d < 1$ ,  $x=n$ . The number, therefore, is,  $n^2+1$  or  $n^2-n+1$ . The numbers are 2, 5, 10, 17, 26, 37, &c., &c., and 0, 3, 7, 13, 21, 31, &c., &c., according as we assume  $n=1, 2, 3, \&c., \&c.$ , in each class.

I am, &c.,

DION C. SULLIVAN.

Simcoe, Dec. 22, 1873.

### 1. PROFESSOR MULLER ON CIRCLES.

Professor Müller, in a course of lectures in Berlin, offered a simple and mechanical explanation of the universal admiration bestowed on circles. The eye is moved in its socket by six muscles, of which four are respectively employed to raise, depress, turn to the right, and to the left. The other two have an action contrary to one another, and roll the eye on its axis, or from the outside downward, and inside upward. When, therefore, an object is presented for inspection, the first act is that of circumvision, or going round the boundary lines, so as to bring consecutively every individual portion of the circumference upon the most delicate and sensitive portion of the retina. Now, if figures bounded by straight lines be presented for inspection, it is obvious that but two of these muscles can be called into action; and it is equally evident that in curves of a circle (or ellipsis) all must alternately be brought into action. The effect then is, that if two only be employed, as in rectilinear figures, these two have an undue share of labour; and by repeating the experiment frequently, as we do in childhood, the motion of tedium is instilled, a distaste for straight lines is gradually formed, and we are led to prefer those curves which supply a more general and equable share of work to the muscles.

### 2. NEW SYSTEM OF WEIGHTS AND MEASURES.

On the 1st inst., a new system of weights and measures came into operation, and it would be well to bear in mind that the basis upon which grains, seeds and roots are sold has been entirely altered, and that it is now imperative to comply with the new standard. That standard recognizes *weight* instead of bulk, and the bushel has been displaced by the pound. Buyers will now make bargains in wheat by the cental, or 100 lbs. For example, a purchaser will offer a farmer to-day, say, \$1.89 for wheat, whereas on Thursday he might have said \$1.14. And the reason is, that on the earlier day he was buying but 60 lbs., to-day he buys 100 lbs. as the unit of delivery. The following articles of produce come under the operation of the new law, viz. :—Wheat, Indian corn, rye, peas, barley, oats, beans, clover seed, timothy seed, buckwheat, flax seed, blue grass seed, castor beans, potatoes, turnips, carrots, parsnips, beets, on-

ions, salt, dried apples, dried peaches, and malt. So, good Madame, and good Sir, you will please not to quote the vegetables named, you may have to sell at so much per bushel, or per bag, but so much per 100 lbs., recollecting that a bushel of these articles used to be held to weigh 60 lbs. Thus if you sold last week potatoes at 70 cents per bushel, the price to-day would be, say \$1.16½ per 100 lbs., if the market ruled at the same rate to-day as it did then. And the buyer will say then, "Please, how do you sell your potatoes, parsnips, &c., by the hundred weight," buying 50 lbs. or 25 lbs., as may be required. It may be a little awkward at first, just as it was strange to trade in the market with dollars and cents when people had been so long used to the "York-shilling" system. But a little good nature will bring all things easy and pleasant. The object of the law has been to assimilate the standards of measure in all markets in the Dominion, which has now been done, the Act having come into force January 1st, 1874. A hundred of onions, or a hundred of beets, may sound a little odd to marketers for the time being, but it will soon pass away. Potatoes to-day should be sold from \$1.10 to \$1.20 per 100 lbs., according to quality.—*London Free Press.*

## VI. Biographical Sketches.

### 1. PROF. AGASSIZ.

Louis John Rudolph Agassiz was born at Mottier, Switzerland, May 28, 1807, and was, therefore, in his sixty-sixth year at the time of his death. His father was a clergyman, as have been his lineal ancestors for six generations. He was educated at Bienne and Lausanne, and afterwards at Zurich, Heidelberg and Munich. In the last-mentioned university he won high distinction as a naturalist, and after the return of the Austro-Bavarian scientific exploring expedition from Brazil, he was selected by Martius to elaborate the ichthyological part of the work on Brazil. His next undertaking was the publication of a "Natural History of the Fresh-water Fishes of Europe." Meantime he passed an examination for doctor of philosophy at Erlangen and for doctor of medicine at Munich. While studying living fishes he had his attention drawn to the fossil species, and began making researches concerning them. In 1834, after years of study, he began the publication of his great work on fossil fishes. This was brought to a close in 1844, and stands an enduring monument to the patient and labouring research of the naturalist. The work is in five volumes, with a folio atlas, containing about 400 plates. About 1,000 species are described and figured in the natural size, with the colours of their beds, and there are short indications of 700 more. The great generalizations to which these researches led have stood the test of time, and have been strengthened and extended by the researches of a quarter of a century. In 1846 Agassiz came to the United States, his object being to make himself familiar with the natural history and geology of the country, on a commission from the Prussian Government, and to deliver a course of lectures. Events occurred to induce him to make up his mind to remain in the United States, and, having procured from his Government a release from his obligations, he, at the close of 1847, accepted the chair of zoology and geology in the Lawrence Scientific School of Harvard University. In 1848, in company with some of his pupils, he made a scientific exploration of Lake Superior, the results of which were published in a volume on "Lake Superior." In 1865 he organized a scientific expedition to Brazil, an interesting account of which has been published, entitled "A Journey to Brazil, by Professor and Mrs. Louis Agassiz." Professor Agassiz declined the offer of a chair in Paris, made him by the Emperor Napoleon. In 1848 he published "Principles of Zoology for the use of Schools and Colleges," and later, "Outlines of Comparative Physiology," written in conjunction with Mr. A. A. Gould, and "Contributions to the Natural History of the United States." The Museum of Comparative Zoology at Cambridge, which owed its very existence to the late Professor, and which he did so much to build up, will suffer very materially. The master specialist has gone, and his place cannot now be filled. The Professor at the time of his illness was engaged in the study of the echinoderms, especially, a large and remarkably fine collection obtained in Iowa. The work upon this collection will probably be continued by Alexander Agassiz, a son of the Professor.

### 2. DR. CHARLES SMALLWOOD.

Dr. Smallwood is widely known throughout Canada as a meteorologist, his devotion to the science amounting to enthusiasm. He was born in England, but has resided about forty years in this country, and during a considerable part of the time lived at St. Martin's Isle Jesus. After removing to Montreal he continued his observations in connection with McGill College Observatory, and practised



his profession as a physician. As a doctor he was energetic and popular, and his sudden decease will be the source of deep regret. But it is as an ardent student of meteorology that his name will live longest. In a field in which there are few labourers, he toiled long, and at one time almost alone, his health even sustaining injury by the assiduity with which he pursued his observations. His labours, some of the results of which appeared from time to time in the *Gazette*, will no doubt have made valuable contributions to the important science to which he was so deeply devoted.—*Montreal Gazette*.

