

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- |                                     |   |                                     |   |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/>            | Coloured covers /<br>Couverture de couleur  | <input type="checkbox"/>            | Coloured pages / Pages de couleur   |
| <input type="checkbox"/>            | Covers damaged /<br>Couverture endommagée   | <input type="checkbox"/>            | Pages damaged / Pages endommagées   |
| <input type="checkbox"/>            | Covers restored and/or laminated /<br>Couverture restaurée et/ou pelliculée   | <input type="checkbox"/>            | Pages restored and/or laminated /<br>Pages restaurées et/ou pelliculées   |
| <input type="checkbox"/>            | Cover title missing /<br>Le titre de couverture manque  | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/<br>Pages décolorées, tachetées ou piquées  |
| <input type="checkbox"/>            | Coloured maps /<br>Cartes géographiques en couleur  | <input type="checkbox"/>            | Pages detached / Pages détachées  |
| <input type="checkbox"/>            | Coloured ink (i.e. other than blue or black) /<br>Encre de couleur (i.e. autre que bleue ou noire)  | <input checked="" type="checkbox"/> | Showthrough / Transparence  |
| <input type="checkbox"/>            | Coloured plates and/or illustrations /<br>Planches et/ou illustrations en couleur   | <input checked="" type="checkbox"/> | Quality of print varies /<br>Qualité inégale de l'impression  |
| <input checked="" type="checkbox"/> | Bound with other material /<br>Relié avec d'autres documents  | <input type="checkbox"/>            | Includes supplementary materials /<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/>            | Only edition available /<br>Seule édition disponible  | <input type="checkbox"/>            | Blank leaves added during restorations may<br>appear within the text. Whenever possible, these<br>have been omitted from scanning / Il se peut que<br>certaines pages blanches ajoutées lors d'une<br>restauration apparaissent dans le texte, mais,<br>lorsque cela était possible, ces pages n'ont pas<br>été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion<br>along interior margin / La reliure serrée peut<br>causer de l'ombre ou de la distorsion le long de la<br>marge intérieure. |                                     |   |
| <input type="checkbox"/>            | Additional comments /<br>Commentaires supplémentaires:  |                                     |   |

THE  
JOURNAL OF EDUCATION

FOR

Upper Canada:

EDITED BY

THE REVEREND EGERTON RYERSON, D. D.,

*CHIEF SUPERINTENDENT OF SCHOOLS,*

ASSISTED BY MR. J. GEORGE HODGINS.

---

---

VOLUME VI.—FOR THE YEAR 1853.

---

---



TORONTO:

PRINTED BY LOVELL AND GIBSON, CORNER OF YONGE AND MELINDA STREETS.

TERMS:—FIVE SHILLINGS PER ANNUM, IN ADVANCE.

1853.



# ALPHABETICAL INDEX TO VOLUME VI

N. B.—The Figures indicate the Pages.

## A

Apparatus in Schools, 7.  
 Attendance of Pupils, 11, 26, 150.  
 Arithmetical accumulation of money, 18.  
 American Estimate of Schools in Paris, 19.  
 Do do Upper Canada, 24.  
 Do Literature, Library Catalogue of, 123.  
 Act, New School, U. C., 54, 81, 88.  
 Appointments in Normal and Model Schools, U. C., 56.  
 Advantages of a system of Schools, 17.  
 Addresses to Rev. Dr. Ryerson, 38, 52, 59, 70.  
 Do to Mr J. H. Sangster, 53.  
 Arctic Expeditions, 63, 173.  
 Animal and Vegetable Matter, 68.  
 Apportionment to Common Schools for 1853, 38, 40, 90, 144.  
 Do to Public Libraries, 72, 169.  
 Average attendance basis 144.  
 Application to Study, by Dr. Chalmers 151.  
 Arts, Useful, the Magnetic in, 158.  
 Arts useful, Catalogue of Libraries, books on the 119.  
 America, Education in, 185.  
 American Provinces, Statistics of B.N. 159.  
 Arago, Obituary notice of 161.  
 Animals, Skeletons of, to procure, 174.  
 Absentee Land-holders, 38, 83.  
 Auditing School Accounts 38, 148.  
 Agriculture, Catalogue of Library books on, 118.  
 Ancient Literature, Library Catalogue of, 124.  
 American and Canadian Schools, Expense of contrasted, 28.  
 Athol U.C., School Progress in, 10.  
 Appellate Jurisdiction of the N. Y. State, Superintendency of the Teacher, 181.  
 Authority of the Teacher, 181.  
 Arnold, Rev. Dr. on School Discipline, 17.

## B

Boys, Remember, 182.  
 Books, Cicero, on 141.  
 Books, Suggestions for choice of 138.  
 Books, Text in Schools 769, 163. Turkish, 15.  
 Books, Catalogue of Library, for U.C. 102.  
 Byron, Ada, death of 16.  
 Beautiful, love of the 28.  
 British Constitution, the 44.  
 Bible, Coverdale's, 80.  
 Botany, Catalogue of Library books on 113.  
 Biography, do do 127.  
 Book-knowledge of Farmers' 140.  
 Books, origin of certain 141.  
 Bad Spelling, 149.  
 Britannia Bridge, the 156.  
 Business, Rules for Young Men in 165.  
 Bonaparte on Novel Reading 176.

## C

Childless, the, taxed for Schools 5.  
 Child in Prayer 28.  
 Children, Vagrant, at School, 11, 150, School Rate on, 51.  
 Children 28, 86, 150, 166.

Canada, National Education in Upper 8, 23, 24, 39, 72.  
 do do do Lower, 45.  
 Canadian History, Catalogue of Library Books on 126.  
 Convention, School, in U. C., 8, 25, 36, 39, 41, 51, 56, 69.  
 Common Schools, 21, 62.  
 Cambridge University Commission 22.  
 Chalmers Rev. Dr. 151.  
 Colleges in Canada, 66, 70, 75, 172.  
 Colleges, to interest of the People, 145.  
 Colleges, Mechanics 49.  
 Columbia College, N. Y., 31, 47.  
 Colleges, to interest of the People, 145.  
 Colleges and Schools, relations of 178.  
 Correspondence, the, of a Public Department, 34.  
 Certificates of Qualification, Provincial, 40, 95, 173.  
 Caloric Ship Ericson, 63.  
 Cards Visiting, 71.  
 Congress, the Library of 79, 159.  
 Circulars of the Chief Superintendent, 8, 88, 92, 94, 95, 97, 98, 99, 168.  
 Catalogue of Books for Public Libraries in U. C. 102.  
 Chemistry, Catalogue of Library books on 118.  
 Cicero on Books 141.  
 Connexion between Science, Literature and Religion 141.  
 Correspondence in regard to Public Libraries in U. C. 96, 137, 153.  
 Comet, the Recent, 158.  
 Comma, Importance of a 176.  
 Culture of N. S. grounds Toronto in 1853, 170.  
 Candle Burning, the Science of 174.  
 Connecticut School Fund 158.

## D

Dublin University 30.  
 Discipline in Schools, 7, 17, 21.  
 Dartmouth College 63.  
 Denominational Schools, Evils of 65.  
 Dictionaries for Public Libraries U.C. 121.  
 Discontent and Ignorance 181.  
 Domestic Life, Works relating to, 132.  
 Decimal Coinage, the, 159.  
 Diligence, the Reward of 13.  
 Done what is here Well Done, 162.  
 Debts, American State Debts 74.  
 Dull Children 166.  
 Designs, Transferring, 174.

## E

### EDITORIALS—LEADING.

Education, National in Upper Canada 8.  
 Educational Wants in the State of New York 24.  
 Education in Upper Canada, American opinions of, 24.  
 Municipal Appropriations for Public Libraries 72.  
 Education in Upper Canada, Necessity for increase 72.

The Supplementary School Act, U.C. 88.  
 Educational Institutions of a Country one interest 152.  
 First Apportionment of the Legislative Library Grant in U. C. 168.  
 First Years' Culture of the Normal School Grounds, 170.  
 University College, Toronto, 172.  
 Review of the year 1853' 182.  
 Parliamentary Report on the L. C. system of Education, 184.  
 Education, State, without a State Fund 1.  
 Education, Past and Present 33.  
 Education, Influence of Detective 71.  
 Education, Value of a Free People, 86, 157.  
 Education in U.C., 8, 23, 39, 55.  
 Education, Rules for Home Education, 166.  
 Education of Farmers, 175, and labor 181.  
 Educational Intelligence, Various, 14, 29, 45, 61, 75, 157.  
 Essentials in Common Schools, 21.  
 Elections, Free Schools, in U. C, 1853, 26.  
 Expense of Canadian and American Schools compared 26.  
 Elgin, Lord, on Personal Responsibility 41.  
 Edinburgh Review and American Education 179.  
 Europe, Popular Education, in, 44.  
 England, the greatness of 22.  
 England, Education in 33, 47, 77, 172.  
 English Travellers on the Continent, 185.  
 English Literature, Works on, for Libraries in U. C. 120.  
 Eminence, Poor Boy raised to, 164.  
 Errors in Teaching, 173.  
 Eclipses in 1853, 79.  
 Earth Mensuration of the, 174.

## F

Favours and their obligations, 182.  
 Fund, State Education without a State, 1.  
 Friends' State School, 157.  
 Farmers, Education of 140, 175.  
 Free Schools in Upper Canada, 11, 25, 36, 39, 42, 51, 56, 69.  
 Free Schools in P. E. Island, 46, 70.  
 Free School Law of, N. Y. State, 78.  
 Foolscap Origin, of 74.  
 French Literature and Biography for Public Libraries, 121, 130.  
 French Schools, 19, 21.  
 Fiction, H. More, on 141, Napoleon on, 176-

## G

Great Men, Self-Educated 19, Influence of 164.  
 Gray Thos., the Poet, Memoir of 20.  
 Golden Hours 21.  
 Generosity, Noble, 52.  
 Guiana Education in British, 30.  
 Geology of Nova Scotia, 87.  
 Geological Works for Public Libraries, 116.  
 Geological Knowledge, use of, 158.  
 Grammar Schools, 7.  
 Gillilan, Rev. G. Address by, 141.  
 Gutenberg, Memoirs of 179

## H

Hints for a Teacher, 5, 7, 86, 151, 162.  
 Hints to Parents, 86, 166.

Hours, Golden, 21.  
 Habits, Four Good, 60.  
 Hungary, a Warning to Canada, 65.  
 "Honor me I will Honor, Them that" 74.  
 Hamilton Central School, 75, 157.  
 Historical Works for Libraries, 102.  
 Harvard College Museum, 174.  
 Home Education, Rules for, 166.

## I

Ignorance in France, 21.  
 Ignorance and Discontent 181.  
 Ireland, Education in, 30.  
 Inspectors, School, in Upper Canada, 37.  
 Improvement, An Obstacle to, 162.  
 Information, Seek Useful, 165.  
 Institutes, Teachers, 51.

## J

Journal of Education and School Offices, 9, 27, 85.

## K

Kindness, Power of 140.  
 Knowledge, Uses of 142.  
 Kentucky School Fund 157.

## L

Labor, Education increases the power of, 181.  
 Life a Fountain 13.  
 Literary and Scientific Intelligence 15, 31, 47, 63,  
 80, 87, 158, 174.  
 Literary Pursuits in U. C. 79.  
 Libraries Public, in U. C. 8, 42, 51, 57, 97, 102,  
 137, 152, 168.  
 Libraries, Public Statistics of 159.  
 Libraries, Common School 140.  
 Libraries, Influence of Suitable 141.  
 Libraries and Study, 139.  
 Leisure, the Young Man's 28.  
 Love of the Beautiful 28.  
 Law Proceedings in Regard to Schools 37, 85.  
 Legislation School in Ohio 43. In N. Y. thought-  
 less, 50.  
 Lower Canada, Education in 45. 184; Population  
 of 159.  
 Layard Dr. 87.  
 Literature Science and Religion, Connection be-  
 tween, 141.  
 Learning 176.

## M

Man, What Makes a, 176.  
 Maps providing for Schools 144.  
 Modus Operandi of a School Room 6.  
 March (Poetry) 44.  
 Mechanics Institute, and Mechanic's College 49.  
 Murray, Death of Professor 60.  
 Michigan, Education in 62.  
 Massachusetts, Education in 62, 158.  
 McCaul, Dr., Speech of 66.  
 Magyars, Hungary and Separate Schools 65.  
 Municipal Proceedings regarding School matters  
 143.  
 Municipal appropriations for Public Libraries 72,  
 97, 137, 152, 169.  
 More, H., on Fiction 141.  
 Moore The Poet 73.  
 Manners, Good 74.  
 Memoirs, Short, of Eminent Men.  
 I. William Hyde Wollaston, 2.  
 II. Thomas Gray, the Poet 20.  
 III. Sir Isaac Newton 67.  
 IV. D. F. Arago, the Astronomer 161.  
 V. John Gutenberg, the Printer, 185.  
 Money, Arithmetical Accumulation of 13.  
 Mind, a Bountiful 176.  
 Memory, the Power of 165.  
 Magnet in the Useful Arts 158.  
 Metals, Transmutation of 158.  
 Mother's Prayer, The 13.  
 Museum, Provincial, U. C. 85.

## N

Normal and Model Schools for U. C. 12, 53, 56,  
 144, 167, 168.  
 Normal School Grounds, Toronto 170.  
 Normal Schools 7, 20.  
 New Brunswick, Education in, 14, 30—Popula-  
 tion of 160.

Nova Scotia, Education in 46—Geology of 87—  
 Population of 160.  
 New York, Education in 20, 31, 47, 50, 78, 157.  
 New England, Education in 143.  
 New Jersey, Education in 157.  
 Newton, Sir Isaac 67, 159.  
 Niagara Falls 73, 74, River 174.  
 Nineveh 87.  
 Nestorians, Schools among the, 188.  
 Natural History, Library Books on 109.  
 Noble Boy, The 149.  
 North West Passage, Discovery of 173.

## O

Opening of the Normal School, U. C. 12.  
 Opinions of the Press—see Press.  
 Ohio, School Legislation in, 43.  
 Ocean, Double Current in the 63.  
 Oxford Gazetteer, The 73.  
 Opening the Gate, Hints 86.  
 Ottawa, Valley of the 87.  
 Ontario, Lake, Waterspouts in 174.

## P

Press, Opinions of the 12, 23, 39, 41, 55, 70, 167.  
 Poets, Extinct Families of Great 13  
 Poetry.  
 The Mother's Prayer 13.  
 To a Child in Prayer 28.  
 March 44.  
 Steam, and the Steam Engine 52.  
 The measure of time, 188.  
 Pennsylvania School Fund 157.  
 Public Education, its Value 86.  
 Public Officers Correspondence of 34.  
 Public Virtue of Wellington 28.  
 Public Schools, Deception in 7, 17, 21.  
 Paris, Schools in, 19, 21.  
 Paris Press, The 64.  
 Paris (U. C.), Schools in 25, 61.  
 Preston, U. C., Public Schools in 61.  
 Port Hope, Schools in 29, 45.  
 Plate presented to Rev. Dr. Ryerson 59.  
 Prussia, Education in 31, 62.  
 Past and Present Education 33.  
 Personal Responsibility of Public Men 41.  
 Prince Edward's Island, Free Schools in 46, 70—  
 Population of 160.  
 Printing, the Inventor of, 185.  
 Politics, Corruption of, in N. Y. State 50  
 Pantheon, The, in Paris 80.  
 Pitt, Anecdote of 159.  
 Power of Memory 165.  
 Parents, Duties of  
 Potter, Rev. Dr. 138.  
 Pollock, the Poet, and Sir J. Sinclair, 181.

## Q

Queen's College, Ireland 30, 187.  
 Queen's College, Kingston 75.  
 Quebec, Daniel Webster at 22.

## R

Report on Education in U. C., 1851, Remarks on  
 23, 55.  
 Read Slowly, Make Children 28.  
 Russell, Lord John, Address on Education 33, 47.  
 Resolutions passed at the County School Con-  
 ventions in U. C. 41, 56.  
 Responsibility in Public Men 41.  
 Reading of Books, Suggestions on 138.  
 Reading, Taste for 140.  
 Relations of Teacher and Pupil 151.  
 Right of a Child to a Public Education, 150.  
 Rhode Island, Education in 157.  
 Rules for Home Education 166.  
 Rules for a Young Man in Business 165.  
 Rules for the Young 176.  
 Regulations for Public Libraries in U. C. 99.  
 Roxbury, (Mass.) the Banner Town, 74.

## S

Scott's Advice to Youth, Sir W., 180.  
 State System of Education without a State Fund 1.  
 State School Funds 157.  
 Sections, Small School 10, 52.  
 Senate of the University of Toronto, 187.

Sites, School, Authority to take 10, 37, 52.  
 System of Free Schools in U. C. 11.  
 System of Schools, Advantages of 177.  
 Suggestions from Local Superintendents, etc. 9,  
 11, 27, 36, 51.  
 Suggestions to Trustees 156 183.  
 St. Thomas, U. C., School Progress in 29.  
 School of the Section, The 44.  
 Statistics of the Population of the B. N. A. Pro-  
 vinces 159.  
 Separate Schools, 45, 65, 82, 88, 93.  
 Scotland, Education in 47.  
 System of Schools in Scotland, New 187.  
 Sydney, N. S. W., University in 47.  
 Sidney School Celebration 157.  
 Steam and the Steam Engine 52.  
 School Act Supplement 54, 81.  
 Science, Religion, and Literature, their Connec-  
 tion 141.  
 Scientific Pursuits in U. C. 79.  
 Science Answering Simple Questions 174.  
 Smithsonian Institution 79.  
 Study, Libraries, and 139.  
 Study, Chalmers on Application to, 151.  
 Support of Schools, How to Secure the, 150.  
 Stephenson, Robert, 156.  
 Smoke, Advantages of Burning 158.  
 Swearing 176.  
 Sabbath, a Friend, The 175.  
 Spell, Learning to, 175.