### 3. PROFESSOR WILLIAM RUSSELL.\*

William Russell was born in Glasgow in 1798. He received his education in the Latin School and the University of that city. Before graduating, he became deeply religious, and had formed the purpose of going out as a missionary to the East, in connection with the denomination known in Great Britain as General Baptists, with whom his sympathies continued through life. The state of his health, however, compelled him to abandon the missionary work, and he came to this country in his twentieth year, 1817. Having a tendency to consumption, he sought a genial clime in the State of Georgia. He declined the position of "rector" in an academy, and took the lighter duties of a private tutor in the family of a distinguished Southern statesman. After a brief visit to his native land, he returned and became the principal of the Chatham Academy in Savannah. From this time his labours in the cause of education were arduous and incessant. He had charge, during several years, of an academy in New Haven, and of the celebrated Hopkins Grammar School. He then began to give lessons in elocution, partly induced thereto with the hope of strengthening his own lungs. In this he was successful, and his voice was clear and resonant to the end of his life. He gave lessons in the Seminary at Andover, at Harvard College, and in the Latin and Chauncey Hall Schools in Boston. The American "Journal of Education" was founded in 1826, being the first publication of the kind in the world. He was editor and chief contributor to its pages during three years. All this work was a labour of love, performed at night, after the labours of the day were done. During the next twenty years he gave instruction, in Germantown and Philadelphia, to classes of young ladies; taught elocution at Andover; lectured at teachers' institutes in Rhode Island and New Hampshire; and in the winter season at Princeton, New York and Brooklyn.

In 1849, a seminary for training teachers was established in New Hampshire, which Mr. Russell conducted for several years.

He came to Lancaster in 1853, and remained here to the end of his days. His labours were continued in schools, colleges, teachers' institutes, and theological seminaries, till advancing years confined him at home. He received private pupils even to the last year of his life.

In all these years he worked as industriously with his pen as with his voice. The titles of the volumes and pamphlets prepared by him, besides the three volumes of the "Journal of Education," would fill more than half a column of this paper: they number between thirty and forty. They embrace a large variety of subjects, and all evince the ability and science of a master.—*Rev. A. P. Marvin*.

### 4. J. W. GAMBLE, ESQ.

John William, eldest son of Surgeon John Gamble, British army, was born on 5th July, 1798, at the Garrison, York, Upper Canada (see family records, page 15), and was at the time of his death in his 75th year. He was placed in the Commission of the Peace in 1827. In 1836 he was unanimously elected Chairman of the Quarter Sessions. In 1842 he was elected District Councillor for Etobicoke, and removed to Vaughan the same year. In 1846 he was elected for that township, and in 1850 was elected as County Councillor. He served as such until 1858, when he declined re-election. In 1838 he was elected for south riding of York, and was re-elected for same riding in 1851, by a majority of 600. In 1854 he was again elected for the south riding. He was a member of the Provincial Legislature nine years; on the 10th September last he had been a Justice of the Peace for forty-six years; he was Warden of the County two years; Chairman of the Quarter Sessions six years, and County Councillor fourteen years. He also filled the following offices at different periods: Commissioner for settling disputed boundary lines, Commissioner for macadamizing county roads, Commissioner of Court of Request, and for many years Director of the Edinburgh Life Assurance Co. He was Colonel of the second

Battalion Reserve Militia of County of York. He was also an active member of the Church of England, and a delegate to its Synod from its inception to the day of his death. A large portion of his life was passed in the discharge of public duties, and in the fulness of years growing infirmities warned him it was time to withdraw from them. He ended his career in peace, with a firm faith in a happy resurrection through the merits of his Saviour, Jesus Christ; and surrounded by his children and his family he fell asleep.—*Cor. Toronto Mail*.

### 5. CHIEF JOHN SENECA JOHNSON.

This venerable and well-known Chief died a few days ago on the Reserve of Tuscarora, regretted by his people, and by others who knew him, for he was a noble, handsome specimen of his race,—honest, kind, and genial; his presence and voice will be greatly missed in the Council House. A few years ago, he with his wife embraced Christianity, were christened and married in the Tuscarora Church, the Rev. Messrs. Nelles, Elliott and Roberts officiating—and, at the request of the old Chief, Mr. Gilkison, Supt., standing as Godfather. It was an interesting and solemn occasion; and ever since, though surrounded by influences of his Pagan friends, he stood fast by his new faith, and always evinced his feelings and interest in the services of the church,—his last request being, that he should be buried in the burial ground of his church, which was done by the Rev. Mr. Anthony (one of the Six Nations) in the presence of a concourse of people. His wife had preceded him to that happy and everlasting home they no doubt joyfully looked forward to.—*Brantford Courier*.

### 6. D'ALTON MCCARTHY, ESQ.

Mr. McCarthy was born in the City of Dublin, Ireland, on the 15th of June, 1805. He was the only son of Backnall Henry McCarthy, Esq., a member of the Irish Bar. His mother was the youngest daughter of Lord Chief Baron Hussey Burgh. He matriculated at Trinity College, Dublin, but did not remain long enough to graduate. In 1847, thinking that by emigrating he could find in this province a better opening for his large family than was afforded in the old land, he embarked for the new world, and landed at Toronto, and tried farming somewhere near Shanty Bay. In this avocation he managed, like many other amateur agriculturists, to sink more than he made. Finally, after three years' experience as a Canadian farmer, he settled in Barrie, and again devoted himself to his old profession of the law. On his admission he went into partnership with D'Arcy Boulton, Esq., and together with one of his sons continued the partnership for about fourteen years. In politics he was always Conservative, and was at one time a very active politician. For many years he sat as Master of one of the Orange Lodges of this town, and for several years filled the Grand Master's chair. An active and zealous member of the Church of England—for a number of years Churchwarden—and at the time of his death one of the delegates to the Synod of the Diocese. In municipal and educational matters, in former years, Mr. McCarthy took an active part, especially in the latter; having been about fourteen years a zealous promoter of education in his capacity as Chairman of the Board of Trustees of the Common Schools.—*North-ern Advance*.

### 7. THE REV. JAMES MIDDLETON.

The deceased gentleman was a native of Aberdeen, Scotland, and emigrated to Canada with his family in 1837. He settled in the township of Nicol, near the now flourishing village of Elora, where he purchased 100 acres of land, and with the assistance of his family cleared it. He was the first common school teacher in Elora, and held the post of village schoolmaster for many years. In 1850 Mr. Middleton was ordained a minister of the Congregational Church, and for fifteen years discharged the duties of pastor in the vicinity of Elora. He was one of the earliest advocates for temperance in that district, and we believe quite a number owe their rescue from drunkenness to him.—*Elora News*.

### 8. JOHN WORTHINGTON, ESQ.

The deceased gentleman was one of our most prominent citizens, having represented the public in the City Council, and also at the Board of Water Commissioners. The deceased gentleman died at the early age of fifty-five—during a large portion of which he resided in Toronto, and carried on an extensive business as a contractor.

\* Brother of Andrew Russell, Esq., late Assistant-Commissioner of Crown Lands.

## 9. MRS. HARRIS AND MRS. FOX.

Among the pioneers lately gone from our midst, we are sorry to chronicle the decease of Mrs. Margaret Harris, wife of Myndert Harris, Esq., who is now the only surviving pioneer of the first settlers of Port Hope. Deceased was a daughter of the late Mr. James Hawkins, of Montpelier, who settled here as early as 1801. She with her husband experienced the many hardships of a pioneer's life, and has left but few even of the second generation of her old contemporaries. Mrs. Harris was looked up to as a model, for her kindness, frugality and industry.