## T

Taste for Reading 140, 168.  
 Teacher's Authority, The 181.  
 Teacher, Hints for the 5, 86.  
 Text Books 7, 15, 21, 163.  
 Teachers and Text Books, Offices of 163.  
 Teacher and Pupil, Relation of 151.  
 Teacher's Manual, Young's 72.  
 Teacher's Library, Books for a 136.  
 Teaching, Errors in 173.  
 Time, the measure of (Poetry), 181.  
 Turkish Schools 15.  
 Training of Youth, Judicious 85.  
 Trustees, Suggestions to, 156.  
 Trustees, School, Powers of 36, 41, 51, 56, 82  
 88, 94, 98.  
 Truant, Playing 176.  
 Trinity College, U. C. 60.

## U

University College, U. C. 14, 45, 70, 74, 160, 172.  
 Senate of, 186.  
 Universities and Colleges of Canada 66, 152.  
 University Commission, Oxford 22.  
 University of Michigan 62.  
 Universities and Colleges, as well as C. Schools,  
 the interest of a whole People 145, 152 178.  
 Useful Arts and the Magnet 158.  
 Use of Knowledge 142, 158.

## V

Vagrant Children Attending School 11.  
 Visiting Cards 71.  
 Victoria College, U. C. 75, 157.  
 Valuable Statistical Table, 159.  
 Vegetable and Animal Matter, Constituents of 68.  
 Voltaire on Railway Travelling 159.

## W

Wollaston, Memoir of Dr. 2.  
 Wellington Memorial to the Duke of 14.  
 Wellington, great Public Virtue of 28 180.  
 Wales, Education in 14.  
 Wealth in the United States, Distribution of 74.  
 What is done, do Well 162.  
 Water Spouts in Lake Ontario 174.  
 What Makes a Man 176.  
 Woman 176.

## Y

Yeomans, Rev. Dr., Address by 1.  
 Young's Teacher's Manual 72.  
 Youth, Judicious Training of 85.  
 Young, Influence of Suitable Libraries for the,  
 141.  
 Young Men in Business, Rules for 165.  
 Young, Rules for the 176.  
 Youthful Neglect.

# JOURNAL OF

Upper



# EDUCATION,

Canada.

Vol. VI.

TORONTO: JANUARY, 1853.

No. 1.

### CONTENTS OF THIS NUMBER.

	PAGE
I. STATE System of Education without a School Fund,.....	1
II. Short Memoirs of Eminent Men (Third Series). 1. W. H. Wollaston, M.D.,.....	2
III. The Rich and Childless taxed to support Public Schools,.....	5
IV. Hints to Teachers commencing to keep School,.....	5
V. The Modus Operandi of the School Room,.....	6
VI. 1. Normal Schools. 2. Examination of Teachers. 3. Uniform Series of Text Books. 4. Apparatus in Schools. 5. School Discipline,.....	7
VII. EDITORIAL—1. National Education in Upper Canada. 2. County School Conventions in Upper Canada by the Chief Superintendent. 3. Extracts of Letters from Local Superintendents. 4. Remarks on the foregoing. 5. Shall authority be given to take School Sites. 6. Small School Sections. 7. Good Suggestion. 8. General System of Free Schools. 9. Vagrant Children in Cities and Towns. 10. Punctual attendance of Pupils,.....	8
VIII. OPINIONS OF THE PRESS—1. Globe. 2. Middlesex Prototype. 3. Niagara Chronicle. 4. Western Progress,.....	12
IX. MISCELLANEOUS—1. Beautiful Figure. 2. The Mother's Prayer (Poetry). 3. Arithmetical Accumulation of Money. 4. Extinct Families of Great Poets. 5. The Reward of Diligence,.....	13
X. EDUCATIONAL INTELLIGENCE—1. Canada Monthly Summary. 2. New Brunswick. 3. British and Foreign Monthly Summary. 4. United States Monthly Summary,.....	14
XI. LITERARY & SCIENTIFIC INTELLIGENCE—1. Monthly Summary. 2. Text Books for Turkish Schools. 3. Death of Lady Lovelace,.....	15
XII. Advertisements,.....	16

### STATE SYSTEM OF EDUCATION WITHOUT A STATE SCHOOL FUND.

The Rev. Dr. Yeomans, of Pennsylvania, stated the following important facts and views, in a recent public School Address:—

"The history of Pennsylvania, in respect to the means and methods of general education, is different from that of several of the other old and important States of the northern portion of the Union. This Commonwealth has no fund for the support of a system of Common Schools. The only resource for the support of a scheme of general education by the State has been taxation. In some of the States, the appropriation of public lands to the purposes of education, at an early period, or the creation of a fund in other ways, prepared the way for the early establishment of a system of Common School instruction, which has already conferred inestimable benefits on several generations of the people, and has attained the vigor, stability and completeness of a full maturity. But the circumstances of this State in its early periods did not favor, or at least, did not produce, the establishment of a large and permanent fund for schools, and, as a consequence, the system of State Schools was later in its beginning, and has yielded less fruit in the general intelligence and culture of the people.

The value of a large fund for the support of common schools to the people of a State will of course depend on the prevailing sentiments and habits of the people. For, on the one hand, a fund may not be judiciously managed, and may render a large portion of the people more indifferent towards education than if they should pay for it as they go along; or on the other, the people may appreciate education so highly as to bear ample taxation for its support. In the latter case education will prosper more without a fund than with one; for nothing more engages the interest of the people in any institution than their being called upon steadily by law or otherwise to contribute to its support.

No doubt much more can be expended for education in a community where the avails of a rich fund lie plentifully in the hands of disbursing officers, and where the management is simple and quiet, and agents have only to apply the public means and account for their expenditure, to the government in the appointed way. But we should remember that for the usefulness of public schools there must be not only the necessary expenditures to build houses and supply teachers, but also an interest among the people, alive and watchful, to detect abuses,

suggest or admit improvements, encourage faithfulness and skill among the teachers, punctuality and diligence among the pupils, and diffuse as largely as possible, among themselves, the benefits of the institution.

Now, if our Commonwealth has, as yet, at her disposal no large and productive fund for the support of her system of public instruction, she has whatever of advantage can be derived from the immediate dependence of the system on the tax-payers of the State.—And although we should not go so far in boasting of this advantage, as to imply that this plan is every way better than the other, or better than some sort of union of the two, yet we certainly need not hesitate to admit that the present system has advantages which, in the absence of other causes, are operating powerfully for the cause of general education in our State.

And first it commands, for the most part, an amount sufficient to give the schools of the State a very considerable practical efficiency. It enables all the families of the State to maintain good schools among them a part of every year, with funds partly provided by the State, and partly furnished in due proportion by the families themselves. It induces those communities which set a higher value on general education to add largely by voluntary taxation, to the amount received from the State, and thus to increase among them the benefits of this public instruction. Now, to say nothing of the vast amount of principal which must be placed in charge of the State authorities, and vested by them, at some hazard, and with no small trouble, and expense and responsibility in the management, the people have this valuable inducement to tax themselves the more, in order to secure the greater benefit of the schools for which they are taxed by the State. The State of Connecticut has had a large school fund for several generations. But it was so difficult for the legislature to devise a plan for distributing the avails among the people, so as at the same time to satisfy the people and induce them to raise enough more to keep up good schools, and enliven the general interest in them, that it became a serious question with the enlightened people of the State whether their great fund was any real advantage.

Secondly, this system of regular taxation for schools brings up the subject of general education before the attention of the citizens, and makes them familiar with the cause of common education as a proper matter of public concern in every civilized community. It is suggestive; and reaches, especially in this Commonwealth, a numerous class of minds, which would scarcely be reached in any other way. With a fund of the existence of which half the people would know nothing, while still more would not know how it was managed, it would be far more difficult than it now is, to call the attention of thousands in our State to the duty of educating their children. Taxation is a hint, from high authority, that the education of the young is a sacred duty which the State owes to herself; and when society thus expresses her interest in the knowledge and virtue of its members, and claims the right to compel provision for their education, it takes a deep hold on the attention of many who would otherwise be the last to feel an interest in the subject.

Thirdly, there is this farther advantage in drawing the support of our schools directly from the people according to the present laws of our State, that it keeps the eyes of the people open on the directors, and other officers who are responsible for the application of the money, while it also gives them a personal concern in the wise expenditure of funds which they must contribute their share to supply. In the towns which have become interested in the improvement of the public schools, the larger part of the school tax is to be imposed and collected under the authority of the local directors; upon whose proceedings the presence and watchfulness of the tax-payers will not fail to be an all-sufficient check. There is little danger in such circumstances, of a careless use of funds by directors, and little probability that funds will be supplied in this way by the people, unless they feel an interest in the benefits of the expenditure. Whether this part of the plan works well for the State in general must be seen by its fruits; but all must see that this feature of our present system is not without important advantages."

## SHORT MEMOIRS OF EMINENT MEN.

With the first number of the Sixth Volume of the *Journal of Education*, we commence a third series of "Short Memoirs of Eminent Men." Those which have already appeared are as follows:—

In the Fourth Volume, under the title of "Systems of Education and their Founders:—

- |                                 |                                   |
|---------------------------------|-----------------------------------|
| I. John Frederick Oberlin.      | IV. Emanuel, Count de Fellenberg. |
| II. Henry Pestalozzi.           | V. Rev. Andrew Bell, D.D.         |
| III. Gustavus Frederick Dinter. | VI. Joseph Lancaster.             |

In the Fifth Volume:—

- |                          |                      |
|--------------------------|----------------------|
| I. Homer.                | III. Joseph Addison. |
| II. William Harvey, M.D. | IV. Herodotus.       |

Our third series commences with the following sketch of WOLLASTON, the distinguished English Chemist and Philosopher, to whom we are indebted for several most interesting discoveries and improvements in science;—among others, for the discovery of the important process by which *Platina* is rendered malleable, for which Wollaston received thirty thousand pounds sterling.

## I. WILLIAM HYDE WOLLASTON, M.D.

WILLIAM HYDE WOLLASTON, one of the ablest and most renowned of English chemists and natural philosophers, was born August 6, 1766, and died in December, 1828.

He was the second son of the astronomer, and of Althea Hyde, of Charter-house Square, London. He was one of seventeen children, and was born at East Dereham, a village some sixteen miles from Norwich, on the 6th of August, 1766. After the usual preparatory education, he went to Cambridge, and entered at Caius College, where he made great progress. In several of the sketches published of him, he is said to have been senior wrangler of his year; but this is a mistake, arising out of the fact that a person of the same surname, Mr. Francis Wollaston, of Sidney Sussex College, gained the first place in 1783. Dr. Wollaston did not graduate in arts, but took the degree of M.B. in 1787, and that of M.D. in 1793. He became a fellow of Caius College soon after taking his degree, and continued one till his death. At Cambridge he resided till 1789, and astronomy appears to have been his favorite study there, although there is evidence to show that at this time, as at a later period, he was very catholic in his scientific tastes. He probably inherited a predilection for the study of the heavenly bodies from his father, and it was increased by his intimacy with the late astronomer-royal of Dublin, Dr. Brinkley, now Bishop of Cloyne, and with Mr. Pond, formerly astronomer-royal of Greenwich, with whom he formed a friendship at Cambridge which lasted through life.

In 1789, he settled at Bury St. Edmunds, in Suffolk, and commenced to practise as a physician, but with so little success, probably on account of the peculiar gravity and reserve of his manner, that he soon left the place and removed to London. He succeeded, however, no better in the metropolis. He continued to practise in London till the end of the year 1800, when an accession of fortune determined him to relinquish a profession he never liked, and devote himself wholly to science.

He had no occasion to regret the change even in a pecuniary point of view, the only one in which his abandonment of medicine was likely to have injured him. His process for rendering crude platina malleable, which conferred so great a service on analytical chemistry, is said to have brought him more than thirty thousand pounds, and he is alleged to have made money by several of his minor discoveries and inventions.

His communications to the Royal Society are thirty-nine in number, and, along with his contributions to other scientific journals, refer to a greater variety of topics than those of any other English chemist, not excepting Cavendish. In addition to essays on strictly chemical subjects, they include papers on important questions in astronomy, optics, mechanics, acoustics, mineralogy, crystallography, physiology, pathology, and botany, besides one on a question connected with the fine arts, and several describing mechanical inventions.

Five are on questions of physiology and pathology, and do not admit of popular discussion. The most curious of these is a paper on "Semi-discussion of the optic nerves," and single vision with two eyes. Besides its interest as a scientific essay, it is important as having been occasioned by speculations concerning the cause of a remarkable form of blindness from which Wollaston suffered, during which he saw "only half of every object, the loss of sight being in both eyes towards the left, and of short duration only." This peculiar state of vision proved in the end to have been symptomatic of a disease of the brain, of which he died.

Eight or nine papers are on optics, but our limits will not allow us to discuss them.

Wollaston published two papers on astronomy, one "On a Method of Comparing the Light of the Sun with that of the Fixed Stars," of which we can only give the title; the other is "On the Finite Extent of the Atmosphere," and is one of the most interesting physical essays on record. It was published in January, 1822, in the May preceding which, a transit of Venus over the sun's disc took place. Wollaston was induced in consequence to make observations on this rare and interesting phenomenon. None of the larger observatories were provided with suitable instruments for watching it; but our philosopher, with that singular ingenuity both in devising and in constructing apparatus, which we shall afterwards find to have been one of his great characteristics, succeeded by a few happy contrivances in making a small telescope completely serve his purposes. His special object in watching the passage of Venus, was to ascertain whether or not the sun has an atmosphere like that of the earth. He satisfied himself that it has not, and embodied his results in the paper, the title of which we have given.

It is a very curious attempt to decide a most difficult chemical problem by reference to an astronomical fact. The chemical question is, do the elements of compounds consist of indivisible particles or atoms, or do they not? It is a branch of the great problem which has occupied physics and metaphysics since the dawn of speculation, in vain attempts to decide either way, viz., is matter finitely or infinitely divisible? Our author undertakes to show, not only that this difficulty may be solved, but that in fact it was solved, though no one was aware of it, as early as the discovery of the telescope, and Galileo's first observation of the eclipses of Jupiter's moons.

The paper we are discussing excited great attention among men of science; and for a long period, though few implicitly assented to the validity of the argument, no one appeared able to detect any fallacy in its reasoning.

Beautiful and certain as are the astronomical facts brought to light by Wollaston, they supply no decision of the question of the divisibility of matter. That problem still presents the same two-fold aspect of difficulty which it has ever exhibited. If we affirm that matter is infinitely divisible, we assert the apparent contradiction, that a finite whole contains an infinite number of parts. If, pressed by this difficulty, we seek to prove that the parts are as finite as the whole they make up, we fail in our attempt. We can never exhibit the finite factors of our infinite whole; and the so-called atom always proves as divisible as the mass out of which it was extracted. Finiteness and infinity must both be believed in; but here, as in other departments of knowledge, we cannot reconcile them.

The greater number of Wollaston's strictly chemical papers, with the exception of those referring to physiology and pathology, are devoted to the exposition of points connected with the chemistry of the metals. He was the discoverer of palladium and rhodium, once interesting only as chemical curiosities, but now finding important uses in the arts. He discovered, also, the identity of columbium and tantalum. He was the first to recognise the existence of metallic titanium in the slags of iron furnaces; and he is the deviser of the important process by which platina is rendered malleable. He published, also, analyses of meteoric iron, and showed that potash exists in sea water.

Among other bodies which the alchemists of the middle ages thought it possible to discover, and accordingly sought after, was a Universal Solvent, or *Alkalest* as they named it. This imaginary fluid was to possess the power of dissolving every substance, whatever its nature, and to reduce all kinds of matter to the liquid form. It does not seem to have occurred to these ingenious dreamers to consider, that what dissolved everything, could be preserved in nothing. Of what shall we construct the vessel in which a fluid is to be kept, which hungers after all things, and can eat its way through adamant as swiftly as water steals through walls of ice? A universal solvent must require an equally universal *non solubile* in which it may be retained for use.

The modern chemist's desire has lain in the opposite direction from that of his alchemical forefather. It is the *non solubile*, not the solvent, that he has sought after, and Wollaston supplied him with that in malleable platina. Long before the close of last century, the chemical analyst found the re-agents he had occasion to make use of, alkalests or universal solvents enough, for the vessels in which he could contain them. For the greater number of purposes, glass and porcelain resist sufficiently the action of even the strongest acids, alkalies, and other powerful solvents. In some cases, however, they are attacked by these, and cannot be employed in accurate analysis. Whenever, moreover, it is necessary to subject bodies to a high temperature along with active re-agents, as, for example, in the fusion of minerals with alkalies, porcelain can seldom be employed, and is often worse than useless.

It was in vain that chemists had recourse to silver and gold, as substitutes for the insufficient clay in the construction of their crucibles. These metals melt at comparatively low temperatures, and before a sufficient heat can be obtained to fuse the more refractory substances enclosed in them, they run into liquids, and the crucible and its contents are lost in a useless slag.