Yet another and the last of the early female settlers of the Township of Hope is Mrs Catharine Fox, relict of the late James Fox, Esq., who for many years officiated as Clerk of the Township. The deceased came here from New York in 1800, with her brother, the late James Sculthorpe, Esq. She also shared the hardships of pioneer life with industry and perseverance, and lived to see the dense forest develop its beauty and utility for the comforts of those she left behind. By her Christian and matronly manners she made for herself a host of friends, who deeply mourn her loss.—*Port Hope Times.*

## 10. WM. BARKER, ESQ.,

Was born in Nottingham, England, in the year 1810, and was consequently in his sixty-third year. Mr. Barker came to London about the year 1838, with the Eighty-third Regiment, and during his stay here was associated with the commissariat and engineer departments. He saw service in the Rebellion, and was present at the battle of Point au Pelee, and participated also in other engagements throughout the West. He obtained his discharge a few years afterwards, and engaged in hotel keeping in a house nearly opposite where the Crystal Palace now stands, and which was known, in memory serves, as the "Lord Nelson Inn." He acquired considerable means while in that business, and was looked upon as one of the most public-spirited and enterprising men in the town. He was elected a member of the Board of Police in 1847, and in the succeeding year was chosen by the ratepayers of St. George's Ward to represent them at the Council Board, the village having been in that year erected into a town. This position he held for a number of years, and when the town was created a city he was elected Alderman of No. 7 Ward. In the year following, 1856, he was elected Mayor of the city, and at the close of his term retired altogether from active municipal life. He was for many years agent for Col. Renwick, and transacted that gentleman's business with the attention and assiduity which characterized almost all his acts. Some time afterwards he accepted a situation in the Customs Department, the duties of which he fulfilled until death summoned him hence. Mr. Barker took a prominent part in the inauguration of the London and Port Stanley Railway, the Sewerage system, and civic affairs generally. He seemed to have but one object in view, and that, the advancement of the City of London. He was a man of more than ordinary intelligence, and commanded the respect of his fellow-citizens. He was much devoted to the study of astronomy, and by his continuous and carefully kept records was quite an authority on matters pertaining thereto. He was an ardent lover of floriculture and fruit, and devoted much time to the propagation of new varieties.—*London Free Press.*

## 11. MR. WILLIAM WALDEN.

Mr. Walden was born in 1809, in the town of Wells, England. He emigrated to Toronto, then "Little York," in 1832, and in the following year moved to the "Lower Block," Waterloo Township, where he resided about five years. He then removed to Bridgeport, where he carried on the business of a saddler and harness maker for some years. About the year 1845 he removed to Berlin, where he performed the duties of bailiff for several years. In the contest between the villages of Berlin and Galt for the honour of being the county town, Mr. Walden took a great deal of interest, and was among the foremost of those to whom the final victory of Berlin was due. On the completion of the municipal organization of the county, in 1852, he was appointed Governor of the Gaol, a position which he retained till the time of his death, on Thursday morning last. Both Grand Juries and Prison Inspectors found occasion to praise the good order, comfort, cleanliness and care with which the gaol was kept, and in all that time no prisoner ever succeeded in escaping. One or two managed to get outside the walls, but we believe no one finally got away. Personally, Mr. Walden was a straightforward, honest and manly citizen, kind-hearted and charitable, but firm when duty demanded it.—*Waterloo Chronicle.*

## VII. Miscellaneous.

## 1. YOUNG CANADA IN DENMARK.

We give below some verses by the Hon. W. Macdougall, entitled: "The Knave's Cross of Freilev." It appears that while the gentleman in question was visiting one of the former-princes in Denmark, he had the opportunity of pressing the advantages of Canada upon the attention of a select audience. As but little is known of Canada there or in any of the Scandinavian countries, some surprise was expressed at what he was able to state, and especially with regard to the condition of education. One of the party present, the daughter of a Bishop, was anxious to know if Canadians could write poetry in English; and when Mr. Macdougall assured her that that was no unusual circumstance, and that versification was even taught at Common Schools in the country, she was still more surprised, and hoped that she might be gratified by seeing a specimen. Thereupon Mr. Macdougall, so the story runs, composed impromptu the verses referred to, and having them printed on the following morning presented each of those who were present with a copy, at which they were much delighted. The story of the "Knave's Cross" he had received from a friend, as he drove past the spot on which it stands, the day before, and we think that those who read the verses will agree that he turned the legend to very good account in support of education in the English language in Canada. :-

## THE KNAVE'S CROSS OF FREILEV.

(Freilev-Skalkekors.)

A wooden cross stands by the way,  
In Laaland's pleasant Isle,  
It asks you not to stop and pray;  
Nor marks the grave of martyred dead;  
Nor where some patriot hero bled;  
But tells a tale of guile.

Two centuries and more\* ago,  
The graven members say,—  
Here fell, beneath the vengeful blow,  
In secret dealt, by peasant hands,  
The cruel keeper of these lands,  
In some concerted way.

The Count of Aalholm then was wroth,  
And swore that he would slay  
The people all, both great and small,  
Unless they caught, and to him brought,  
Without a day's delay,  
The man that slew his henchman true,  
In that concerted way.

The frightened peasants now foresaw  
A cruel fate in store,  
For then, the great man's word was law,—  
Yet none would play the traitor's part,  
And tell who threw the fatal dart,  
Nor even mark his door.

The Count, relenting, then decreed  
A strange and hard decree;  
He said: "I swear your lives to spare,  
And from this crime will free  
The people all, both great and small,  
If you shall bring to me  
Seven heifers, white, in one fortnight;  
But all their ears must be,  
From tip to head of crimson red,  
And this is my decree."

The peasants then, both boys and men,  
All o'er the country fled,  
In haste to find 'mong cattle-kind,  
Seven heifers, white, in any plight,  
If but their ears were red.

When all had come to Freilev home,  
On the appointed day,  
Then cries and tears foretold their fears,  
For only six had they!  
A seventh was there, but blank despair  
Fell on that guilty pack,  
As Aalholm's eye must soon descry  
That both its ears were black!

Red paint was brought, and, quick as thought,  
The black was turned to red;  
And then, with many a smirk and smile,



The artful peasants hid their guile,  
As to the Count they sped.  
The Heifers, seven, were boldly driven  
Unto the Palace door ;  
And all the people danced with glee,  
When told the ransom made them free,  
If they would kill no more.

With drink and song, all that day long  
They quite forgot their crime ;  
Nor ever thought the trick they'd wrought  
Must be revealed in time.

Next day their joy was turned to grief,  
And consternation spread  
O'er all the country-side to hear,  
That in the night a rain, severe,  
Had washed the paint from every ear !  
And now no trick could bring relief ;  
For lo ! that morn their wary Chief  
Had early walked upon the plain—  
Had seen the Heifers washed with rain ;  
And one with ears—not red !