It was at this crisis that Wollaston came forward to put a new weapon

into the hands of the chemical analyst. Several years before he turned his attention to the subject, scattered grains of a brilliant metal had been found in the sands of certain of the South American rivers. To this, from its resemblance to silver, or in their language plata, the Spaniards gave the name of platina, or little silver. This metal was found to resist the action of nearly every substance except aqua regia; to suffer no change, nor to become rusted by protracted exposure to the atmosphere; and to be perfectly infusible by the most powerful forge or furnace.

Here, then, was a substance for the chemist's crucible, could a method of working it only be discovered. But the very properties which made its value certain, if it were wrought into vessels, forbade its being easily fashioned into them. It occurred in nature only in small grains which could not be melted, so that it was impossible, as with most other metals, to convert it into metals by fusion. Neither was it possible by hammering to consolidate the grains into considerable masses, so that vessels could be beaten out of them, for the crude metal is very impure. Accordingly, it happened, that for years after the value of platina had been discovered, it could not be turned to account. Whole cargoes of the native metal, although it is now six times more costly than silver, are said to have lain unpurchased for years in London, before Wollaston devised his method of working it.

That method was founded upon the property which platina possesses of agglutinating at a high temperature, though not melted, in the way iron does, so that, like that metal, it can be welded, and different pieces forged into one. This property could not, however, be directly applied to the native grains owing to their impurity and irregularity in form.

Wollaston commenced by dissolving the metal in aqua regia; purified it whilst in solution from the greater number of accompanying substances which alloyed it; and then, by the addition of sal ammoniac, precipitated it as an insoluble compound with chlorine and muriate of ammonia. When this compound was heated, these bodies were dissipated in vapor, and left the platina in a state of fine black powder, which was further purified by washing with water.

It was only further necessary to fill a proper mould with this powder well moistened, and to subject it to powerful compression. By this process the powder cohered into a tolerably solid mass, which was gently heated by a charcoal fire, so as to expel the moisture and give it greater tenacity. It was afterwards subjected to the intensest heat of a wind furnace, and hammered while hot, so as completely to agglutinate its particles, and convert it into a solid ingot. This ingot or bar could then be flattened into leaf, drawn into wire, or submitted to any of the processes by which the most ductile metals are wrought.

The costliness of the metal has not forbidden its application to manufacturing operations even on the largest scale. In the oil of vitriol works, stills of platina are made use of for distilling sulphuric acid, each of which, though holding only a few gallons, costs above a thousand pounds. A coinage of platina was introduced into the Russian dominions, which possess valuable supplies of its ores: but though roubles and other coins struck in it, occasionally reach this country as curiosities, we understand that the coinage has been withdrawn by the imperial government, in consequence of the fluctuations that occur in the value of the metal.

In our own country, from the great consumption of platina in chemical processes, its value has rapidly risen even within the last few months; but it is constantly shifting\*. Nothing but its rarity and costliness prevent its application to the construction of every kind of culinary vessel, for which its purity, cleanliness, and enduringness especially fit it. A thousand other uses would be found for it, if it were more abundant.

Were it now the custom to honor men after death according to the fashion of the Greeks and Romans, Wollaston's ashes would be consigned to a gigantic platina crucible, as to a befitting and imperishable sepulchral urn.

His other chemical papers are all important. One of them, "on the chemical production and agency of electricity," proved, by singularly ingenious and beautiful experiments, that identity of voltaic and friction electricity, which Faraday has since confirmed by still more decisive trials. The others had reference chiefly to the atomic theory, which Wollaston was a great means of introducing to the favorable notice of chemists. One was, "On superacid and subacid salts," and contained one of the earliest and most convincing proofs which can be given of the existence of such a law of multiple proportion, as Dalton had pronounced. The other on, "A synoptical scale of chemical equivalents," first brought the laws of combination within the reach of the student and manufacturer.

Wollaston published three papers on the shapes of crystals, and on the mode of measuring them. No branch of science is less inviting to the general student than crystallography. Nevertheless, we must be

allowed to refer briefly to one of Wollaston's essays on that subject. The most superficial sketch of the philosopher whose works we are considering, would be inexcusably defective if it passed it by.

The paper we refer to is entitled, "Description of a reflective goniometer," and, next to that containing the account of the platina process, is perhaps Wollaston's most important contribution to science. It is much more difficult, however, to convey an idea of its value, than it was in the case of that essay.

A goniometer, as its name implies, is an instrument for measuring angles. The appellation, though susceptible, of course, of much wider application, is restricted to an apparatus for measuring the angles of crystals. Different goniometers were in use before Wollaston invented his, but they were comparatively rude, and could only be applied to large crystals.

When Wollaston published the account of his goniometer, he stated as an evidence of its superiority to those previously in use, that whereas a certain angle of Iceland spar was reputed to be of one hundred and four degrees, twenty-eight minutes, forty seconds, it was in reality of one hundred and five degrees.

But this is the lesser service which the reflective goniometer has rendered to science. Early in this century, a great German chemist, Mitscherlich, comparing the results obtained by Wollaston's instrument, with those procured by analysis, in the case of crystalline bodies, discovered a very curious and unexpected law. It appeared, that when substances resemble each other in chemical characters, their crystalline forms are also similar. When the simplicity in chemical properties is very great, the shapes become absolutely identical. It is a very singular circumstance, which no one appears to have in the least anticipated, that where two closely-allied bodies, such as arsenic and phosphorus, unite with the same third substance, they should produce identical forms when the respective compounds are crystallized. Each face of the one slopes at the same angle as the same face of the other. A mould of a crystal of the one would fit a crystal of the same size of the other. A goniometer set at the angle of the one, would exactly measure the angle of the other. Such crystals are named isomorphous, a Greek word synonymous with the Latin one, similiform, also made use of.

Taught by this law, the chemist, to his astonishment, found himself able to ascertain chemical analogies by measuring angles of crystals, and supplied with a means of controlling and explaining the results of analyses, which otherwise seemed only to lead to contradiction and confusion. Crystalline form is now one of the first things attended to in classifying chemical substances, and is the basis of most of our attempts to arrange them into groups and natural families.

It deserves especial notice, but has never obtained it, in histories of the progress of chemistry, that he who, by his gift of the platina crucible, enabled his brethren to extend the whole science, and especially to subject every mineral to analysis, by his other gift of the reflective goniometer showed them how to marshal their discoveries. The latter instrument has been to the chemist like a compass-needle or theodolite to the settlers in a strange country. By means of it, he has surveyed and mapped out the territory he has won, so that new comers may readily understand the features of the district; and has laid down pathways and roads, along which his successors may securely travel.

One of his papers is on the interesting and poetical subject of "Fairy rings." There is no one, we suppose, who does not sympathize with the poetical rendering of the fairy ring; and no one, probably, who does not at the same time wish to know what the scientific version is also. Wollaston furnished us with the latter. He was led to form the opinion we are about to state, by noticing "that some species of fungi were always to be found at the margin of the dark ring of grass, if examined at the proper season." This led him to make more careful observations, and he came to the conclusion that the formation of the ring was entirely owing to the action of the fungi in the following way. In the centre of each circle, a clump or group of toadstools or mushrooms had once flourished, till the soil, completely exhausted by their continued growth on it, refused to support them any longer. The following year, accordingly, the toadstools which sprang from the spawn of the preceding generation, spread outwards from the original spot of growth towards the unexhausted outer soil. In this way, each circle of mushrooms came to be preceded by a ring of withered grass, and succeeded by one of the deepest verdure, and as the one increased the others did also.

These views of Wollaston have been beautifully confirmed by the recent researches of Professor Schlossberger of Tübingen, into the chemical compositions of the fungi, by which it appears that they contain a larger quantity of nitrogen, of phosphates, and of other salts, than any of our cultivated vegetables.

In another, and one of the most curious of his papers, Wollaston again plays the part of disenchanter of a poetical fancy. It is entitled, "On the apparent direction of the Eyes of a Portrait." Into this essay we cannot enter at length, but it deserves a word of notice. One large part of it is occupied in showing that we are unconsciously guided in our estimate of the direction in which the eyes of another are turned

\* Platina costs at present, in the state of ingot or bar, from 30s. to 35s. per ounce, wholesale. Manufactured articles from 32s. to 42s. per ounce, also wholesale. The retail prices are from 6s. to 10s. higher. Virgin silver sells at 5s. 8d. per ounce, wholesale; at 9s. per ounce, retail, when manufactured. Sterling silver is worth 4s. 11d. per ounce.



not merely by the position of the iris (or colored circle) and whites of these eyes, but likewise by the direction of the concurrent features, particularly those which are more prominent, as the nose and forehead. However unexpected this statement may be, or perplexing the explanation of it, Wollaston puts it out of the power of the least credulous of his readers to deny the facts, by the plates which accompany his paper. In these he shows that the same pair of eyes may be made to look up, or down, or to either side, merely by altering the direction of the nose and forehead which accompany them. In this paper, also, he supplies an explanation of the familiar fact, that "if the eyes of a portrait look at the spectator placed in front of the picture, they appear to follow him in every other direction."

One other reference will conclude our discussion of Wollaston's essays. The last paper we mention is, "On Sounds inaudible to certain ears." Its object is to point out, that while in the natural healthy state of the ear, there seems to be no limit to the power of discerning low sounds, in many persons who are otherwise quite free from deafness, there exists a total insensibility to high or shrill notes, so that they are quite deaf to these. The hearing of different persons was found by Wollaston to terminate at a note four or five octaves above the middle E of the pianoforte. His own hearing ceased at six octaves above that note. Those who were thus deaf to high notes were, in consequence, quite insensible to the chirping of the grasshopper, the cricket, the sparrow, and the bat. With these observations, Wollaston connects a beautiful speculation as to the possibility of insects both emitting and listening to shrill sounds, which we never hear; whilst they, in like manner, are totally deaf to the graver notes which only affect our ears.

This seems to us a striking and beautiful idea, and suggests many thoughts. It is in a fine sense a fulfilment of St. Paul's declaration, "There are, it may be, so many kinds of voices in the world, and none of them is without signification."

Towards the latter part of the year 1828, Wollaston became dangerously ill of the disease of the brain, of which he died. Finding himself unable to write out an account of such of his discoveries and inventions as he was reluctant should perish with him, he spent his numbered hours in dictating to an amanuensis an account of some of the more important of them. These parting gifts of a dying philosopher to his brethren will be found in the papers bearing his name which are printed in the *Philosophical Transactions* for 1829.

These were not his only legacies to science. Shortly before his death, he wrote a letter to the secretary of the Royal Society, informing him that he had that day invested, in the name of the society, stock to the amount of £1000. The interest of this money he wished to be employed in the encouragement of experiments in natural philosophy. A Wollaston medal is accordingly given periodically by the Royal Society.

In the June before his death, he was proposed as a member of the Astronomical Society of London; but, according to the rules of that body, he could not have been elected before their last meeting for the year. When the society met in November, 1828, however, the alarming situation of his health, and the great probability of his dissolution previous to the December meeting, induced the council at once to recommend to the assembled members a departure from the established rule, and that the election should take place at that sitting. This was done, and received the unanimous sanction of the meeting, which insisted on dispensing with even the formality of a ballot. Dr. Wollaston, then within a few days of his death, acknowledged this feeling and courteous act by presenting the society with a valuable telescope which he greatly prized. It originally belonged to his father, and had been subsequently improved by the application to it of an invention of his own, that of the triple achromatic glass, a device on which astronomers set great value.

It is impossible to turn from the record of these incidents, without a feeling of strong admiration of the old Roman-like resolution and calm courage with which the suffering philosopher waited for death. When he was nearly in the last agonies, one of his friends having observed, loud enough for him to hear, that he was not at the time conscious of what was passing around him, he immediately made a sign for a pencil and paper, which were given him. He then wrote down some figures, and, after casting up the sum, returned them. The amount was right. He died on the twenty-second of December, 1828, aged sixty-two, a few months before his great scientific contemporaries, Sir Humphrey Davy and Dr. Thomas Young. After death it appeared that that portion of the brain from which the optic nerve arises was occupied by a large tumor. If we are right in thinking that the singular one-sided blindness from which he sometimes suffered was an early symptom of this malady, it must have proceeded very slowly, for his paper on the semi-decussation of the optic nerves was published in 1824. It is interesting for the sake of psychology to know, that in spite of the extensive cerebral disease referred to, Wollaston's faculties were unclouded to the last.

There remains but little to be told. No picturesque incidents or romantic stories adorn Wollaston's biography, and but few character-

istic anecdotes have been preserved. His days were spent with entire devotion to science, between his laboratory and his library.

His reluctance, or rather positive refusal, to admit even friends to his laboratory has already been referred to. Plato is said to have written above the door of his study, "Let no one who is not a mathematician enter." Had Wollaston placed an inscription, or rather a proscription above the door of his laboratory, it would have been still more brief and comprehensive, "Let no one enter." This hermetically sealed laboratory was known to have been of small dimensions.

Dr. Paris mentions, in his life of Davy, that a foreign philosopher once called upon Dr. Wollaston with letters of introduction, and expressed an anxious desire to see his laboratory. "Certainly," he replied; and immediately produced a small tray containing some glass tubes, a blow-pipe, two or three watch-glasses, a slip of platina, and a few test-tubes. It is added by the same gentleman, that Wollaston appeared to take great delight in showing by what small means he could produce great results. Shortly after he had inspected the grand galvanic battery constructed by Mr. Children, and had witnessed some of those brilliant phenomena of combustion which its powers produced, he accidentally met a brother chemist in the street. Seizing his button (his constant habit when speaking on any subject of interest) he led him into a secluded corner, when, taking from his waistcoat pocket a tailor's thimble, which contained a galvanic arrangement, and pouring into it the contents of a small vial, he instantly heated a platina wire to a white heat.

That he did not selfishly hoard his money may be gathered from the following anecdote, which is declared to be authentic. Having been applied to by a gentleman, who was involved by unexpected difficulties, to procure him some government situation, Dr. Wollaston's reply was—"I have lived to sixty without asking a single favor from men in office, and it is not after that age that I shall be induced to do so, even were it to serve a brother. If the enclosed can be of use to you in your present difficulties, pray accept it, for it is much at your service." The enclosed was a cheque for ten thousand pounds.

Wollaston and Davy were contemporaries and friends. It is difficult to imagine a greater contrast than that between the eager, imaginative poet-chemist, on the one hand, and the austere, unimpassioned, monk-philosopher on the other. Davy was a man of sanguine, enthusiastic temperament, overflowing with life and animation; Wollaston's nature was as still and unmoved as the bosom of a lake hidden from the wind in the recesses of a cavern. The former was a spoiled child of nature and of fortune, and greedy of applause. He delighted in the approving smiles of ladies, and was flattered by the notice of the great. It was a source of pain to him that he was not of good family. Wollaston was a disappointed man. He begged one boon from his brethren, the physicianship of an hospital; when that was refused him, he shut himself up in his laboratory, and rejoiced, when sixty years old, that he would not ask a favor, even for a brother. He was indifferent to the notice of all but scientific persons, and avoided every occasion of attracting popular attention.

To these attempts to bring out Wollaston's character by contrasts with that of his great contemporary, we would add a word or two concerning his likeness in disposition to another of our distinguished men of science. Those who are acquainted with the life of the Honorable Henry Cavendish will acknowledge that he and Wollaston resembled each other greatly. In both there was the same austerity, taciturnity and reserve; the same extreme caution in drawing conclusions, and exact precision in stating them; the same catholicity of tastes as regarded their philosophical pursuits; the same relish for scientific society and dislike to any other; the same indifference to applause; the same frugal habits; the same candor and justice towards other men of science; and the same strong love of truth and perfect integrity. And as in life they were alike, so in death they were not divided. The closing moments of the one, were marked by the same kind of calm courage and serenity which distinguished the death-bed of the other. Cavendish and Wollaston might in truth have been twin brothers.

The restraint and distraction of faculty which these three influences occasioned, were fatal to Wollaston's being a distinguished or systematic discoverer. His inordinate intellectual caution kept him from giving to the world any great generalization. Had he attempted one, he would have spent a lifetime in establishing it to his own satisfaction. His acquaintance with most of the physical sciences induced him, instead of dedicating his life to the establishment of some one great theory in a single branch of knowledge, to pursue many inquiries in each; these were sufficiently limited in scope to be brought to a conclusion, satisfactory even to his fastidious, sceptical spirit, in a reasonable time. His mechanical ingenuity constantly tempted him to improve some one of the thousand instruments of physical science which are not perfect.

He must nevertheless be counted great, on the ground of the multitude of single works which he executed so ably. He will stand in the second rank of great physical philosophers, along with Black and Cavendish, Davy and Dalton.

The portraits of Wollaston represent him as a grave, silent, meditative man; one who would excite much sincere respect, but little enthusiastic affection, among those who knew him. He led a solitary life, and was never married.

Altogether, the combination of reserve with perfect straightforwardness; the relish for acquiring money, with the generosity in parting with it when it could be worthily bestowed; the clear intellect, the self-reliance, the aversion to interference or intrusion on the part of strangers; the impartial justice to rivals, and the business-like method of all his habits, seem to us pre-eminently to mark out Wollaston as, *par excellence*, the *English Philosopher*.