Back to his Palace straight he came,  
For he was sorely wroth ;  
He summoned all, both great and small,  
And now he swore, an oath once more,  
And this was then his oath :—  
“ For this base cheat, you shall not eat  
Of fish, nor flesh, nor corn,  
Until you build, o'er him you killed,  
A Cross of Guilt and Scorn :  
That all who live in Laaland's Isle  
May hate your sin, and shun your guile.”

The Cross was raised ; the Count was praised ;  
They thought his oath was good ;  
The legend's trace would not disgrace,  
If rightly understood.

And this is what the peasants said ;  
And this is how that Cross was read :—  
“ Let cruel Keepers all beware  
How they oppress the peasants here ;  
For we are cunning ; we are bold ;  
So testifies the Cross of old.”

Long years had passed, the Cross at last  
A broken ruin fell ;  
The Count who then ruled o'er these men,  
No longer cared to tell  
Of hasty vows, or tricks, or crimes,  
That all occurred in ancient times.  
But this the peasants said :—  
“ Another Cross shall mark this place ;  
The first was meant for our disgrace ;  
No legend on this one we'll trace—  
A date will do instead :  
Harsh keepers still may cause us grief ;  
The year will point to our relief.”

A wooden Cross now safely stands  
Where it was raised by willing hands :  
And Keepers—so the peasants say—  
Do not much care to pass that way !

Fuglsang, 1873.

W. M'D.

## 2. THE MUTUAL RELATIONS OF THE UNITED STATES AND CANADA.

The Rev. Dr. Ryerson recently delivered an interesting address at Philadelphia upon the subject of Methodism in Canada, and in concluding he referred to the mutual relations of the United States and Canada as follows :—

### CONCLUSION—MUTUAL RELATIONS OF THE UNITED STATES AND CANADA.

FATHERS AND BRETHREN,—I have spoken to you of our Church in Canada, its difficulties and successes, its relations and ever unchanging affection to you, as our Parent Church. Allow me, in conclusion, to say some words as to the relations of our two countries. While we, as Canadian Methodists, venerate your spiritual fathers as our spiritual fathers, and love you as our brethren ; so as Canadian citizens we cordially embrace you as American citizens, we honour your institutions, and admire and rejoice in your progress ; but we do not seek annexation to you as a church or a country, any more than you desire annexation to us. The Mother

Country, which treated you so despotically a hundred years ago, has treated Canada as the better part of herself during the last thirty years. A century since a tariff was imposed upon you, and the proceeds of it disposed of without your consent. But the Proclamation of your President, issued the 1st of this month, exhibits the Legislature of Canada as on an equal footing with the Legislature of Great Britain and the Congress of the United States, in ratifying a treaty of commerce and amity with a foreign power—a position not occupied by the Legislature of any of your States. Had you been allowed a hundred years ago to levy a foreign tariff, even upon the imported manufactures of the mother country, and deal with foreign powers at your pleasure, as do the Canadians—to dispose yourselves of the revenues arising from your foreign tariff, with your executive officers accountable to your own House of Representatives, and holding office not a day longer than they possessed the confidence and support of such House of Representatives, as is the case in the Provinces of Canada—there would have been no Declaration of Independence of 1782, and no seven years' bloody war following it ; but you would have grown up as are the Canadians, to independence without disruption, and taken your place among the nations without any sense of parental wrong, and with the truest respect, gratitude and affection for the fatherland, and a heartfelt alliance with it.

In Upper Canada, for example, my own native country, we have a Governor, not indeed elected as one of your State Governors, but appointed by the Dominion Government at Ottawa ; and our Governor, thus appointed, was born and brought up a citizen in the State of New York ; for there is no caste of nation any more than of colour in Canada ; and energetic Americans make capital Canadians, as industrious and honest Canadians make good Americans ; but our Governor is not an independent power in our State, as in one of your States, but performs his every act under the advice of an Executive Council composed of the Heads of Public Departments, and these members of Executive Council and Heads of Departments are accountable to our House of Representatives for every act of the Governor as well as for their own departmental acts, and can be dismissed any day by a majority vote of the House of Representatives ; for we have not even a Senate in Upper Canada, so that the supreme legislative and administrative power is in our House of Representatives, which, whether “ for better or for worse,” is a considerable advance on any one of your States in the theory and practice of popular government. It is true we have not universal suffrage, though we could have it to-morrow if we were pleased to enact it, for we have the power to do so ; but we have what we think far better—we have household suffrage ; and we have an administration of justice below mediocrity in expense to suitors, and a Judiciary above suspicion, from the County Judge up to the Chief Justice of the Court of Appeal. We have a foreign tariff about one-third of yours, imposed by ourselves, and the proceeds of it for ourselves ; we have public taxes about one-fifth of yours, a surplus revenue of three millions, a state of unprecedented prosperity in our educational, manufacturing, commercial, and agricultural interests, and that prosperity greater than ever before since your abrogation of the Treaty of Reciprocity with Canada. We have a Governor General appointed by the Queen, and the only transatlantic appointment in the whole Dominion of Canada ; but though he reigns in the name of the Queen and as her representative, he no more rules Canada than the Queen rules England ; he brings to Canada the experience of the highest English statesmanship, and the refinement of the best European society, and exercises a genial and wide-spread hospitality, not only in the capital, but in other cities of the Dominion, and at a cost to himself beyond his salary, large as that is, being twice that of your President in past years, and the same as that of your President at the present time, and voted by Canada itself. A Royal despatch of three lines telling Canada to select its own Governor-General, will give to Canada the name, as it now has the substance of Independence ; and should that be done at a future day—and it will be done any day that Canada desires it—we have no apprehension of invasion from your greater country than we have from one county against another county in our own country. Nay, I firmly believe that, should any marauding war party against Canada rise up among you, your own glorious Methodist Episcopal Church would put forth its moral power a second time in the cause of national honour and order, an impregnable wall of defence against any public aggressions upon the rights, and institutions, and independence of your peaceful, hard-working, and resolute Canadian neighbours.

Offspring of the same parent ; dwellers on the same continent ; engaged in the same pursuits ; students of the same arts, sciences and literature ; possessors of institutions equally free ; believers in the same Bible ; living, moving and having our being in the same great truths of religion,—I think I can hear, in the long-distant future, the United States and Canada mutually saying to each other,

"Peace be within thy borders, and prosperity throughout thy territories."

I have only to add, the lesser Canada of former times has become, not by conquest, but by energy, the greater Canada of the present times : and my last words to you shall be the first words of a report of the present survey of a proposed Pacific Railroad :— "Travel a thousand miles up a great river ; more than another thousand miles along great lakes and a succession of small lakes ; a thousand miles more across rolling prairies ; and another thousand miles through woods and over three great ranges of mountains, and you have travelled from ocean to ocean through Canada. All this country is a single Colony of the British Empire, and this Colony is dreaming magnificent dreams of the future, when it shall be the 'Greater Britain,' and the highway by which the fabrics and products of Asia shall be carried to the Eastern as well as to the Western sides of the Atlantic."

### 3. HISTORICAL ASSOCIATIONS.

At the pic-nic of the Canadian Association not long since, it was assumed that there was no historical associations connected with this section of country. Yet Burlington Heights were in large measure the base of operations for the Niagara frontier during the war of 1812-14. Running across our cemetery may now be seen the breastworks that were thrown up for defence. These extend from the marsh (then known as Coutt's Paradise) to the bay, but on the east side of York Street they have been levelled. Several hundred yards in front of the breastworks stood an old block house, part of the foundation timbers of which could be seen within the last twenty years. It was surrounded by a deep ditch which came to an acute angle in front and rear. The cemetery fence cuts the site of this block house through the middle. Outside of the fence the operations of the gardener have obliterated all trace of it, but inside, the ditch may still be seen, though nearly filled up. It was here the British force was encamped on the 5th of June, 1813, when a courier brought intelligence to General Vincent, who was in command, that the Americans had reached Stony Creek. And it was from here that that little force started, at ten o'clock that night, on the noiseless march which resulted in the battle of Stony Creek, the most daring exploit of the war. We need not repeat the story of that memorable little transaction, since the best account of it that has ever been in print appeared in the columns of the *Spectator* about two months ago from the pen of Mr. E. B. Bigger. Within a few minutes' drive of the pic-nic ground—in the grounds of Dundurn—are the graves of some thirty British officers (we give the number from memory), who fell in battle or yielded to disease in these troublous times. It was within these grounds, too, we think, that General Brant was compelled to slay his son to save his own life. These are a few of the historical associations of Hamilton, and it will be seen that they are memorable.—*Hamilton Spectator*.

### 4. "I'VE GOT ORDERS NOT TO GO."

"I've got orders, positive, not to go there—orders I dare not disobey," said a youth, who was being tempted to a smoking and gambling saloon.

"Come, don't be so womanish—come along like a man," shouted the youths.

"No, I can't break orders," said John.

"What special orders have you got? Come, show them to us, if you can. Show us your orders."

John took a neat wallet from his pocket, and pulled out a neatly-folded paper. "It's here," he said, unfolding the paper, and showing it to the boys.

They looked and read aloud :

"Enter not into the path of the wicked man. Avoid it : pass not by it ; turn from it, and pass away."

"Now," said John, "you see my orders forbid me going with you. They are God's orders, and by His help I don't mean to break them."

### 5. WHAT TO BE CAREFUL OF.

Be careful of your time. Time is money ; husband it well ; let it be understood that when men look for you in business hours you are to be understood.

Be careful of your expenditure ; every dollar you withdraw from your business needlessly is a thrust at your success. It is like taking away an effective man in the presence of an enemy. It is worse ; it is like taking an effective man and handing him over to the enemy.

Be careful of your companions. If you want to succeed, the theatre, the saloon, the gambling hall, are not the places for you. He would not be a prudent merchant who would open accounts with young men knowing them to be frequenters of such places. Don't seek companions who can only corrupt, while you can find so many who can profit.

Be careful of your character. "A good name is rather to be chosen than great riches."—*Prov. xxii. 1*. Character, like a shadow, accompanies all men, and, whether good or bad, it cannot be shaken off. A father who leaves to his son a good name, and that only, leaves him a priceless inheritance ; one which will never fail him, if fully appreciated and properly improved.

### 6. FARMERS' HOMES.

It is often the practice of farmers to think too much of the farm and too little of the farm house ; to spend too much time and labour on the general farm and on the barn, and too little on the garden and home mansion ; to give too much attention to the hogs, cattle and horses, and too little to the wife and children. There is a feeling of dissatisfaction too generally noticeable with life on the farm, not only among the sons and daughters, but the wives of farmers. It is too often the case that while the farmer himself and his wife are struggling from year to year to make money and improve the farm, their sons and daughters are constantly learning to dislike and absolutely hate the occupation and all the surroundings of their parents. They are constantly pointing to themselves the less laborious and more profitable occupations, and the more cheerful and happy homes of their comrades and acquaintances in the neighbouring towns and cities, and longing for the day to come when they can throw off a life of drudging and unsatisfying servitude, and go to the store or counting house, the factory, or to some of the overcrowded professions, where they can enjoy more leisure and more privileges than they know how to find on the farm. Now, the only way to remedy this state of things, this great evil of rural life, is to make home on the farm more attractive and enjoyable.

The door yard ; the flower and vegetable garden ; the house, both outside and in, should be rendered objects of interest and affection to the children from the very moment they are old enough to feel that interest and exercise affection. In the house let them have their play-rooms, their toys and pictures, their sewing and patchwork, their slates and pencils, their saws and hammers. Let them be taught that these things are all their own ; that they are articles of real value, to be handled and used with care, and for a valuable purpose ; always being careful to explain, in an interesting manner, their uses and their objects. In the garden and around the house let each child, as soon as he or she is old enough, help in planting a fruit-bearing tree, or a vine as well as a tree, or a vine for ornament. Let these also be their own in name and in fact. Teach them how to cultivate and prune them, and the reason of each particular operation.

Begin when the children are small to treat them as reasonable beings, and as soon as they can read and understand, furnish them with books that explain in a simple and interesting manner the very things it will be of the most value for them, as sons and daughters of a farmer, to know when they are larger. Make the boy a man and the girl a woman, and let them feel that they are responsible for their acts as such, as soon as practicable. Let them feel that, while they are working for your good, it is not for yours alone, but for their own as well. Do not compel, but induce them to work. Have always in the house a family room. Make it attractive to each and all the family. Have stated, or at least frequent, meetings of the whole family in this room, and at each of such meetings be sure to be provided with something of interest to communicate—some practical lesson of the farm or garden or kitchen, or of the virtues, to attract the attention, brighten the intellect or temper, and direct the affections. Study, above all things, to remember for yourself that the farmer's life is only a monotonous life of drudgery to him that makes it so ; that it is for your interest, as well as your duty, that your mind, that your social and moral faculties, and those of your children, should be cultivated as well as your farm. Think more ; work less hours, but to greater advantage. Cultivate kindly feelings toward your neighbours ; meet often with them in the old-fashioned neighbourhood visiting circle. Give others the benefit of your knowledge, and in return learn something from your fellow-members. In short, break up the erroneous idea that you have imbibed in some improper manner, and which, by your own acts, you have been teaching your children, that the farmer's life is the life of a drudge, a hermit, and determine that you will make your home attractive and happy, and go about it and make your determination a reality.

—*London Herald*.

## 7. IS IT WORTH WHILE ?

[Joaquin Miller has written a new book of poems, in which may be found many rare gems strewn among the sand. Here is one from among his "Fallen Leaves," which is so full of earnest feeling, and teaches so much a needed lesson, that it seems worthy of presentation to our readers.]

Is it worth while that we jostle a brother  
Bearing his load on the rough road of life ?  
Is it worth while that we jeer at each other  
In blackness of heart ?—that we war to the knife ?  
God pity us all in our pitiful strife.

God pity us all as we jostle each other ;  
God pardon us all for the triumphs we feel  
When a fellow goes down 'neath his load on the heather,  
Pierced to the heart : words are keener than steel,  
And mightier far for woe or for weal.

Were it not well, in this brief little journey  
On over the isthmus, down into the tide,  
We give him a fish instead of a serpent,  
Ere folding the hands to be and abide  
For ever and aye in dust at his side ?