### THE RICH AND CHILDLESS TAXED TO SUPPORT PUBLIC SCHOOLS.

To the citizen of large property and no children to be educated, it seems an inequality to pay a heavy tax for the schooling of his neighbours, most of whom he considers able to purchase instruction for themselves. But that some system is necessary to secure the general education of the families of the state, and especially of the poorer classes, is on all hands admitted. This necessity itself, if duly considered, will go far to reconcile the feelings to some unavoidable inconveniences. Some families have no members who can enjoy the benefits of the institution: and some may prefer to procure instruction for their children in private or select schools. Both these classes receive greater advantages from the system of common education than might at first view be supposed. They have more pecuniary interest in the intelligence and good morals and peaceful habits of the community than the poor who pay little or no taxes; for they have more to lose by the violence and lawlessness of the ignorant and the vicious. They have more social interest in the good habits of the poorer classes than the poor themselves; for having a measure of culture and being raised to a comparatively higher sphere of social enjoyment, they find no satisfaction, but only annoyance and disgust, in those riotous pleasures which are the element of the low bred and the vicious. And since many families may choose rather to maintain seminaries which are more select, than to avail themselves of the common schools, these may be the more contented to bear their share of a general school tax, while they consider that they contribute to support a beneficent institution for those who cannot purchase for their families the higher degrees of education and many of whom desire nothing better; that they thus pay, and at a very cheap rate, for that conciliation and sympathy and influence with the masses which they would wholly forfeit by a total separation from an enterprise so closely connected with the general good; and that they thus sanction and sustain a law which commands a vast amount of means for education from persons of ample wealth, and large families, but no culture, and who would not give anything for schools except under the force of law. These and other like considerations, if candidly weighed, will go far towards overcoming the repugnance which some may feel against a law which taxes them without offering a direct return.

Therefore, remembering that intelligence and virtue in the people, are, to a free state, the only security of right; that nothing but good schools can maintain intelligence and virtue; that the state only can ensure good schools to the full extent of the public need; that taxation is the only pecuniary resource of the state; that property or some representative of property is the proper subject of taxation, and ought as much to pay for this kind of defence as for any other, we may see more reasons for contentment with some such approach as we now have, towards an equitable taxation for schools, than for meditating any change which would sacrifice our present advantages without supplying better.—*Pennsylvania School Journal*.

### A FEW HINTS FOR A TEACHER ABOUT TO COMMENCE A SCHOOL.

FRIEND N —: You ask me to give you what you have been pleased to call the "results of my experience." I have never felt more fully conscious of my inability fully to discharge the duties of the school-room than I do now; and if experience has done no more, it has shown me many deficiencies. Still, however, I remember some peculiarities of the country district schools, and will drop a few hints which may bear to you my best wishes for your success. Let me, in the first place, ask you to remember that any plan or scheme may work well in one man's hands and under one set of circumstances, and utterly fail when conditions change.

On first meeting your pupils, do not allow yourself to be disturbed by the novelty of your position; your natural ease of manner, and your feeling of sympathy with those around you, will shield you from putting on the airs of a master, while your just appreciation of your position will teach you what respect is due from those under your care. Our actions spring from our thoughts, and he who knows himself and the position which he occupies, can hardly fail to fill his place with

propriety. The best assurance of a kind and gentlemanly bearing towards pupils is found in a benevolent heart and a cultivated understanding.

*Opening school.* The busy sounds of gaping, curious inquirers beside as you enter the school-room, and the crowd of life now waits your direction. If it is your purpose that your first exercise be reading the Bible, have all the other books laid together, and, in general, do not have them taken from the desks till after the reading is finished. This prevents noise, and separates the present exercise from the ordinary business of school. Quiet being secured, let the older pupils read two verses each in turn. It is not best for the smaller pupils to read; let them wait till they can read well enough; but be sure that all who can read the Testament, have books and pay attention. From what I know of your opinions and feelings, I judge that you will wish to follow the reading by brief prayer. I advise you to do so. You will feel calm, refreshed, and strengthened. Your pupils will pass to their work more quietly, and to better purpose. I like to have a school repeat the Lord's Prayer in concert.\* This would no doubt seem strange to your pupils, but in a few days they would all easily speak in the same time with you. These opening exercises may occupy about fifteen minutes; less, rather than more.

*Let the discipline of your school be your first care.* You will not understand me to recommend you to begin with presenting a code of laws, nor with a particularly magisterial manner. Not at all. But have, at first, as distinct a notion as possible what the condition is which you desire, and then use *in season* the best means to secure it. Forestall evil by securing attention to something good. Hence, tell the pupils by your manner, and in words, too, that you have come to help them reap the greatest profit from the winter's opportunity. That the business of the place is study, and that, for their good and their comfort, as well as for yours, nothing should be admitted which is likely to interfere with study. Say to them, perhaps, that from your recollection of your own school-days, and also from the testimony of experienced teachers, you believe that whispering, with other forms of communicating among pupils, is the great evil in most schools, and is the entrance for almost all the other evils which disturb their quiet and progress. I have often closed my remarks on this subject, by saying that I considered refraining from whispering of so much importance, that to refrain from it and from its substitutes, was all I had to suggest; and that, to call their attention more directly to it, as well as to offer some stimulus to watchfulness and self-control, I would, before the morning's recess, ask all those who have refrained from whispering to rise. Sometimes I have divided the question, asking first if there were any who had not voluntarily communicated in any way, by writing, motioning, &c.; then calling on those who had refrained from communicating by whispering. Express your satisfaction with the success of those who have been successful, and remind the others that you will repeat the inquiry at noon. Inquire often, until the habit of refraining is formed; for the pupil will think it comparatively easy to do without communicating with his neighbors for half of the morning, when it would look like an impossibility for him to do it all day. Tell them how much easier it is to refrain entirely from communicating than pretty nearly to do it. A vague purpose to do about thus or thus, is not worth much; but a resolution to do this very thing, and to begin now, makes success nearly certain. If you purpose on a pleasant evening to accompany your friend towards his home *a little way*, where will you stop? If you speak of going *so far*, the question is all settled. By this plan of inquiring, a large majority of the school will have their course fixed for the winter. Ask those who do not refrain, to consider which portion embraces the best scholars and most trusty pupils, those which are most esteemed in the neighborhood. I like to keep a record of each half day's success. If some consider this a milk-and-water government, only playing with them, and begin to annoy you by improprieties, try talking with them alone, and such stronger influences as you find necessary. But in what you require, be obeyed. Respect for authority is so little required in many families at home, that if that habit of obedience to just rule, which is more necessary in making a good citizen than correct language, be not formed at school, the boys and girls will grow up without it. This voluntary method in respect to whispering has served me better through all my teaching than anything else. But your discretion must be your tutor. Be particularly careful that the reporting does not lead to a disregard of truth.

*As quickly as possible give all your pupils employment.* A good beginning being made in respect to whispering, and just enough work assigned to employ each pupil till he expects to recite, taking care yourself to have leisure enough for observing what passes in your realm, government will be known only in respect to such pupils as purpose mischief; and if there be such, very likely the general current of the school, with your kind, frank, and independent manner, will prevent such a purpose from being carried into effect.

*Take time enough to arrange your school.* Well begun is half done. Before you can classify your school, you must know what it contains.

\* This Prayer, on a large sheet, is sold at the Educational Depository, Toronto.

To obtain this information, I have been accustomed to rule a sheet of paper from top to bottom, leaving the first space wide enough for the pupil's name, the second his age, and the following ones for writing the names of the studies of school. Then, each pupil being called in turn, his name, age, and the studies he desires to take, are entered in the proper columns. This takes time, but when it is done you have the whole before you, and can readily see how many classes you must have, &c.; give them all some work to do while you are doing this. Some assistance in classifying may be obtained from asking the several classes, as they were arranged in the last school, to rise.

*Have as few classes as possible.* I am not a believer in the doctrine that a teacher can instruct twenty pupils just as well as one; for I well know that different pupils need different instruction. An explanation which is given rapidly enough to keep the attention of one pupil, will leave another all in a maze behind you; whilst that which is given slowly enough, and with sufficient detail and repetition for the second, will make the first impatient or listless. Still, there is great gain to those pupils which are near to each other in attainments and capacity from hearing each other recite, and to you from instructing them all at once, instead of individually.

*Have a time for each exercise.* On this I will add nothing.

*Do not permit pupils to take too many studies.* Time is frittered away and attention is dissipated by trying to carry along too many kinds of work at once. A disciplined mind finds it difficult to fix the attention at once on new works, and a child with half-a-dozen studies is not likely to have distinct notions of any. An editor of a book for beginners in Greek, recommended the pupil to have, when commencing, no other study, unless it were a light one to give relief by change.

*Do not try to go over too much ground.* One farmer tills a small piece of ground well, has heavy crops and gets rich; another goes with plough and scythe over a large farm, and having worked hard all summer, gleans a sparing harvest, and is disheartened at the poor return for his labor. I confess I have some experience in failing of what I might do, from attempting too much. Do not allow a class or pupil to go over what they do not understand, because it is unpleasant to tell them of their deficiency, or through your own or their desire to go through a book. Progress is not measured by pages. Assign a short advance lesson for next time so that you may have time to complete this. Take nothing for granted. Consider it your chief business at recitation to find out if the pupil is ignorant of any point in the lesson. Let it be learned that recitation to you is something, both in rapidity and thoroughness. There is hardly an instance of a handsomer compliment than that paid to a medical examiner who, when he asked a candidate for a degree how he would give a sweat, received in answer,—"I would bring the patient before you, sir, for examination." Do not fear, from thorough questioning, the fate of that master who was discharged because he did not know anything, and only asked questions to learn something from the scholars.

Experienced teachers usually spend much more time on the elementary portions of books than beginners do. In arithmetic, to work numbers readily is the first considerable step for the learner. If the pupil, whilst studying an example, is burdened on account of his inability to perform the numerical operations easily, he cannot reason well upon it. We choose small numbers for illustrating an example in written arithmetic for this very reason. A boy who cannot work fractions easily, will fail in his reasoning if the example has fractional numbers, when he can tell the method of performing a similar example made of small whole numbers. Time is lost. A beginner will learn to add well much faster from tables in his book, or from columns on the board, which a class study to add to you in concert, than he will when stopping to think, whilst trying to perform an example. One thing at a time, if we would have anything done well. Many persons, from not having learnt addition properly, often have to stop and think, or count, when they would add. A child has not learned addition till 7 plus 3 makes him think of ten as readily as the numeral 1, with a 0 following it (10), does. Nor has he learned multiplication till 7 multiplied by 3 is just as certain to make him think of twenty-one as the numeral 2, with a 1 following it (21). Then to what a painful drudgery a boy is subjected who is at work in reduction with his fingers between the leaves at the table of long measure, and a multiplication table lying before him; or a girl in the middle of Colburn's First Lessons, counting her delicate fingers! Is it uncommon to find pupils ciphering in reduction when they dread to see a division larger than twelve? or having so hard work to get the figures right in decimals, that they have really no thought to bestow on the pointing?

The means of having all these things right is *drill*, and this takes time. Your pupils may think they are making but little progress, but distinct vision will come if you persevere; and when the book, in coming time, opens to those few worn pages, the pupil's mind will gladden with the thought that he there began to study arithmetic to some purpose.

I have spoken mostly of arithmetic, but the waste of time and the stupifying of intellect may be effected by going over other studies without understanding them, as well as this. Perhaps the evil occurs oftenest in grammar. The art of cross-questioning well is as important to a teacher as to a lawyer.

You know I think much of visiting the pupils' parents. Not doing this, you testify falsely as to the interest you take in the pupils' welfare, and lose much influence and co-operation.

I hope this winter's experience will be so pleasant that your desire to make teaching a permanent employment will increase. If you would improve in teaching, you must see what others do, read what others have written, and reflect on it till the grain is all your own. You must know other things too; you will be judged like other men by your intelligence. It has been often spoken, resolved, and voted, that teaching is an honorable calling; but, a man in any profession will, in the end, be honored for what he is,—for what he brings to the profession. The teacher must be intelligent that he may instruct his pupils well; and if he would be well received in society, he must contribute to society his proportion of improvement and pleasure.

#### THE MODUS OPERANDI OF THE SCHOOL-ROOM.

So much has been said on education that I hardly know where to begin to say more. Yet who can say that it has been in vain? What are common schools now, and what were they ten years ago, in Lancaster county? What were our school houses ten years ago, and what will they be ten years hence? Six years ago I commenced teaching at Lampeter Square, in an ex-blacksmith's shop, now replaced by a large and convenient brick house, unsurpassed by any country school house in the county. Ten years ago teachers in this county were but seldom examined; now they are not employed without examination. The only object of teaching then, was reading, writing and ciphering: now (in our best schools) it is to educate the faculties.—What was then written respecting what schools ought to be, is now accomplished in our best schools. But let us not forget that what we are now, others were ten years ago; and what they are now, we have yet to be. Let us then, Teachers and friends of education, lay our shoulders to the wheel, and in ten years more, we may see a new race of teachers, fresh from the Normal schools, established by the State. Do not the best teachers now feel their wants? Do we not often see and hear suggestions which show us wherein we need instruction in the *modus operandi* of the school-room?

The education of a child's faculties: the making of the child to be a thinking being, seems to be the desideratum. Yet the mode of doing it, the way a child is taught to think, how to place the mental food within his reach so as to render it the most attractive: in short, the practical teaching of "the young idea how to shoot," seems to be more theorized and less practised with us than any other branch of education. To make the more advanced studies attractive to the student, is not so much a theory.—Most of us, I hope, have succeeded in some degree, in this branch of education. Yet a few hints thrown out in this essay may not be wholly unprofitable to myself and others. Let us endeavor mutually to improve one another.

I begin with a child's first studies. In the school that I now teach, there are two little boys, one a regular pupil, the other the child of a neighbor, a voluntary pupil. If prohibited from coming to school he cries, and if not watched, steals the opportunity to come, and will not leave without force, unless commanded by the teacher. The one first cried to come to school, and in a week, cried to stay at home. Why? Because the "long lessons tired him," to use his own words. The other, a remarkably active, lively boy, continues to like the school, and so well, that he will consent to sit in quietness for several hours each day rather than leave it.—He sometimes, as a special favor, is permitted to say a lesson, and with respect to the improvement of the mind, is the better scholar. The former is a book drudge, the latter is becoming a thinker. At different periods during my being engaged in teaching, I had two little girls given to my care. They commenced their studies, as the little boy here mentioned, is commencing his; and, in two years, they were better scholars, (even book scholars) than any others ever taught in my school in the same time.

I merely throw out these facts, as hints to others. As practical teachers, we are arrested on the threshold, by parents and the patrons of the school, who try the pupils by the book. Who has not heard the complaint, "My child has gone to school so long, and he don't know his letters."

I dare not trust my reputation and interest as a teacher, in the hands of my most liberal patrons.—They judge, not by what the child knows, but by how many words he knows in the book. All that he knows besides his book knowledge, is attributed to his own natural talent; and the teacher is the more liable to censure, for not teaching so promising a child. Better for the reputation of the teacher that he cramp every energy, except that which is bent, from morning till night, over an unmeaning book-lesson: for the dulness of the child is not attributed to the teacher, who rather receives additional praise, for teach-

ing one so unapt. As to punishment, the greatest that could be inflicted on the little girls mentioned (besides sending them from the school) was to deprive them of books.

Without theorizing further, I leave these facts in the hands of others, and proceed to the more advanced branches of a common school education.

I commence with the teaching of English Grammar: and be it understood, that I disclaim any professions of superiority; what I relate is merely my experience. "In the multitude of counsellors there is wisdom." Let us relate, examine, and compare. I have found no better system of English Grammar, than the old fashioned one of ten parts of speech, five moods, six tenses, &c., &c. The teaching is of more importance than the system taught,—and whether you call Thomas Burrowes a name or a noun, is of but little importance. What difference can it make in a pupil's acquirement of a knowledge of our language, whether run and walk are neuter verbs, according to Murray, or active verbs according to modern grammarians. The distinction between them and transitive verbs must exist, be the system what it may; and it seems to me of little importance, by what names they are called. Teach the pupil the true distinctions between words, and I care not by what names they are called.

E. LAMBORN.

West Lampeter, Lancaster County, Nov. 1852.

### NORMAL SCHOOLS--EXAMINATION OF TEACHERS ---UNIFORM SERIES OF TEXT-BOOKS.

In a County Convention of Teachers, at which the State Superintendent presided, held at Blairville, in Pennsylvania, the following (among several other) resolutions were adopted:---

"Resolved, That though much good can be effected by Teachers' Institutes, yet the full preparation of the Teacher for the performance of his momentous duties, can only be effected by a regular thorough professional system of training. If it be true that "the right to punish crime involves the duty to educate for the prevention of crime," then it must be true that the same right involves the duty of providing all the means of education. Of these we consider Normal schools, founded by the State, for the preparation of teachers, as among the most necessary and efficient; and therefore we strongly advocate their early establishment.

"Resolved, That as teachers we not only are willing to submit to, but demand at the hands of directors, a thorough examination into the moral character and professional qualifications, as well as the literary attainments of all applicants; under the belief that though such investigation will not have the effect of creating perfectly qualified teachers where they do not already exist, yet it will at least give the due preference to the most worthy and thereby encourage self-improvement.

"Resolved, That in the opinion of this Institute, it is a matter of high importance that a uniform system of text-books in our schools be secured; that we regard any system as preferable to no system; and that we respectfully but earnestly urge the Directors of the Common Schools in every district to perform their duty in this respect, by adopting and requiring the use of a uniform series of text-books."