Look at the roses saluting each other ;  
Look at the herds all at peace on the plain—  
Man, and man only, makes war on his brother,  
And laughs in his heart at his peril and pain ;  
Shamed by the beasts that go down on the plain.

Is it worth while that we battle to humble  
Some poor fellow-soldier down into the dust ?  
God pity us all ! Time oft soon will tumble  
All of us together, like leaves in a gust,  
Humbled indeed down into the dust.

Truth like a diamond will shine in the dark, notwithstanding the efforts of those who seek to cover it.

Human Law is not God's Law.

The reign of faction is brief—that of truth, triumphant.

The rights of the Christian are not less sacred than those of the citizen.

Draco had but one punishment for all kinds of offences, and that was Death.

## 8. ABOLISHING CORPORAL PUNISHMENT IN SCHOOLS.

At the beginning of the school year that has just closed, the Superintendent of the Chicago schools went before the Chicago Teachers' Institute, comprising more than 600 teachers, and told them he wished them to see what could be done during the year without corporal punishment. The teachers anxiously inquired what they should do with lazy and disobedient pupils. The Superintendent replied by simply telling them what they must do. They must not keep pupils after school hours ; they must not deprive them of their recess ; must not make them the subjects of ridicule before their mates ; must not use any means that will tend to irritate or annoy the children. The teachers went to work upon the new platform with 30,000 children on their hands, and with nothing in shape of a weapon of defence except the simple power of writing a suspension and sending an ungovernable child to the Superintendent. The result has been that the number of suspensions increased during the year from 200 to 600. Many were received back on promise of reform. It is proposed to establish a central ungraded school, which shall be in the nature of a reform school, to which all the hard cases shall be sent.—*New York Observer.*

## 9. DIET OF SCHOOL GIRLS.

Students who apply themselves closely, need to be well nourished. It requires good food and a great amount of it to make the brain work well, and not impair the body. Sedentary habits often induce indigestion ; therefore, many have supposed the less they ate the more they could study. About twenty-five years ago earnest persons with limited means worked and studied very hard, and ate and slept very little. Many a good constitution was thus ruined. Nervous dyspepsia was often induced by overwork and lack of suitable nutrition. The more abstemious they were as to food, the less able they became to dispose of what was taken. Many of our ladies not pinched by poverty or pressed by hard work,

lose their appetite by too little exercise, too little sleep and too much study. This course, if long continued, will induce indigestion. The nervous system being exhausted through the brain work, has not power to carry on the bodily functions, and the victim wonders that she should have any stomach trouble when she had eaten so very sparingly. The truth is, limited nutrition has induced indigestion.

The morbid appetite of school girls, for which they are so often blamed or ridiculed, is a nervous disease brought on by impaired nutrition. There is a lack, a longing, "a sense of goneness," which craves but lacks relish for healthful food. Men suffering from this, take to beer and alcoholic drinks ; women more often to tea and coffee in excess, and school girls to chalk, slate-pencils, cakes, candies, etc. A busy brain, as well as an active body, requires beef, bread, oysters, eggs, vegetables and fruit, all well cooked, and plainly prepared. Physiologists are making investigations as to what food is suited to supply brain and nerve power, and physicians are talking of the remedies best able to restore it when lost, and perhaps in years to come we may have a bill of fare exact and definite for those who wish to work with the head, and another for those having hand labour. But certain it is that those of intense mental activity ought not to be helped on, and hurried on by stimulants, or they will die before their time. Stimulants may be useful for emergencies, for sickness, or for advancing years ; but young life, with its enthusiasm, does not need the aid of tea, coffee or alcohol, unless impaired by sickness or overwork. These will help one through a hard lesson, or a night's gaiety, but if it be persisted in, it is at the expense of strength for the years that follow. Tea makes our girls over-excitable, wakeful, nervous. Coffee induces constipation, yellow skin and mental depression. Washerwomen take their strong tea and "wash it off," work it off through the muscular system, and are ready to sleep. Our sensitive girls take it and are bright for study for social life, but are wakeful after, and they come to live on tea and coffee, and care less and less for plain nourishing food. There are few chronic individuals so hard to cure as those who have long studied with too little food and too little sleep. If girls must study too hard, if women must work when they are not able, or if they must be social and gay when they do not feel so, then tea is the best aid, the stimulus safest and best, and very efficient if not relied upon constantly. If needed, it is best in the morning. At night it makes one wakeful, and hence should not be used, save when we *must* sit up, and then it is as good as the Irishman's whiskey, which was "victuals and drink and lodgings." But if used two or three times a day, then something stronger is wanted for extra occasions, for emergencies.

School girls remain fresh and plump sometimes when they are but imperfectly nourished. The brain work brings a determination of blood to the head, which gives a flushed face. Beside this, those of studious habits are likely to suffer from torpidity of the excretory organs ; hence the system is plump from being loaded with effete material which should have been thrown off by way of the skin and bowels. Thus what seems to be strength is merely weight, weariness—an excess of adipose, with a poverty of muscular tissue. In such cases there is a craving for something to eat, but a lack of appetite for regular rations. The whole system is surcharged with impurities which should have been thrown off ; and this depresses the appetite and disturbs digestion.

Half the complaints of school girls about food are the result of lack of relish. Then they feel half famished, and nibble cakes, crackers and candies between meals, or have a box of "goodies" from home, and these will certainly destroy all desire for bread and meat. Of course in supplying a table for large numbers there must be a lack of deference to individual tastes, which can only receive attention in the home circle. But the need of change in occupation, quite as much as in food, causes nine-tenths of the trouble about fare. Over-study, over-anxiety, too little sleep, too little exercise, too much sugar take away the appetite, and those who cannot eat should not study, for nerve power is thereby permanently impaired.—*Mrs. Gleason, in Herald of Health.*

## 10. ENGLAND'S EXPORT BOOK TRADE.

The English Custom House returns for 1872 show that the export of printed books in that year reached 81,422 cwt., of the declared value of £883,914, an increase of no less than 19,212 cwt., in quantity, and £164,872 in value over the preceding year. On the other hand, the import of books was only 14,172 cwt., of the value of £149,189. England thus sent out six times as much as she received. The export of books to the United States in 1872 was to the value of £307,684, a very large amount considering the large number of English reprints which are got out by our neighbours on the other side. Without these, to what a large extent might not the export have been increased.

VIII. Monthly Report on Meteorology of the Province of Ontario.

I. ABSTRACT OF MONTHLY METEOROLOGICAL RESULTS, compiled from the Returns of the daily observations at ten High School Stations, for OCTOBER, 1873.

OBSERVERS:—Pembroke—R. G. Scott, Esq., M.A.; Cornwall—James Smith, Esq., A.M.; Barrie—H. B. Spotton, Esq., M.A.; Peterborough—J. B. Dixon, Esq., M.A.; Belleville—A. Burdon, Esq.; Goderich—Hugh J. Strang, Esq., B.A.; Stratford—C. J. Macgregor, Esq., M.A.; Hamilton—George Dickson, Esq., M.A.; Simcoe—Dion C. Sullivan, Esq., L.L.B.; Windsor—J. Johnston, Esq., B.A.