### TEXT-BOOKS AND APPARATUS IN SCHOOLS.

Of the positive facilities for study, the first consists of books on all the branches of science to be pursued in the schools. And among the multitude of books it is not easy to decide which are the best. It is only the experience of teachers of approved judgment which can be relied on to select, for the use of the school, books which unite the qualities of prompters and helpers. Books should be used in schools as prompters to thought. They should be designed to excite the scholar to the use of his mental power, to make him think closely and patiently, telling him one thing only to make him think of another; stating a fact to lead the pupil to search for the cause; describing phenomena to make the scholar think of their due order in the course of nature. A book of anecdote, or of mere historical narration will serve scholars for exercises in reading, and may give useful information, but serves no purpose for mental discipline. A book of arithmetic which teaches by rule and example only, which directs the scholar to place his 7 under his 9, and put down six and carry one; or teaches him to compute the interest of 40 dollars for eight months, at 6 per cent., by multiplying by 4 and cutting off the two right hand figures for cents, and leads his thoughts to nothing more, may guide the pupil in a few mechanical processes of thought, but cannot teach him to think. Hence the rage for simple books, entitled science made easy, which told everything and left nothing to be studied out, has had its day. Common sense has decided that books of education should not be labor-saving inven-

tions, but means of increasing labor and making it profitable; as good roads are not to relieve horses from work, but to make them work to better purpose.

But while good books for schools must not be so plain as to leave nothing for study, they must not be so blind as to furnish no leading thoughts—so dark that the pupil cannot see his first step. Suggestive hints for starting processes of thought are indispensable; but as the books are to be used under teachers, and not in mere private study, they may, as they must, be left with a general adaptation, leaving the particular application of the books to the different capacities of the scholars, very much at the discretion of the teacher. And it is in this department of his office that the discretion of the teacher can very highly commend itself.

In addition to books there are also other helps to study to be found in the various contrivances for illustrating the principles of science to the senses. The formulas of mathematics, the diagrams of geometry, the drawings of mechanics, the miniature machinery for illustrating laws of nature and explaining problems in philosophy, form together a body of apparatus, indispensable as incitements and guides of thought. They are a part of the language of science; a compend of the literature of nature; select phenomena to stand along the path of thought, as classical explanations of principles.

The value of apparatus in teaching consists chiefly in the clear and direct views it gives of principles which would not be understood by the use of words. And in the present advanced state of common education, we cannot expect to gain the full advantages of our system, without the use of this help. It has become one of the duties of teachers and directors of our schools to provide such means of illustrating scientific principles, as will put the scholar in command of his science, and furnish him with a firm basis and substantial materials of thought in all the branches of his study.—*Pennsylvania School Journal*.

### SCHOOL DISCIPLINE.

For several years past the question of corporal punishment has engaged the attention of the community, and many have taken strong ground against it. Public sentiment has always been averse to the infliction of corporal punishment, arising partly from a superficial view of the subject, and partly from an undue value of the efficacy of the substitutes employed. The public have generally put forward the *abuse* of this mode of punishment as one of the chief arguments against its practice.

In some portions of the Union teachers were severely censured both by the public and the press.—The first inquiry propounded to the humble applicant demanded his opinion concerning the use of corporal punishment.—An answer in its favor was considered a weighty objection against him. Hence, many, who had never experienced the difficulties of the school-room became the most ardent supporters of *moral suasion*; and many who had held responsible situations, seeing their popularity waning, had neither the courage nor the honesty to avow their real sentiments, but joined the advocates of the new theory, and thus apparently gave undeniable evidence of its superiority. Every teacher who had the hardihood to defend the wise teachings of Solomon, was in danger of incurring the displeasure of his superiors, and he could scarcely dare to inflict personal chastisement even as a *last resort*. In vain would he plead to be heard, while he portrayed the sad effect upon a certain class of his pupils, whose misdoings nothing would restrain but the fear of the rod, the assertions of the advocates of mild and gentle treatment to the contrary notwithstanding. Expulsion, the only remedy for the incorrigible, substituted: For when every kind, gentle, and judicious effort of the teacher has failed, personal chastisement or expulsion must follow.

What has been the result of the experiment?—Let the parents of our populous cities answer. A distinguished teacher asserted, before the Convention at Newark, last August, that the *people* of Boston came forward and settled the question in favor of a sound and wholesome discipline. What he stated of that city we are prepared to affirm of others.

In a few months hundreds were turned out to run the streets. Expulsions multiplied to a serious extent. Parents earnestly entreated the teacher to punish their children rather than to give them the opportunity of finishing their education on the highway. Need we add that the name of our city had become a synonyme for riotous and disorderly behavior? Truant-players increased to an alarming multitude. Then the relapse took place, and a general revulsion of opinion soon closed the mouths of those who decried a proper chastigation of the refractory, and thus encouraged insubordination, instead of supporting good and wholesome discipline.

These remarks were prompted by the necessity of keeping teachers and parents awake to the dangers of specious philosophy, and of warning them against the adoption of the principle that a pupil can be governed without restraint.

Philadelphia, Nov. 1852.

Z.



**JOURNAL OF**      **EDUCATION**  
 Upper                      Canada.

TORONTO: JANUARY, 1853.

### NATIONAL EDUCATION IN UPPER CANADA.

A good Scotch writer has observed, that "a rightly directed system of education is a moral power in the universe, second only to the creating energy that forms and sustains in existence its material framework. It is, indeed, cooperating with the same Divine influence—it is carrying into effect the very laws which the Creator has established for the moral renovation and perfection of the species, for admitting it to a glimpse of that intellectual radiance emanating from the 'Father of lights,' and for opening up by the magic influences of love and affection, those springs of joy and gladness that have their source in every breast, and that would flow forth and encircle the whole family of man in one vast flood of blessedness."

Every inhabitant of Upper Canada who enters into the spirit of this passage,—and who does not, or ought not to do so?—must be proportionably anxious that the *area* of education should be as large as the population of the country, and that its *quality* should be as excellent as its extension should be universal. There should not be a *desert* or *wilderness* spot in the whole *mental* area of the land; and every spot should receive the best cultivation. This requires schools to be universally accessible, and universally good; and involves the diffusion of that knowledge which will enlighten and prompt the public mind to the exercise of right views and feelings, in regard to this vocation of patriotism and humanity. Such is the continued object of the *Journal of Education*—unswayed by any spirit of partizanship, and acknowledging no narrower interest and no lower object than the universal education of the youth, and the future happiness and grandeur of Upper Canada. But in this great work, every agency has its place and its importance, from the School register to the School law; and every individual has his position and his duty, whatever may be his office in the School system, and whatever may be his circumstances and rank in society at large.

Individual mind is in harmony with itself, and is working out its high destinies, when every faculty is healthful, and every power is performing its appropriate functions; so is society fulfilling its high vocation, when the duties of every actual member are duly understood and performed, and the faculties and powers of every intended member are appropriately developed and directed.

That Upper Canada is happily advancing in this career of civilization, is beyond doubt; and it depends upon each Canadian to say, whether he will retard or accelerate the advancement of his country in the essential elements of individual enjoyment and national prosperity.

### COUNTY SCHOOL CONVENTIONS.

[OFFICIAL CIRCULAR.]

*To the Municipal Councilors, Local Superintendents, Visitors, Trustees, and Teachers of Common Schools in Upper Canada.*

GENTLEMEN,

In the course of the next two months, the undersigned proposes, Providence permitting, to visit each County, or union of Counties, in Upper Canada, for the purpose of holding in each a County

School Convention of all school officers and other friends of general education who may choose to attend. It will be recollected, that all clergymen, judges, members of the Legislature, members of County Councils, and aldermen are School Visitors; that the law makes it the duty of Local Superintendents to attend such conference; and the undersigned shall be happy to meet and confer not only with all School Visitors and Local Superintendents, but as many Trustees, Teachers, and friends of education generally, as can make it convenient to attend—including, of course, such Trustees and other school officers and promoters of education as may reside in the Cities, Towns, or Incorporated Villages of each County, or union of Counties, within the limits of which a County School Convention shall be held.

The object of each County Convention will be,

1. To answer any questions which may be proposed, and give any explanations which may be desired, respecting the several provisions of the Common School law.

2. To consider any suggestions which may be made for its improvement.

3. To consider any suggestions which may be made as to the best regulations in regard to Public School Libraries, and their relation to County, Township, and School Municipalities; also, Teachers' Institutes, and the mode of constituting and managing them.

There are so many considerations involved in the establishment of Public Libraries and Teachers' Institutes, that the undersigned is unwilling to decide upon and submit official regulations respecting them, without as large and free a consultation as possible with experienced and interested parties throughout the country. And, as it is intended, during the approaching semi-session of the Legislature, to propose (not any changes in the general provisions of the existing school law, but) some supplementary provisions to improve the school law, the undersigned is anxious to be favored with every suggestion which the experience and administration of the law may have furnished to local school authorities. It will be desirable to have all questions and suggestions to be proposed at each County Convention, prepared and presented in writing.

Whatever public address the undersigned may be able to make in each County, will be made during the County School Convention:

The meeting of each Convention will take place at HALF-PAST ONE O'CLOCK in the afternoon, and the proceedings commence precisely at TWO, whether few or many are present. The time and place of each of the proposed County School Conventions are as follows:—

COUNTIES.	TOWNS.	DAYS.	DATES.
Lincoln	St. Catharines	Monday	Jan. 24.
Welland	Merrittville	Tuesday	" 25.
Haldimand	Cayuga	Wednesday	" 26.
Wentworth and Halton	Hamilton	Thursday	" 27.
Wellington, Waterloo and Grey	Guelph	Friday	" 28.
Perth	Stratford	Saturday	" 29.
Huron and Bruce	Goderich	Monday	" 31.
Lambton	Port Sarnia	Wednesday	Feb. 2.
Essex	Sandwich	Friday	" 4.
Kent	Chatham	Saturday	" 5.
Middlesex and Elgin	London	Tuesday	" 8.
Oxford	Woodstock	Wednesday	" 9.
Norfolk	Simcoe	Thursday	" 10.
Brant	Brantford	Friday	" 11.
York and Peel	Toronto	Wednesday	" 16.
Simcoe	Barrie	Friday	" 18.
Ontario	Whitby	Wednesday	" 23.
Peterborough	Peterborough	Thursday	" 24.
Northumberland and Durham	Cobourg	Friday	" 25.
Hastings	Belleville	Saturday	" 26.
Prince Edward	Pictou	Monday	" 28.
Lennox and Addington	Napanee	Tuesday	Mar. 1.
Frontenac	Kingston	Wednesday	" 2.
Leeds	Brookville	Friday	" 4.

COUNTIES.	TOWNS.	DAYS.	DATES.
Lanark and Renfrew, .....	Perth, .....	Saturday, .....	Mar. 5.
Carleton, .....	Bytown, .....	Tuesday, .....	" 8.
Grenville, .....	Kemptville, .....	Wednesday, .....	" 9.
Dundas, .....	Matilda, .....	Thursday, .....	" 10.
Stormont and Glengarry, .....	Cornwall, .....	Saturday, .....	" 12.
Prescott and Russell, .....	L'Orignal, .....	Tuesday, .....	" 15.

Probably, in most of the places mentioned, the Court-House or Town-Hall can be procured for holding the County School Convention; and I must rely upon the kind co-operation of the Local School Superintendent, aided by the Trustees in each County Town or Village, to provide the needful accommodation for the holding of each County Convention, and for giving due notice of the same.

The newspaper press in each County is respectfully requested to give notice of the time, place, and objects of the School Convention for such County.

As the undersigned must get a conveyance from one County Town to another during the evening and morning after each County Convention (except on the Sabbath), he hopes that this public notice will facilitate his procuring the necessary accommodation in cases where there is no public stage passing in the direction and at the time required; and especially as the long distances to be travelled over between most of the places mentioned, and the shortness of the time allowed to travel over them, will render dispatch and punctuality indispensably necessary.

E. RYERSON.

Education Office,  
Toronto, 10th January, 1853.

*Extracts of letters from Local Superintendents of Schools, respecting the Journal of Education and other School Matters.*

1. "I am gratified to perceive from the addition made to the School Act, that justice has been done to Union School Sections, and that the *Journal* is now to be sent gratuitously. This latter boon cannot fail to give a great impulse to education throughout the Province."

2. "Allow me to express my sincere gratification at the arrangement which you have concluded with the Government, to furnish gratuitously to each Board of Trustees in U. C., the next volume of the *Journal of Education*.—The difficulties you speak of [for want of the *Journal*] have repeatedly come under my own observation; and I have been frequently called upon to give advice and settle disputes arising from ignorance of matters that are fully explained in your *Journal*, and necessary to be known by every one who has anything to do in the management of common schools. This, I am happy to say, will be obviated in future; and I have no doubt that this diffusion of intelligence in our national system of education, will be the means of giving an increased impulse, by producing a cordial co-operation of all parties in the support of good schools."

3. "The circulation of the *Journal* free of charge, will confer great benefits, and good results may be expected from that measure; it will be public money well expended."

4. "I assure you that it will give me great pleasure to aid the generous and well-directed endeavours of the Chief Superintendent, in extending the influence already so beneficially exerted on our schools by the head department of our educational institution."

5. "You are certainly entitled to the gratitude of the Province, for your wise and liberal exertions in promoting the cause of education. I trust you will have the happiness of seeing your unwearying exertions crowned with success."

6. "It gives me very great pleasure I need scarcely say, to know that

you have been enabled to enter into such arrangements for supplying School Trustees and local Superintendents with the *Journal*. I am fully persuaded that much good will result from it."

7. "The liberal arrangement which you have succeeded in effecting, for furnishing the *Journal of Education* to every corporation of Trustees, as well as local Superintendents of Schools in C. W., cannot fail to produce the most satisfactory results. Something of this kind has been long needful, not only to give general information on school matters, but also to inspire the public mind with a desire and relish for improvement. With all that has been done, there are yet those parents comprising nearly whole sections, almost totally indifferent regarding the mental culture of their children. Happily this state of things is not so general as formerly. In our own Township (Townsend) several of the schools are assuming a most pleasing character. On Saturday I attended an examination of the school in Section No. 3, in the settlement of the Round Plains; the school is taught by Mr. John Cowen, and the whole of the exercises reflected great credit upon both Teacher and pupils. The school averages about 50 at this time; and marked order and neatness are observable.

8. "When I entered upon my duties in May last, things were in a sluggish state; section boundaries were undefined, and education quite neglected. But by talking, lecturing, and writing to parties, I have the pleasure to see things assuming a more active appearance. I hail the circulation of the *Journal* among the Trustees as a good omen. I hope to see the youth in this backward place have greater facilities afforded for improvement."

9. "Within the last three weeks I have visited and examined all the schools in the Township of my charge, and have read in each your circular addressed to me; I am happy to say that the prospects of education are greatly improved through your exertion, and particularly that the arrangement for furnishing the *Journal of Education* to each Section will have a good effect---tending to produce a uniform system of instruction, and leading Teachers to adopt the most successful methods of conveying useful knowledge to the pupils of different capacities, as well as exciting a love of study and morality. This arrangement is hailed by the people as evincing a high and minute appreciation on the part of the Government of the wants and interests of the rising generation."

10. "I believe that nothing will tend so effectually to infuse a proper educational spirit among the people, as the arrangement which has been lately effected with the Government, to supply a copy of the *Journal of Education* for next year, to each Board of Trustees and local Superintendents. By extending all necessary information on school matters, it will enable Trustees better to discharge their duties, save them from falling into many unintentional errors, and prevent much difficulty and contention in a school section, which often arises from ignorance of the law, and the selfishness and obstinacy of those who are ever anxious to throw impediments in the way of unanimity in school affairs."

EDITORIAL REMARKS.—The number of letters containing sentiments similar to those expressed in the foregoing extracts, is so large that we cannot insert them, although not less worthy of insertion, and not less appreciated than those which we have given. We are happy to find that the arrangement for providing each School Corporation and Superintendent with a copy of the *Journal of Education*, meets with so warm and unanimous a response throughout the country. While we are thankful for the assurances of the cordial

coöperation on the part of local Superintendents, we solicit their assistance in extending the circulation of this *Journal* by means of private subscriptions, as every such subscription will add to the usefulness of the *Journal*, and diminish the amount which must be applied from other sources, to defray the expences of its publication.

We hope also that local Superintendents, as well as all parties concerned, will give us the earliest notice of the incorrect address of the *Journal of Education* to, or the non-receipt of it, by any parties for whom it is intended.

Local Superintendents who have not reported to the Education Office the *actual number* of Sections under their own immediate superintendence, will please to do so without delay, so as to ensure accuracy in mailing the *Journal* to Trustees.

They will be particular that the Union School Sections of which they give the address, are those only which are defined in the latter part of the 4th clause of the 18th section of the School Act, so as to avoid sending two copies of the *Journal* to one Section.

Local Superintendents had better also notify each postmaster that the *Journal of Education* will be addressed to their post-office for such and such School Sections, so that, if not called for at once, they may not be transmitted to the Dead Letter Office at Quebec.