Table with columns: STATION, ELEVATION, BAROMETER AT TEMPERATURE OF 32° FAHRENHEIT, MONTHLY MEANS, RANGE, MONTHLY MEANS, TEMPERATURE OF THE AIR (DAILY RANGE, HIGHEST, LOWEST, WARM-EST DAY, COLDEST DAY), TENSION OF VAPOUR (MONTHLY MEANS).

Approximation. dOn Lake Simcoe. eNear Lake Huron. fOn Lake Ontario. gOn St. Lawrence. hOn the Ottawa River. iOn the Detroit River. kInland Towns.

Table with columns: STATION, HUMIDITY OF AIR, WINDS, NUMBER OF OBSERVATIONS, MOTION OF CLOUDS, SURFACE CURRENT, WINDS, AMOUNT OF CLOUDINESS, MONTHLY MEANS, RAIN, SNOW, AURORAS.

Where the clouds have contrary motions, the higher current is entered here. Velocity is estimated, 0 denoting calm or light air; 10 denoting very heavy hurricane. REMARKS: CORNWALL—Wind storm, 21st. Fog, 9th. Snow, 28th, 29th. Rain, 3rd-7th, 12th, 17th, 19th-21st, 24th, 26th, 28th, 29th. BARRIE—A few flakes of snow fell on 6th. The first snow fall of more than half an inch occurred on 20th. Wind storm, 21st, 30th. Snow, 6th, 20th, 28th, 31st. Rain, 3rd-5th, 11th-13th, 16th, 18th, 20th-23rd, 26th-28th, 31st. PETERBOROUGH—Hail, 21st. Hail round moon on 4th, 9 p.m. Wind 11th. Wind storms, 11th, 17th, 20th, 24th, 28th, 31st. Snow, 6th, 20th, 28th, 31st.

HAMILTON.—Fogs, 9th, 10th. Snow, 20th, 28th. Rain, 4th, 5th, 11th, 13th, 16th, 18th, 20th, 21st, 23rd, 27th, 28th, 20th.  
 SIMCOE.—Hail, 14th. Wind storm, 11th. Snow, 19th, 20th, 27th—29th. Rain, 2nd—5th, 15th—23rd, 26th, 27th, 30th, 31st. Very wet month. Last week of September and first of October leaves assumed their gorgeous hues.  
 WINDSOR.—Lightning, 9th. Lightning and thunder, with rain, 11th. Wind storms, 20th, 21st, 28th. Fog, 7th. Snow, 20th, 21st, 28th, 29th, 30th. Rain, 3rd, 4th, 5th, 11th, 16th, 17th, 23rd, 26th, 30th. Meteor in Z. towards W., 23rd. One through *Auriga* towards N., 24th.

## IX. Educational Intelligence.

OTTAWA PUBLIC SCHOOLS.—At the recent examination of the Ottawa Schools the following address was presented to His Excellency the Governor-General and to the Countess of Dufferin: "May it Please Your Excellency—May it Please Your Ladyship: In the names of about 1,500 children in attendance at the public schools of this city, I have the great honour of offering you very sincere thanks for your kindness in attending the exercises of this evening. It is now very widely known that Your Excellency entertains strong, but just, opinions on the subject of popular education, and especially in regard to the education of girls, and we have not been without the hope that Your Excellency would favour us this evening with some observations tending to encourage and guide us in our future studies. We feel that, as the rising generation, we are in advance of all who have preceded us in this country in point of facilities for moral and intellectual improvement, and it is our purpose to endeavour to show that we prize our privileges. From the rewards to be presented this evening, Your Excellency will necessarily infer that the gentlemen who manage the public schools have been well pleased with the progress of the scholars, and we hope that, should Your Excellency attend any similar gathering hereafter, you will find we have not been less diligent or successful. Respectfully praying leave to offer to Your Excellency and Lady Dufferin our best wishes for a very happy and enjoyable Christmas, as well as for a long life of usefulness and prosperity, I now beg Your Excellency's permission to hand you a written copy of this short address." His Excellency, in replying to the address just read to him, expressed the pleasure he experienced at being present on the occasion. In the course of his remarks he alluded to the arduous and painful duties of a teacher, and made particular reference to the subject of the education of women, which was now engaging general attention, and to her influence in society. He also expressed his deep regret that he and Lady Dufferin were unable, owing to an unforeseen accident in his household, to be present earlier in the evening, and wound up by wishing them all a happy Christmas. Readings, recitations and singing followed, Professor Workman, the efficient music master of the schools, also giving an admirable illustration of his method of teaching music. The Rev. H. J. Borthwick then read the prize lists. His Excellency and the Countess then presented the gold and silver medals to the successful pupils. Dr. Grant, M.P., at the request of the Chairman, briefly addressed the audience. He spoke of the great progress which education had made in the city during the past twenty years, as evinced by the brilliant assemblage before him that night. He alluded to the higher education of women, and spoke of the duties of mothers in bringing up their children. He referred in happy terms to the presence of His Excellency the Governor-General and Countess of Dufferin at their meeting that night, which was an evidence that they entered heartily into the work of educating, and took a lively interest in everything pertaining to the welfare and prosperity of the people throughout the whole length and breadth of the Dominion. The Chairman having made a few appropriate remarks, in which, on his own behalf and on that of the Board, he thanked their Excellencies for their attendance on the present occasion, the proceedings were brought to a close by the singing of the National Anthem.—*Ottawa Times*.

## X. Departmental Notices.

### INTER-COMMUNICATIONS IN THE "JOURNAL."

As already intimated, a department is always reserved in the *Journal of Education* for letters and inter-communications be-

tween Inspectors, School Trustees and Teachers, on any subject of general interest relating to education in the Province. As no personal or party discussions have, ever since the establishment of the *Journal*, appeared in its columns, no letter or communication partaking of either character can be admitted to its pages; but, within this salutary restriction, the utmost freedom is allowed. Long letters are not desirable; but terse and pointed communications of moderate length on school management, discipline, progress, teaching, or other subjects of general interest are always acceptable, and may be made highly useful in promoting the great objects for which this *Journal* was established.

### PAYMENT OF TEACHERS' CHEQUES.

The Education Department requests that Inspectors will add the following words to the cheques which they may issue to Public Schools, or write them across the face of the cheque:—

"This cheque must be presented to the Treasurer for payment within two weeks of its date."

Inspectors generally complain of the great remissness of Trustees not sending in their orders until too often the amount payable to teachers has been apportioned and is available for them—even after the Trustees have been notified on the subject by the Inspector. One Inspector suggests as a remedy, "These Trustees blank orders attached to the inside of the blank half-yearly returns, with directions to have them signed and forwarded with the returns."

### SCHOOL PREMISES AND ACCOMMODATION.

We would request the attention of Inspectors to Note *a* of Regulation No. 4 of their "Duties," in which they are directed to call the attention of Trustees to the condition of the School premises. In many School sections the School-house has been allowed to remain in the same state for fifteen or twenty years and longer, often on a bare open space, or on the road-side unenclosed, without a tree or shrub near by to shade it, or any provision being made by the Trustees for the convenience or health of the pupils, or even for their observance of the decencies of life. The Legislature has wisely decided that this state of things shall not continue, but that, as soon as possible, a remedy shall be applied where necessary. A reasonable time should, of course, be allowed to Trustees in all cases to set things right; but in the meantime Inspectors will, we trust, not fail to urge upon Trustees the necessity of complying, as soon as possible, with the provisions of the law on this subject.