From the local Superintendents of the following Municipalities no reply has been received at the Education Office, to the Chief Superintendent's circular published in the *Journal of Education* for November last. The *Journal* cannot, therefore, be addressed to the Trustees in these Municipalities, until their Post office address be received:—

Lochiel.	Yonge.	Scarboro'.
Finch.	Hinchinbrooke.	Medonte.
Caledonia.	Hillier.	Barton.
Osnabruck.	Marmora.	Clinton.
Matilda.	Monaghan, North.	Wainfleet.
Williamsburgh.	Monaghan, South.	Oxford, West.
Huntley.	Manvers.	Wilmot.
Bastard.	All in the County of	Mosa.
Leeds and Lansdowne	Victoria.	Chatham.
(Front and Rear).	Hope.	Harwich.
Athol.	Markham.	Euphemia.
Hallowell.	Adjala.	Plantagenet, North.
Hungerford.	Ancaster.	Plantagenet, South.
Alwick.	Beauford.	Oxford (Grenville).
Cartwright.	Wellesley.	Escott.
Harvey.	Dorchester, North.	Richmond.
Whitby.	Camden.	Wolf Island.
Gore of Toronto.	Zone.	Thurlow.
Tiny.	Enniskillen.	Murray.
Glandford.	Maidstone.	Ennismore.
Walsingham.	Hawkesbury, East.	Chinguacousey.
Waterloo.	Torbolton.	Tay.
Adelaide.	Gower, South.	Flamboro', West.
Southwold.	Elizabethtown.	Charlotteville.
Brooke.	Montague.	Norwich.
Gosfield.	Portland.	Woolwich.
March.	Ernest-town.	Westminster.
Edwardsburgh.	Rawdon.	Dover, East.
Burgess, South.	Percy.	Dover, West.

**SCHOOL PROGRESS IN A NEW TOWNSHIP.**—The Local Superintendent of the Township of Athol, under date of the 14th ult., writes as follows:—"In this Township small school sections and the want of suitable school-houses have heretofore materially retarded the progress of education; but these obstacles will, I trust, soon be in a good degree removed. Our Township Council has, by reducing the number and altering the boundaries of several school sections, remedied the evils of small school sections; and the *one* new school-house, erected the past autumn, with *three* others to be built early in the coming spring, and which, I trust, will be of brick or stone, and in all other respects what school-houses ought to be, will, in a great degree, remove the evils of poor school-houses in this Township."

## SHALL AUTHORITY BE GIVEN TO TAKE PIECES OF GROUND FOR SCHOOL-SITES, AS WELL AS FOR HIGHWAYS AND RAIL-ROADS?

The foregoing is a question of great importance for the interests of schools, in many places, and which has frequently been pressed upon our attention, and on which we have conferred with several public men, but without arriving at any satisfactory conclusion. We should like to have the opinions of the public press on the subject. The question is practically and strongly stated as follows in a letter from a local Superintendent of Schools:—

"Allow me to suggest for your consideration, and, if you judge expedient, through the columns of *The Journal of Education*, to the consideration of the friends of education in the Province, the propriety of an addition to the School Act of a clause to provide for the settling questions which sometimes arise between the inhabitants of a school section and individuals, who, as it frequently happens, own the lands in the central parts of school sections, and who oppose the erection of school houses on any lands they possess; also to settle questions which may arise as to the *quantity* of land required and the *amount of money* to be paid for the lands required for common school purposes. Instances have happened in which individuals have held out inducements and made liberal promises in regard to sites for school houses, until the section has been established, and the house required to be erected, when they would demand an enormous price for the land required, or perhaps totally refuse to allow a house to be erected upon any conditions whatever. Where suitable sites exist, in, or near the centre of a section, it is, in my opinion, (especially if the section is large, as it should be,) but right and just that the school-house should be as near the centre as circumstances will permit. Our Legislature, to encourage the building of plank and macadamized roads, have, I believe, wisely provided that private property may be taken for public purposes, by allowing an equitable compensation; and have provided, (if I mistake not) a short and easy method of determining what that compensation shall be; and if the cause of education is of as much importance to the present and future generations, as plank roads, then I can see no good reason why they may not deal in a similar manner in reference to the necessary amount of land required in any school section for common school purposes. Again, if it is right to take *my money by law, for the purpose of erecting school-houses for public good, then why not my land, on which a house may be erected, should the public interest demand it.* But I need not stop to argue this question with you, believing, as I do, that your good sense will require no argument from me in favour of so equitable a measure. Enormous evils, which, to my knowledge have heretofore existed, and which I fear may exist hereafter, have induced me to make the above suggestions for your consideration, and should you agree with me as to the propriety of a measure of this kind, (and confident I am, if you had seen the evils arising from the want of such a measure that I have, you will,) I would suggest the propriety of settling disputes of this nature in the same manner as the School Act provides for the settling of differences of opinion between the majority of the inhabitants of a school section and the majority of the trustees, in regard to a site for a school-house; or, perhaps questions of this kind as to whether a school-house *shall be built on a man's land, against his wishes,—what quantity of land may be taken for such purposes,—and the amount to be given for such land,*—might be referred to the Municipal Council of the township in which such property is situated. For one, I am confident that some measure of this kind is required to remedy existing evils; and I hope, ere the ensuing session of Parliament closes, to see some equitable measure adapted to settle questions of the kind above referred to, which frequently arise."

**SMALL SCHOOL SECTIONS.**—The *Ohio Journal of Education* for January, 1853, remarks as follows, on the subject of small School Sections—a subject on which progress has been made in the right direction in many townships, but which still deserves the

most serious attention and decided action on the part of Township Councils generally :—

“The complaint is made from nearly every part of the State, that the District Schools accomplish but little, that the money expended upon them is little better than thrown away, that during the long vacation the scholars forget so much, that, when they commence again under a new teacher, it requires nearly half the term for them ‘to become acquainted with his ways,’ and to advance as far in their studies as they were at the close of the previous session. Much of this is doubtless true, and will continue to be, so long as small districts, short school terms, and cheap teachers, frequently changed, are continued. Hence the vigorous efforts which the intelligent friends of education are making to unite school districts, secure a proper classification of scholars, sustain the schools from eight to ten months in the year, and secure the employment of competent teachers in every department of the schools.”

**A GOOD SUGGESTION.**—A local superintendent and able writer makes the following excellent suggestions, in which we fully concur; and we shall be happy to insert communications of the kind referred to, upon the triple condition that they be short, intelligibly written, and approved of in regard to character and style :—

“May I permitted to suggest, that the *Journal of Education*, now one of the best of the kind in the world, might be made still more acceptable, and, therefore, useful, if a few pages of every number could be filled with communications from teachers in different parts of the country, containing their several experiences in teaching, essays on the art, different methods of school examination, discipline, government, methods of teaching the different branches of knowledge,” &c.

**A GENERAL SYSTEM OF FREE SCHOOLS.**—Many communications have been made by local school authorities to the same effect with the two following, the first being an extract of a letter from a local superintendent of schools in the County of Norfolk :—

“I am fully of opinion that some judicious general system of free schools would be a rich boon conferred on the rising generation. Several of the sections in this township have availed themselves of the provision of the law to tax themselves for the support of their schools; the result has been invariably a large increase of scholars in the school—in some instances amounting to double the number under the rate-bill system. But with all this advantage, a common evil grows out of the free school system, as now adopted. Respectable ministers are opposed to it, and often a sharp contention ensues which paralyzes the best efforts for a time. Indeed taxes, on the whole, are more agreeably paid when imposed by some other authority than that of neighbour taxing neighbour.”

A local superintendent in the County of Oxford remarks, as follows, on the same subject :—

“From the fact that the new act to amend the school law expires on the 1st of April next, I take it for granted that you hope to get a more complete measure passed before the close of the session. I beg to say, that you would greatly increase the obligations under which the country is already laid to you, if you would include a provision to make the free schools compulsory. This is what the country now needs, and, I believe, desires. The present system, though it has borne some good fruits, is inconvenient and unsatisfactory. There have been many instances, certainly, where the majority of the people have decided for free schools; but in nearly every instance there is left a disappointed and bitter minority, who frequently fill the school and the section with animosities and hatred, sometimes even affecting the peace of Christian churches. In many, I think most instances, the bitterest opposers, in these townships, say that they approve of the principle, and if it were the law of the land they would cheerfully support it; but under the present system, they say, they may be compelled to pay their money for the benefit of others for some years, and that when a school would

be useful to their own families, others who have been enjoying their money may vote the free school down. There is much force in this objection. Let the system be made a Provincial one. Let the people decide by their vote, as to the time (not less than six months) that the school shall be kept open, but let it not be optional or doubtful how the school shall be supported.”

**SHOULD VAGRANT CHILDREN IN CITIES, TOWNS AND VILLAGES, BE COMPELLED TO GO TO SCHOOL?**—The Committee on school attendance, appointed by the *American Association for the Advancement of Education*, concludes its Report in the following words :—

“Laws must be enacted upon the subject. All children, not engaged in any lawful calling, who habitually frequent the streets, and other public places, should be deemed vagrants, and treated as such. They should be compelled to go to school. In most of the States our schools are supported by direct taxation upon property. The man of wealth, every citizen in the community, whether he has children to send to school or not, is taxed directly or indirectly for the education of youth; and if he complain, he is told that the support of common schools is essential to a republic, even for the better security of personal property, and even of life itself. He is compelled to pay his money for the support of schools, and has a right to demand, in return, that every child in the community shall receive the benefit of a good education.”

**PUNCTUAL ATTENDANCE OF PUPILS AT SCHOOL.**—In the Report of the Committee on this subject, (appointed by the *American Association for the Advancement of Education*.) we find the following excellent remarks :—

The best method of securing the regular and punctual attendance of children at school, is a subject which has long engaged the attention of practical teachers, and is one of the utmost importance. Most of the teaching and recitations in our large schools, are conducted in classes: consequently, every absence is not only a hindrance to the individual absent, but it retards the progress of the whole class. All teaching to be effective, must be thorough. The steps to be taken in acquiring an education, must be gradual and certain. Our class-books are so arranged, and the course of instruction is such, that no recitation can be omitted without serious injury to the individual or to the school; as the class must wait for him to make up the lessons omitted, or he will experience the want of them in all his future progress.

“The cause of these absences may in most cases be traced to the negligence or indifference of parents, and this negligence or indifference arises principally from a want of knowledge as to the extent and magnitude of the evil. Some of them are influenced by their affections, and yield readily to the wishes of their children, granting them permission to be absent for trivial causes, whenever they desire it. Others have not sufficient control over them to compel their attendance. Every experienced and thoughtful teacher has witnessed the baneful effect which these absences have upon the progress of a school, and many have been the expedients adopted to remedy the evil. Much has been, and may be accomplished by a faithful and conscientious teacher, by appealing directly to the children. He should make it unpopular in the school-room, to be absent at any time without good and sufficient cause. Public sentiment in the school-room is as powerful in directing the actions of children, and may be used with as much effect, as it is in directing and controlling the actions of men in the social and political affairs of life. The teacher should therefore impress it upon the children that he regards absence from school as a serious offence; and every instance of it should be made a subject for investigation and comment. He should endeavor at all times, to interest them in everything which pertains to the reputation and welfare of the school; for it will always be found that those children who are really interested in the studies of the school will be the most regular and punctual in their attendance. Whenever these means do not accomplish the object, as in all cases they will not, let him appeal to the parents themselves, personally or by letter, and arouse them to a sense of the importance of the subject. Let him call upon all the friends of education through the public press, to aid him in forming and directing public sentiment aright upon this topic, and the evil, so far as it exists among the virtuous and intelligent portions of the community, will soon be remedied.”



## OPINIONS OF THE PRESS.

[From the *Globe of Saturday, November, 27, 1852.*]

### NORMAL SCHOOL OPENING.

Elsewhere will be found a full report of the addresses delivered on Wednesday evening, at the opening of the New Normal School. As was very happily said by one of the speakers, the occasion which called the audience together was suggestive of very pleasing thoughts in regard to our national system of education. That system has, of late years, acquired a form and consistency, a power and influence which cannot fail to gratify the feelings of every well-wisher of Canada. For many years, Parliament acknowledged, by its votes, the importance of education, and granted aid with what must be thought a liberal hand, considering the condition of the Colony at the time; but it has only been of very late years, that a lively sympathy has sprung up throughout all classes of the community, in favor of thorough instruction, that an efficient organization has been established to keep alive and strengthen that sympathy, and that we see very strong and gratifying proofs of the benefit of that organization. It must be acknowledged that to the Reverend gentleman who fills the post of Chief Superintendent of Schools the greatest honor is due for this pleasing result. We have often blamed Dr. Ryerson's past conduct, but it would be a gross act of injustice if we refrained from acknowledging, that in his situation of Superintendent of Education, he has been doing a great and noble work; that he has done more than any other man, to elevate the character of his fellow-countrymen. Where he found deadness, he has given life—where there was chaos he has produced order; it is to be hoped that ere his labors are ended, he will place our national system of common school education on such a fixed and permanent basis, that no length of time, no lassitude in its managers, no corrupt influences in the legislature—will be able to subvert it. He has worked earnestly, with his whole soul, in behalf of the instruction and enlightenment of the people. He may have committed errors in management—no man is perfect; he may be chargeable with some thoughts of self in his efforts—that is only to say that he is mortal, but no man need ask a nobler or more enduring monument of his labors, than that which Dr. Ryerson is at present raising. The energy given to the common school system by the power centred in the Council of Public Instruction and the Chief Superintendent, some years ago, is a sufficient defence of a step which was at one time considered of doubtful expediency. While the power of the people over their educational affairs has not been seriously interfered with, it is certain that a powerful stimulus has been given to the good cause. The chief difficulty of our Common School system has been the lack of competent teachers. There has been want of money to pay them, it is true, in our back-woods, but it may be safely said there never has been a good teacher in Canada, who could not obtain a handsome remuneration for his labors. Of late, the demand for well-trained instructors has been greater than ever—far greater than the supply; and the state of the market has had the usual consequence—an increase in price. Dr. Ryerson said on Wednesday that they had more applications for teachers at ninety and a hundred pounds per annum than they formerly had at forty and fifty. It is evident that some effort is necessary to supply this scarcity, and it is not the worst part of the centralized school system that it has taken up so spiritedly the means of remedy—an evidence of which we find in the building erected for the Normal School. This institution is, in fact, the heart of the educational body, the spring from which is destined to flow streams of pure water to moisten the dry educational field. It is to it that we must look for those who will go forth fully armed and equipped to fight our battle against the ignorance and error, the darkness and superstition which would impede our national progress.

Not the least gratifying part of the proceedings of Wednesday, was the hearty and spontaneous testimony given in behalf of national education by some of that class, who, in the mother country, have shown themselves in the opposite ranks. Mr. Chief Justice Robinson's address contained many important admissions of the benefits of secular knowledge, many compliments to a system of education which has been pronounced infidel and Godless by the Bishops of the church to which the learned gentleman is attached. It is true that the Chief Justice said something of religious education, in a careful manner, to avoid wounding the feelings of a mixed audience, from which we might suppose that he did not consider the question about sectarian schools as altogether settled, but the whole tone and spirit of his address was in favour of a national, general, system of instruction, in contradistinction to one conducted by the sects. The Rev. Dr. McCaul also, in the short speech which he made on very short notice, was almost all that could be desired on the great question to which we refer. In his concluding sentence, the eloquence and elegance of which drew down thunders of applause, the President of the College gave in his cordial adherence to the principle of free schools, expressing his ardent hope that, ere long, the son of the poorest man in Canada might enter at the Common School, and proceeding through the intermediate stages, take the highest honours of the University, without any expenditure

of his own means. Dr. McCaul never thought that the sectarian system of education would do this, we venture to say. If the people were to be taxed to support ten sets of Institutions, instead of one, we wonder how long free schools would be allowed to exist—one year, perhaps; certainly not two. Dr. McCaul also talked a little of the necessity of religious teaching, and congratulated himself that there was no party in the country that avowed its opposition to it. Dr. Ryerson carried out that idea very happily: he, too, was an advocate of religious education,—all were its friends; but to the various sects of Christians belonged the religious instruction of the people; and it was with that principle in view that, ever since the opening of the Normal School, the students had been taught once every week, by their own clergymen, and they were required to attend their own church once every Sabbath-day. The rev. gentleman did not hesitate to say, in continuation, that he dissented altogether from the idea, that besides teaching religion, the sects were the proper parties to give secular instruction.

The Reverend Superintendent and those who preceded him, were correct. There is none who does not say that religious teaching is the most important work which can be performed. The only question for discussion is, whether that work can be undertaken in Governmental schools. Experience has shown that where there is no national system of education, there is no thorough education of the masses; and we take it as acknowledged in Canada by all, that Government schools are necessary. If we introduce religious teaching into these schools, it is impossible that they can be attended by all classes of the population. If it is Protestantism that is taught, Roman Catholics will stay away—if it is Romanism, Protestants will be excluded. The chief advantage of Government schools is, that the whole population may receive benefit, that by one organization and one expenditure, every child may be brought under instruction. Shall we abandon the general system with all its merits, because we cannot teach with it the doctrines of the sects? Shall we leave the people to chance efforts in behalf of their intellectual enlightenment, because it is impossible that we can attend to the spiritual? May we not with safety and propriety leave the religious education of the people to those set apart for that purpose in great and growing numbers? What is there in the instruction of children in the rudiments of learning, which renders it necessary that it should be connected with the inculcation of theology? Our Common School teachers have much labour on their hands. They try with all their strength to give to their pupils a mere outline of knowledge—and often fail in doing that efficiently. Are they able to undertake the additional labour of religious teaching? Are they, in general, men to whom could be entrusted that onerous and difficult task? We could not find teachers for even a few of the chief sects, and if they were obtained, we could not provide means for their support.

What course is then open to us but to adopt the principle laid down by Dr. Ryerson? Let the State, a purely secular institution, attend to the secular instruction of the people, and let the churches give that training to their children which is their peculiar province.