### THE ACT OF 1871 AND SEPARATE SCHOOLS.

In reply to a question frequently asked, we desire to say that the new School Act and Regulations do *not* in any way affect the Separate Schools. It was not intended to affect them when the Act was passed; and it would be unjust to the supporters of these Schools thus to legislate for them indirectly, and without their knowledge. The Inspectors will, therefore, be particular not to apply the Act, or any of the new Regulations, to Separate Schools.

### THE PUBLIC SCHOOL GENERAL REGISTER.

The General Register for use in the Public Schools of Ontario, as required by the Official Regulations, is now ready, and can be supplied to schools on the following terms, viz.:

No. 1. Copy of 20 pages, paper covers, free by post	35	cts.
2. do 40 do stiff cover, cloth backs....	45	"
3. do 60 do do do ...	65	"

NOTE.—As Numbers 2 and 3 above, 40 and 60 pages each, have a stiff cover, they cannot be sent by post, but may be ordered by Express from the Department or through any bookseller, from Messrs. Copp, Clark & Co., Wholesale Booksellers, Toronto.



PUPILS' DAILY, WEEKLY, AND MONTHLY REPORTS.

NOW READY, AND CAN BE SUPPLIED AT THE EDUCATIONAL DEPOSITORY, THE FOLLOWING BLANKS :—

1. Public School Pupil's Weekly Report of Standing (Attendance, Conduct, Diligence, Recitations, Merit Cards, for a Term), Class I., II. or III., price per doz., on paper, postage included. .... \$0.15
2. Do do do on card..... 0.35
3. Do do Lesson Report in subjects of Study, &c. (for a Term), Class IV., price per doz., on paper, postage included.. 0.30
4. Do do do on card..... 0.50
5. Do do do Class V., price per doz., on paper, postage included... 0.30
6. Do do do do on card..... 0.50
7. Do do do Class VI., price per doz., on paper, postage included... 0.30
8. Do do do do on card..... 0.50
9. Do do Report of one Month's Credit and Discredit Marks obtained, &c., price per doz., on paper, postage included 0.15
10. Do do Monthly Summary (for five months) of Attendance, Conduct and Recitations, in subjects of Study, &c., price per doz., on paper, postage included 0.25
11. Do do do do on card..... 0.40

N.B.—A set of samples of each of the foregoing will be sent free, by Mail, on receipt of 30 cents.

NORMAL SCHOOL STUDENTS AT THE RECENT EXAMINATION.

At the late examination of Teachers throughout the Province, the number of Certificates of the Second Class awarded to students from the Normal School was 36. Of these, 12 were of the Grade A, and 24 of the Grade B. The number of students of the Fiftieth Session who presented themselves for examination was 34, of whom 10 received 2 A Certificates, and 20, 2 B Certificates. The other candidates were students of a former Session. The total number of Second Class Certificates granted was 99 ; of these, 31 were A's and 68 B's.

The examination for First Class Certificates resulted in the Council of Public Instruction awarding to three students of the Normal School Certificates of the Grade B. The successful candidates, out of eleven applicants, were Messrs. Carson, Duncan and Parlow.

CORRECTION.

Mr. George E. Crawford's name appears in a recently published list of retired teachers. Mr. Crawford has not retired from the profession, and the two dollars sent to him was to refund an overpayment of subscription.

CONSCIENCE MONEY.

Dr. Hodgins, Deputy Superintendent of Education, acknowledges the receipt, anonymously, of eleven dollars, from a teacher who had appropriated to himself books sent as prizes for the pupils, but whose "conscience will no longer allow him to leave the matter unsettled." The amount has been sent to the Treasury, as requested. The Department takes every precaution to prevent occurrences of this kind. The books are always sent direct to the Trustees, and they are required, before getting them, to sign a pledge or guarantee to the following effect :—"The Corporation hereby pledges itself not to dispose of these books, nor permit them to be disposed of to any private party or for any private purpose whatsoever ; but it

binds itself to have them distributed solely as prizes among the pupils attending the schools (and not to the teacher, or any other party or parties), in terms of the Regulations, &c.

TABLET READING SHEET LESSONS.

- Being the First Book of Lessons in Tablet form, in thirty-three sheets, 75 cents (By post, postage paid)..... Price \$0 90
- Mounted on 17 sheets of thin cardboard ..... " 2 00
- Mounted on 17 sheets of stiff cardboard, varnished. " 4 00
- Mounted on 33 sheets of stiff cardboard, varnished. " 6 00

The hundred per cent. is allowed on those and the Geography sheets, provided a sum of not less than five dollars be remitted.

PRINTED SHEETS FOR SCHOOLS.

- |   |                 |   |
|---|-----------------|---|
| 1. The New Programme .....                | } Large Sheets. | } The ten sheets sent free of postage for 50 cents. |
| 2. The New Limit Table .....              |                 |   |
| 3. A Blank Time Table .....               |                 |   |
| 4. Duties of Pupils .....                 |                 |   |
| 5. The Ten Commandments.....              |                 |   |
| 6. Library Regulations .....              | } Small Sheets. |   |
| 7. List of authorized Text Books .....    |                 |   |
| 8. Merit Cards and their uses .....       |                 |   |
| 9. Hints on constructing Time Tables..... |                 |   |
| 10. Departmental Notices .....            |                 |   |

CANADIAN SCHOOL MAPS AND APPARATUS.

Sets of the new series of maps of Canadian manufacture are now ready, and can be had, by school authorities, at the Educational Depository, Toronto, either singly, in wall cases, or on rotary stands, embracing Maps of the World, Europe, Asia, Africa, America, the British Isles and Canaan and Palestine. The Map of British North America (too large for cases) is mounted separately on rollers.

Terrestrial and Celestial Globes, of Canadian manufacture, of the following sizes : *three* (hemisphere), *six*, *twelve*, and *eighteen* inches in diameter, and on various kinds of frames.

XI. Advertisement.

A Gem worth Reading!--A Diamond worth Seeing

SAVE YOUR EYES!

Restore your Sight!

THROW AWAY your SPECTACLES.

By reading our Illustrated **PHYSIOLOGY AND ANATOMY OF the EYE SIGHT.** Tells how to Restore Impaired Vision and Overworked Eyes; how to cure Weak, Watery, Inflamed, and Near-Sighted Eyes, and all other Diseases of the Eyes.



WASTE NO MORE MONEY BY ADJUSTING HUGE GLASSES ON YOUR NOSE AND FIGURING YOUR FACE. Pamphlet of 100 pages Mailed Free. Send your address to us also.

**Agents Wanted,**

Gents or Ladies. \$5 to \$10 a day guaranteed. Full particulars sent free. Write immediately, to **DR. J. BALL & CO.,** (P. O. Box 957,) No. 91 Liberty St., New York City, N. Y.

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