[From the *Middlesex Prototype of Wednesday, December 1, 1852.*]

### OPENING OF THE NORMAL SCHOOL.

On Wednesday last, the Normal School was opened in the city of Toronto. The splendid edifice, erected for training future instructors of the youth of Canada, having been so far completed as to answer all the purposes for which the building is designed, a great concourse of people assembled to witness the dedication of an institution, calculated to send to the remotest bounds of this extensive Province, for all future time, a class of teachers, male and female, fitted, from inclination, habit, training, and high moral character, to assume the important position of guiding and directing, in the proper channel, the minds and energies of the future rulers of Canada, and so instruct the youth of the country, that the sons and daughters of the Canadian people may, ere long, take rank amongst the most highly educated and intellectual people of America. The common schools of the country will, under the direction of these superior teachers, fitted for the task in the Normal School, send hundreds of ambitious and devoted pupils yearly to the higher seats of learning, and thus will the standard of education be raised to a principle hitherto unknown in the country. The sons of the farmer, the mechanic, and the merchant, will vie with each other, and all run on in the race of intellectual pursuits, until these distinctions, that have too long divided the people, will be forgotten; and the measure of a man's greatness, hereafter, will be his educational attainments, his high moral character, his respect for religion, and his known devotion to the interests and institutions of his country. Formerly, such distinctions could not be made, and, in the selection of officers for the different departments of government, both municipal and otherwise, men totally devoid of refinement, morality and education, were too frequently appointed to make laws, that they themselves were incapable of understanding; and even now, some of our magistrates, and municipal councillors, are a disgrace to the counties they aspire to govern, and a laugh-

ing-stock to the school children, that amuse themselves about the precincts of their "legislative halls."

We are delighted to find our public men, of all parties, uniting with zeal and cordiality, to give strength and confidence to the officers of the Normal School, and to convince the public that the institution is no sectarian scheme, erected for a favored few. Within its walls all are taught from the same standard works, and no distinction made between the Methodist and Episcopalian, the Baptist and the Presbyterian, while, at regular stated times (at least, once a-week) divine service is performed within the school, by the recognised clergymen of the different denominations, the pupils of each sect being obliged to attend the ministrations of their own clergymen; while on the Sabbath day, all are obliged to attend their respective churches.

[From the *Niagara Chronicle* of December 3, 1852.]

#### NORMAL AND MODEL SCHOOLS.

The Normal and Model Schools were opened with all the ceremonies which are customary on occasions of such importance, not only to Toronto, but to the Upper Province generally. The chair was occupied by the Hon. Mr. Justice Harrison, Chairman of the Council of Instruction, and addresses were delivered by Chief Justice Robinson, the Hon. Francis Hincks, the Rev. Dr. M'Cauley, and the Rev. Dr. Ryerson, in which all were agreed that the buildings of the Normal and Model Schools were elegant in architectural appearance, commodious in their accommodations, and healthy in their situation. The cost of these buildings is about £17,500. The annual sum granted by Parliament, for the maintenance of the Institution, amounts to £1500; and the Government has evinced a disposition to increase the grant, if it is found to be necessary for the efficient working of the establishment. It can at once be seen that though the buildings are situated in the city of Toronto, that the Institution is one in which the Province at large is interested; for from it, as from a focus of learning, will teachers be sent out to all parts of the Upper Province, experienced in the art of teaching, and well qualified to impart that instruction which is required. We object not to any profitable expenditure, when such momentous interests are at stake; for there is nothing which will tend so much to the elevation of a country, as the extension of a sound education to all classes of the people: and that can only be effected by extending every encouragement to persons to come forward to prepare themselves for the arduous task, and by sending among the people, teachers who are competent to impart that instruction which the high standing of the present age requires.

[From the *Western Progress* of Thursday, Dec 2, 1852.]

#### OPENING OF THE NORMAL SCHOOL.

The speeches delivered on the occasion were creditable to the speakers. That of Chief Justice Robinson was most appropriate, judicious, comprehensive, and liberal, devoid alike of religious sectarianism and party politics, and well adapted to promote the interests of this noble institution. The speech of the Hon. Mr. Hincks comprised an apology for his want of preparation for the important occasion. It was short, but showed, as usual, keen discrimination and a thorough appreciation of the nature, character, and utility of the institution.

Dr. Ryerson eulogized in warm terms the abilities of the Hon. Mr. Hincks, and the attention, and able and cordial assistance he had at all times received from him in promoting the interests of the Institution. From an extract from the Doctor's speech, our readers will perceive the great credit which is due to the managers of the Institution, and that, at less cost, its advantages are greatly superior to the Normal School of the State of New York, and, we presume, to any similar Institution on this continent. So far as we are competent to form an opinion, the Model School does great credit to the managers, is an honor to the Province, and we trust will prove of great advantage to the present and future generations.

#### Miscellaneous.

**A BEAUTIFUL FIGURE.**—Life is a fountain fed by a thousand streams that perish if one be dried. It is a silver chord twisted with a thousand strings, that part asunder if one be broken. Thoughtless mortals are surrounded by innumerable dangers; which make it more strange that they must all perish suddenly at last. We are encompassed with accidents every day to crush the decaying tenements we inhabit. The seeds of disease are planted in our constitutions by nature. The earth and atmosphere whence we draw the breath of life, are impregnated with death; health is made to operate to its own destruction. The food that nourishes contains the elements of decay; the soul that animates it by vivifying first, tends to wear it out by its own action; death lurks in ambush along the paths. Notwithstanding this truth is so palpably confirmed by the daily example before our eyes, how little do we lay it to heart. We see our friends and neighbours die, but how seldom does it occur to our thoughts that our knell may give the next warning to the world!

#### THE MOTHER'S PRAYER.

Since the first day her only son drew breath,  
No day nor night escap'd but mark'd the love  
That burn'd within the mother's breast. For him  
The bended knee and uplift heart were seen  
In secret, by an eye that only sees  
The motive of our every act. She  
Gently led him till the time arriv'd,  
When on this world's wide stage he first appear'd  
To act his part. Far from his home, without  
A guard to watch the plant so fondly rear'd,  
He fell—unused to scenes where lies the  
Tempter's snare, but soon perceiv'd his fall, and  
To evade that look which would recall the past,  
He fled, and on the ocean wave pursued  
His way. Her spirit follow'd; those silent  
Tears told us how much she lov'd. Undaunted  
Still, she yet implor'd the power that rules the  
World to be his guide. Her prayer was heard, and  
Now, amidst the splendours of an eastern clime,  
He wanders oft in contemplative mood,  
And every object has a power to draw  
That mind subdued, to concentrate his thoughts,  
And bring him back to the lov'd scenes of home.  
The billowy wave that bore the youth away,  
Oft from that sunny world returning, bears  
A precious volume, valued by all, but more  
Indeed by her who knows the breathings of  
A heart that feels a change, a change divine.

#### ARITHMETICAL ACCUMULATION OF MONEY.

Kellog, in his "Labour and other Capital," forcibly illustrates the accumulation of capital from various rates of interest. A late French writer says, that a sum of money, invested at 5 per cent., compound interest, is doubled in fourteen years and some months, quadrupled in less than thirty years, octupled in less than forty-five years, and so on. From this it would appear, that if a centime had been placed out at such interest, *pro bono publico*, in the year 800, when Charlemagne was crowned Emperor of the West, the 80,000,000 Frenchmen inhabiting the country at the revolution in 1830, would have enjoyed an income of 100,000,000,000 francs

Such arithmetically true and economically impossible results of old deposits, are made the groundwork of some works of fiction; but writers of another class are obliged to attend to the obvious fact, that in order to effect such an accumulation of capital, the business of the bankers and the wealth of the community would require the increase in the same proportion. Money does not breed spontaneously. The party to whom it is entrusted must use his money in such a way as to enable him not only to pay the interest, but to derive a profit from the transaction.—*Hunt's Merchant's Magazine*.

#### EXTINCT FAMILIES OF GREAT POETS.

It is impossible to contemplate the early death of Lady Lovelace, Byron's only child without reflecting sadly on the fates of other families of our greatest poets. Shakspeare and Milton each died without a son,—but both left daughters, and both names are now extinct. Shakspeare's was soon so. Addison had an only child,—a daughter, a girl of some five or six years at her father's death. She died unmarried, at the age of eighty or more. Farquhar left two girls dependent on the friendship of his friend Wilks the actor,—who stood nobly by them while he lived. They had a small pension from the Government; and having long outlived their father, and seen his reputation unalterably established, both died unmarried. The son and daughter of Coleridge both died childless. The two sons of Sir Walter Scott died without children,—one of two daughters died unmarried,—and the Scotts of Abbotsford and Waverly are now represented by the children of a daughter. How little could Scott foresee the sudden failure of male issue! The poet of the "Faerie Queene" lost a child, when very young, by fire—when the rebels burned his house in Ireland. Some of the poets had sons, and no daughters. Thus we read of Chaucer's son,—of Dryden's sons,—of the sons of Burns,—of Allan Ramsay's sons,—of Dr. Young's son,—of Campbell's son,—of Moore's son,—and of Shelley's son. Ben Jonson survived all his children. Some—and those among the greatest—died unmarried:—Butler, Cowley, Congreve, Otway, Prior, Pope, Gay, Thomson, Cowper, Akenside, Shenstone, Collins, Gray, Goldsmith. Mr. Rogers still lives—single. Some were unfortunate in their sons in a sadder way than death could make them.

#### THE REWARD OF DILIGENCE.

"Seest thou a man diligent in his business?" says Solomon, "he shall stand before kings." We have a striking illustration of this aphorism in the life of Dr. Franklin, who, quoting the sentence himself, adds, "This is true; I have stood in the presence of five kings, and once had the honour of dining with one." All in consequence of having been "diligent in business" from his earliest years. What a lesson is this for our youth, and for us all.

## Educational Intelligence.

### CANADA.

#### MONTHLY SUMMARY.

The Hon. Robert Baldwin has, in a published letter, declined the chancellorship of the Toronto University. . . . Considerable interest has been taken by the public in the filling up of the professor of history's chair in the University. The Senate has selected three names for the chair of English History and Literature, to be sent to the Government for the exercise of their discretion. They are those of Rev. Henry Esson, Mr. Robertson of the Normal School, and Dr. Andrew Wilson of Edinburgh. . . . The Senate has also sent to the Government the names of Messrs. Marshall, Herrick, and F. W. Cumberland, as candidates for the professorship of Civil Engineering. Mr. Marshall resides in England, and is the author of several works on subjects connected with his profession. Mr. Herrick is a relative of our fellow citizen Dr. Herrick. Mr. Cumberland is well known as one of our most able engineers, and as the architect of the Normal School, Post Office, and Court-House in this city. . . . The recent examination of Mrs. Corbet's girl's school, in this city, is highly spoken of by the *Examiner*. On the 21st December, says the *Patriot*, the examination of school teachers took place in the Court-House, Toronto. What sort of proficiency and ability their several examination papers might evince, we know not, but certainly a more intellectual and intelligent body of men is not often seen. . . . The *Dundas Warder*, of the 24th ult., contains an extended account of the examination of the public schools in that town. Of Mr. Thornton's the editor remarks, "The proceedings excited great interest, and appeared to give satisfaction to the numerous friends and parents of the children who attended." The examination of the pupils in Mr. Regan's school, particularly in classics, is spoken of as being "most creditable." In connection with an account of these examinations the editor makes several practical remarks, some of which we hope to give under the head of "Opinions of the Press." . . . In the *Norfolk Messenger*, of the 23d ult., we find an account of the examinations of the following schools in the town:—the grammar school under the charge of Mr. G. M. Evans, A.M., and the schools under the charge of Mr. Roach, Miss Douglass, Miss Walker, and colored school taught by Mr. Thompson. In conclusion the editor remarks, "We think Simcoe peculiarly fortunate in all its institutions established for the education of its youth, and we sincerely wish them prosperity and success." . . . The *Brantford Courier*, of the 24th ult., contains an interesting account of the examination of the central school of that town. The interest manifested in the examinations by several of the prominent gentlemen of the town is highly creditable and encouraging.

### NEW BRUNSWICK.

Upon a review of the state and prospects of popular intelligence in the Province of New Brunswick, the editor of the *New Brunswick Reporter* thus concludes his practical remarks:—"But as an agreeable accompaniment to the gloomy state of things which on our part elicits this plain and painful dealing, it gives us sincere pleasure to find that in several districts of this county the people are getting fully alive to the importance of education. In the Scotch settlement in the parish of Douglas, they have recently adopted the principle of voluntary taxation on behalf of schools; and in the lower part of the same parish, in the vicinity of Fredericton, they have not only adopted the voluntary system, but they have also established a useful library.—These are the districts which are to furnish our future legislators."

### BRITISH AND FOREIGN.

#### MONTHLY SUMMARY.

Her Majesty, in her late speech from the throne, at the opening of the British Parliament, remarked, in reference to the universities, "I have directed that the reports of the commissioners for inquiring into the system of education pursued at Oxford and Cambridge should be communicated to the governing bodies of those universities for their consideration; and I rely upon your readiness to remove any legal difficulties which may impede the desire of the universities at large, or of the several colleges, to introduce such amendments into their existing systems as they may deem to be more in accordance with the requirements of the present time. . . . Lord Eglinton has been elected Lord Rector (i.e. chancellor) of the university of Glasgow, by a majority of three out of the four nations, over the Duke of

Argyll. . . . The Earl of Eglinton, who was recently elected to the Lord Rectorship of Glasgow University, visited his constituents, and delivered an eloquent and a scholarlike inaugural address, which was repeatedly cheered. The great hall of the University was crowded with students and others, the galleries being reserved for ladies. The Countess of Eglinton was present. At the close of the inaugural oration, Principal Macfarlane intimated that his Lordship had presented two sums of £20 each, as prizes for two essays on subjects to be determined by the Senate of the University. . . . The vacant Professorship of English language and literature at the London University has been filled up by the appointment of Mr. David Masson, a gentleman well known in literary circles in London and Edinburgh. . . . The University of Cambridge has accepted the bequest of Dr. Lemann's herbarium, comprising 30,000 species of plants, and voted a sum of £150 for defraying the cost of arranging it. . . . William Brown, Esq., M.P., has lately endowed the upper school of the Liverpool Collegiate Institution with a free nomination, value £21, which will be called the "Brown Scholarship," and thrown open annually to competition like the "Egerton Scholarship" of the same value, given by Lord Ellesmere. The first election will take place at the close of the next half year. . . . The Earl of Newburgh by will bequeaths, after paying certain legacies to his farm steward, gardener and butler, and a few others, the whole of his personal property to Stoneyhurst College, selecting for his executor the Rev. T. Sing, Derby, to whom his lordship has left a handsome legacy. . . . In Manchester there are some 20,000 or 30,000 children of the labouring classes kept, without sufficient reason, from the advantages of the day-school, Manchester being thus, in an educational point of view, worse than Liverpool, York, Leeds, Hull and Birmingham.

WELLINGTON MEMORIAL.—With a view to erect a monument to the memory of the great Duke, to which all may contribute, it is proposed to erect and endow, by public subscription, a school or college, to bear the name of the Duke of Wellington, for the gratuitous, or nearly gratuitous, education of orphan children of indigent and meritorious officers of the army. Institutions, more or less national, already exist, in which the advantages of such an education can be obtained by the children of soldiers, of seamen, of naval officers, and of the clergy; but no such provision has been made in favour of officers of the army, a class of men peculiarly liable to casualties. The execution of the proposed plan, and the scale upon which it can be undertaken, must depend on the degree of support given by the country to the object contemplated. It may be assumed that each capital sum subscribed of £1,000, representing a permanent annuity of about £30, will provide for all time to come, exclusive of the expense of building, for the education of one child, and a considerable sum will be required for the erection of a building which shall be worthy of the proposed object. No payment will be required until the total sum subscribed shall amount to £100,000. Donations may be made payable by instalments spread over two, three, or four years. Her Majesty and his Royal Highness Prince Albert have been pleased to signify their approval of the project, and to place their names at the head of the subscription list, for the respective sums of £1,000 and £500. Among other subscriptions already announced, we find the Duke of Cambridge, £500; the Lord Chancellor, £100; Duke of Buccleuch, £500; Duke of Northumberland, £500; Duke of Cleveland, £500; Marquis of Salisbury, £500; Marquis of Londonderry, £500; Marquis of Exeter, £300; Viscount Hardinge, £200; Earl of Derby, £500; Earl of Wilton, £200.

EDUCATION IN WALES.—The *Carmarthen Journal* has an interesting article on the state of education in Wales. Much good has been done by the schools recently established throughout the principality. In the mining and slate districts of North Wales several new schools are in progress of erection, while those already established are in a state of great efficiency. Upwards of sixty masters, says the journal referred to, are at present in the Carmarvon Training Institution during the harvest meeting; and these instruct no less than 4,500 children in the diocese of Bangor and St. Asaph. At Trawsfnydd, in the heart of the Merionethshire hills, a school has been established, which, considering the scattered state of the population in these mountainous districts, is carried on with remarkable success; but, generally speaking, the physical obstacles to regular attendance at school are so great in the more isolated and hilly parts of the country, as well as in portions of Cardiganshire and Montgomeryshire, that but little good can be at present effected. In the more northern counties and in Anglesey the results are highly satisfactory. In South Wales the various educational institutes are, on the whole, in a very promising state—particularly in the rising town of Aberdare, in Glamorganshire, where great efforts are making to satisfy the scholastic wants of a rapidly increasing population. The chief point of interest in these Welsh schools is, the rapid progress of the English tongue—the talis-

man that is to put the Saxon and Cynric peasant on the same level of opportunity. Some very eccentric individuals are trying to persuade the Welshman that he and his sons are better off without English than they would be with it; but every line of railway into the hill districts helps to proclaim the absurdity of this notion. The Welsh-speaking peasant finds himself unable to travel, traffic, or talk as prosperously as his neighbour who has condescended to know the common tongue of the land of which his country forms a part.—*Athenæum*.

## UNITED STATES.

### MONTHLY SUMMARY.

A NEW POPULAR INSTITUTION, handsomely endowed with a posthumous legacy of \$300,000, left by the late Peter Cooper, of New York city, is in process of organization there, having for its title the "Union," and for its object the moral, mental and physical improvement of the youth of New York city and State, as well as the youth of the United States and of the world—a remarkably wide field of operations. A new building is erecting in New York for the "Union," which will cover the entire block bounded by Fourth Avenue, Astor Place, Third Avenue, and Seventh street, and will be six stories high. The sixth story will be occupied as an observatory, with choice astronomical and microscopic apparatus, and in the basement will be a hall 135 feet long and 84½ feet wide, intended mainly for lectures.

A large room will be set apart to be used by ladies in the discussion of natural and practical sciences, and \$560 annually is appropriated by the legates, to be bestowed, by a vote of the members of the Institute, on the female who shall be proved to have exhibited the truest heroism or the greatest self-sacrifice in the cause of suffering humanity. The building, when finished, is to be made over to the people as a free gift; and with a view to the uniting of all kindred institutions in this one, the halls of the edifice are to be opened, free of charge, for anniversaries, commencements, &c. It is stated that "to become a member and student of this institution, will require no other credentials than a good moral character," and these students are to make laws for their own government. . . . The President elect in company with a number of distinguished persons, visited the public schools of Boston, on the 18th ult. He addressed the scholars, and his remarks were calculated to make a lasting impression. The success and honor, he remarked, in his address to the boys, of an American citizen depends much on his own exertion. Every boy whether an American or of foreign origin, is here fitted to become a citizen, and so let him improve his opportunities that he may become a blessing and an honor in support of his country. He concluded by an earnest appeal to the boys to be industrious in the improvement of their present advantages. . . . The Rhode Island State Normal School was opened for the reception of candidates for teachers, in Providence, on the 1st inst. . . . Professor W. C. Larabee, was recently elected Superintendent of Public Instruction in the State of Indiana.

## Literary and Scientific Intelligence.

### MONTHLY SUMMARY.

The Commissioners of the late World's fair have purchased, with the surplus funds of the Exhibition, a plot of ground near Kensington, which they intend to present the nation as a site for a new Gallery of Art. . . . On Wednesday evening last, at the age of about 63 or 64, died the renowned geologist, Gideon Algernon Mantell, LL. D., F. R. S. . . . The Prussian order of merit, vacant by the death of Thomas Moore, has been conferred upon Major Rawlinson. . . . Thomas Carlyle is now at Berlin, collecting materials for his "History of Fredrick the Great." . . . Jewett & Co., the original publishers of Uncle Tom's Cabin state that one hundred and forty thousand copies (each two volumes) have been sold in this country since the twentieth of March last, and that the demand does not begin to slacken. The very last week brought one order from California for five thousand copies! This gives an average sale of about 20,000 a month, or about eight hundred copies per day for every week day since the date of its first publication. In addition to this constant drain upon those presses which work off the common edition, Mr. Jewett has also two other editions in progress; one in the German language, and one in a single octavo volume, magnificently illustrated with one hundred and fifty wood engravings of the very highest order of the art, from exquisite designs, by Billings, which is intended as a gift book for the

approaching holidays, and which will also contain a superb steel portrait of Mrs. Stowe. From some of the proofs of the letter-press and engravings which we have seen, we confidently announce this as in all respects one of the most splendid issues of the American press. . . . Mr. Maclear of Toronto, designs publishing a History of the American War of 1812, '13, & '14,—the first part of which will appear next month. . . . On the day following the Duke's funeral, the *Times* reached a sale of 70,000 copies, 15,000 more than had ever been printed of any one number of the paper before. Of the paper containing a notice of the Duke's death and the first part of his biography, nearly 53,000 copies were sold. The 70,000 copies were printed off in six hours and a quarter, by their wonderful machine. . . . Among the curiosities at the Berlin Library, are the Bible which Charles I. bore with him to the scaffold; Luther's original MS. translation of the Holy Scriptures; and the MS. of Goethe's "Faust." Luther's MS. shows many erasures, additions, and amendments, particularly in the Book of Job. . . . In the proceedings of the British Parliament, we find the following relating to "Industrial Universities," and Art, Manufactures, and the diffusion of Parliamentary papers:—"The Chancellor of the Exchequer, after stating the advantages which would result from the encouragement of art and science, moved a vote of £150,000 for the purchase of land for a national gallery at Kensington-gore, in aid of the funds appropriated thereto by the Royal Commission of the Exhibition. —Lord J. Russell approved of the scheme, and after some discussion the vote was agreed to. Mr. Tufnell moved for the appointment of a select committee to inquire into the expediency of distributing, gratuitously, a selection from the reports and returns, printed by order of the House, among the literary and scientific institutions and mechanics' institutes throughout the United Kingdom. He pointed out the advantages which would result from such distribution, and reminded the House that all he now desired was inquiry.—The Chancellor of the Exchequer agreed with Mr. Tufnell that there were few institutions which ought to be more encouraged than mechanics' institutes. As far as the motion went, he offered no opposition to it, and he hoped the labors of the committee would result in practical good, which would depend upon the working out of the details. The motion was agreed to. The following extract from a recent speech of Her Majesty, would seem to indicate that the noble spirit of her great predecessor, Elizabeth, seemed to animate the Queen to render her already augustan reign one of the most memorable in our annals, Her Majesty remarked, "The advancement of the fine arts and of practical science will be readily recognised by you as worthy of the attention of a great and enlightened nation. I have directed that a comprehensive scheme shall be laid before you, having in view the promotion of these objects toward which I invite your aid and coöperation." A Birmingham house has obtained one portion of the contract for making the copper coinage of the French Empire. Five thousand tons of copper will be required for the first issue of the metallic currency, nearly seven hundred tons of which will be used by the Birmingham firm; and the work will probably take four years to complete it. . . . Sir Charles Lyle is now lecturing on Geology and Physical Geography at the Lowell Institute, Boston. Mr. Thackeray is also lecturing in New York, upon the wits of Queen Anne's reign. . . . The French Government design very shortly to publish the complete literal, national, and diplomatical works of the Emperor Napoleon the First. The publication will extend to thirty-five volumes, and be embellished with a profusion of engravings, fac-similes, maps, &c. It will comprise all Napoleon's military and political reports, proclamations, speeches, observations, and a selection from his correspondence, the genealogy of his family, the "Memorial" of St. Helena, in a word, almost every scrap of writing that he wrote or caused to be written. . . . A terrible hurricane, which recently visited Athens, threw down one of the noble Columns of the Temple of Jupiter Olympus, and two columns of the Temple of Victory, near the Acropolis.

TEXT-BOOKS FOR TURKISH SCHOOLS.—The Turkish Government (says a correspondent writing from Berlin) is in the practice of supplying itself with elementary school books from Prussia, and its representative at this capital has standing orders to send to Constantinople every educational work of merit upon its appearance here. These orders are the consequence of the travels in the west of Europe accomplished a year or two ago by Kemel Effendi, director of the Turkish schools. A number of teachers with assistants were lately sent to Travnik, Czurnic, Beche, Jeni-bazar, Baniialuka, Basnad-Serai, Hersek, and Mostar, in order to organize and conduct elementary schools at those places. It is, however, to be regretted, these schools are only for the Turco-Arabic children, the Christian population deriving no benefit from them.

**DEATH OF ADA BYRON (LADY LOVELACE).**—Ada Byron never looked consciously into the face of her father. Whatever wholesome and ennobling joys his wayward "nature" might have found in watching the growth of his young daughter's mind, it was *not* reserved for the poet ever to know. How far the voice of the illustrious father did blend with the future visions of the orphan girl—how far the echoes of his harp and of his heart did "reach into her heart"—how far the token and the tone from her father's mould had part in her after musings—the world perhaps has no right to inquire. Still, many will find it pleasant to learn that, by her own desire, the remains of Ada Byron were to be laid yesterday where they will mingle with her "father's mould"—in Hucknall Church. At her father's death, Ada was little more than eight years old. She had small resemblance to her father. No one, we are told, would have recognized the Byron features—the finely chiselled chin or the expressive lips or eyes of the poet—in the daughter. Yet, at times, the Byron blood was visible in her look:—and those who saw her in 1835 on her marriage with Lord Lovelace (then Lord King) fancied they saw more traces of the poet's countenance in the bride than they remembered there at any other time. But dissimilarity of look was not the only dissimilarity between Byron and his daughter. Lady Lovelace cared little about poetry. Like her father's Donna Inez,—

Her favourite science was the mathematical.

Mr. Babbage is said to have conducted her studies at one time,—and Lady Lovelace is known to have translated from Italian into English a very elaborate Defence of the once celebrated Calculating Machine of her mathematical friend. Lady Lovelace has left three children,—two sons, and a daughter. Her mother is still alive,—to see, perhaps with a softened spirit, the shade of the father beside the early grave of his only child. Ada's looks in her later years—years of suffering, borne with gentle and womanly fortitude—have been happily caught by Mr. Henry Phillips,—whose father's pencil has preserved to us the best likeness of Ada's father.—*Athenæum*.

**TEXT BOOKS AND ILLUSTRATIONS OF ASTRONOMY.**

**FOR SALE** at the Depository in connection with the Education Office, Toronto,—TERMS STRICTLY CASH:—

**MATTISON'S ASTRONOMICAL MAPS**, or Celestial Charts, designed to illustrate the Mechanism of the Heavens—for the use of Schools, and Public Lectures. Size of Maps, 3 feet by 3½ feet. Mounted on Rollers, and coloured. Per set of 16, with Key, ..... £4 0 0  
 Ditto Mounted on Canvass, Rollers, and Colored, with Key,.... 5 0 0

*Titles of the Astronomical Maps.*

- No. 1. Ptolemaic Theory of the Structure of the Universe.
- " 2. Copernican Theory of the Solar System.
- " 3. Angular Measurement. Light and Heat of the Planets.
- " 4. Relative magnitude of the Sun and Planets.
- " 5. The Ecliptic, Zodiac, Signs, Nodes, Transits, &c.
- " 6. Zodiac, Equinoxes, Solstices, Longitude, Ascending Nodes, &c.
- " 7. The Earth's Orbit, Sun's Declination, Seasons, &c.
- " 8. Inclination of Axis to Orbits; and Seasons of the Planets.
- " 9. Conjunction, Opposition, Transits, Phases of Venus, &c.
- " 10. Telescopic Views of the Primary Planets.
- " 11. Saturn in his Orbit. Phases, Telescopic Views, &c.
- " 12. Phases and Telescopic Views of the Moon.
- " 13. Solar and Lunar Eclipses.
- " 14. The Philosophy of Tides.
- " 15. Views of Remarkable Comets.
- " 16. Clusters of Stars, Binary Systems, and Nebulae.

**MATTISON'S ELEMENTARY ASTRONOMY**, to accompany the foregoing, sixteen coloured Maps, illustrated by sixteen beautifully coloured Diagrams, reduced from the large Maps, and adapted to use either with or without the author's large Maps, pp. 243,..... £0 2 6

**SMITH'S ILLUSTRATED ASTRONOMY**, for the use of Schools, Atlas form, containing upwards of thirty beautifully executed quarto Diagrams and Engravings, with letter-press, Glossary, &c. pp. 71,..... 0 5 0

**SMITH'S ILLUSTRATED ASTRONOMY**. The above abridged, with Plates, 72,..... 0 1 10½

**BURRITT'S CELESTIAL ATLAS**, crown 4to, revised by Professor Mattison, containing eighteen double steel Plates, beautifully coloured, 20 by 14 inches, ..... 0 4 4½

**BURRITT'S GEOGRAPHY OF THE HEAVENS**, a Class Book of Astronomy, designed to accompany the Celestial Atlas, revised by Professor Mattison, illustrated by numerous Wood Engravings. pp. 351,..... 0 2 6

Both together,..... 0 6 3

**VARTY'S NEW ASTRONOMICAL DIAGRAMS**. A Series of four large Engravings, beautifully executed, representing and elucidating the various Phenomena of the Solar System, and that of our own Planet in particular. Size 4 feet 9 inches, by 3 feet 6 inches. The set in sheets, plain,..... 0 10 0  
 Ditto Mounted together, cloth and roller,..... 0 15 0  
 Ditto Coloured in Sheets, ..... 0 16 3  
 Ditto Mounted together, cloth and roller,..... 1 1 3

**PLATE I.**—7 Diagrams.—The Earth's annual and diurnal movement; the circles and diurnal movement of the Celestial Sphere.—Theory of the elliptical movement of the Earth and of Twilight.

**PLATE II.**—5 Diagrams.—Theory of the Seasons, with the Right and Parallel Spheres; and the Theory of Heat.

**PLATE III.**—8 Diagrams.—Movements and Phases of the Moon—its Diurnal Movement, Eclipses.—Periods of Revolution—inclination of its Orbit—and Tidal Theory.

**PLATE IV.**—13 Diagrams.—The Solar System.—Comparative Velocities and Magnitudes of Planets.—Transits and Comets.

The size of these Diagrams suits for *Class Instruction* or *Private Tuition*.

**DARTON'S SERIES OF FOUR ASTRONOMICAL DIAGRAMS**, each 21 by 17 inches. Printed on stout drawing paper, and full coloured, per set, (in sheets)..... £0 4 4½  
 Ditto the four at one view, mounted on canvass and rollers,.... 0 10 0

**PLATE 1.** The Seasons. [Moon.] **PLATE 3.** The Planetary System.  
 " 2. The Tides and Phases of the " 4. The Effects of Refraction.

**REYNOLD'S SERIES OF SIX ASTRONOMICAL DIAGRAMS**, each 25 by 20 inches, printed on stout drawing paper, and full coloured. The whole at one view, mounted on canvass and rollers,..... 0 18 9  
 Ditto Price per set, (in sheets)..... 0 10 0

The Diagrams are executed in a bold, clear style, adapted to convey at once to the mind a correct knowledge of this important Science. The series comprises illustrations of all the principal phenomena, as follows:—

- 1. The Planetary System.
- 2. The Earth and its Atmosphere.
- 3. The Seasons.
- 4. The Phases of the Moon.
- 5. The Theory of the Tides.
- 6. The Eclipses.

**REYNOLD'S SERIES OF TWELVE ASTRONOMICAL DIAGRAMS**. Beautifully executed on large quarto drawing boards, full coloured, and including several Transparencies, with descriptions. Price, per set, in a portfolio,..... 0 13 9

THE SERIES COMPRISES:

- 1. The Solar System.
- 2. The Seasons.
- 3. Eclipses and Tides.
- 4. View of the Moon.
- 5. Phases of the Moon.
- 6. The Earth and its Atmosphere.
- 7. The Sun and Solar Phenomena.
- 8. The Central Sun.
- 9. Chart of the Heavens. [Planets.]
- 10. Comparative Magnitude of the
- 11. Comets and Aerolites.
- 12. Diagram of Meteorology.

**OTHER SCHOOL REQUISITES.**

**PHYSICAL TRAINING** in Schools, in a series of Gymnastic Exercises, illustrated by upwards of 100 engravings of the different positions of the Gymnast, with an introductory (illustrated) sketch of the Athletic Games of Antiquity. 8vo. pamphlet, pp. 32. Price..... 0 0 7½

**THE GROWTH AND PROSPECTS OF CANADA**—Two Lectures by the Rev. A. Lillie—in a pamphlet, pp. 48..... 0 0 7½

Back Volumes of the *Journal of Education*, neatly stitched, can be supplied, *postage free*, at per volume,..... 0 5 0

\*\* **MAPS** on enamelled card, size 6 inches by 4, suitable for prizes, 20 in a set, 2s. 6d. per dozen or 3d. each. A large assortment of School Maps in sheets, and coloured. Size, 14 inches by 12; 20 inches by 16; 24 inches by 20, &c., at 6d., 7½, 1s., and 1s. 3d. each.—Prints, Object and Tablet Lessons, Atlases and Maps, in great variety. Selections carefully made, when requested to do so, by parties sending an order.

N. B.—Any of the foregoing can be sent by post, or at moderate rates by Expresses which run regularly between Toronto and London, U. C., and Toronto and Montreal, stopping at the intermediate towns on the route. Persons sending for articles are requested to enclose the amount required to pay for them, and also to state the mode of conveyance to be adopted. *Postage stamps received for small sums.*

The Stock of Maps, Charts, Prints, Diagrams, Illustrations, Apparatus, &c., is now very complete. See the Descriptive Catalogue published in the *Journal of Education* for January, April, September, and October, 1852, and in the hands of each local Superintendent and County Clerk.

**ADVERTISEMENTS**, not exceeding three lines, inserted in the *Journal of Education* for 1s. 3d. which may be remitted in *postage stamps*; exceeding three lines, one half-penny for every additional word.

**TERMS:** For a single copy of the *Journal of Education*, 5s. per annum; back vols. neatly stitched supplied on the same terms. All subscriptions to commence with the January number, and payment in advance must in all cases accompany the order. Single numbers, 7½d. each.

TORONTO: Printed by LOVELL & GIBSON, King Street.

All communications to be addressed to Mr. J. GEORGE HODGINS, Education Office, Toronto.