

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

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

JOURNAL OF

Province of



EDUCATION,

Ontario.

VOL. XXVII.

TORONTO, MAY, 1874.

No. 5.

CONTENTS OF THIS NUMBER.

	PAGE.
APPORTIONMENT OF LEGISLATIVE SCHOOL GRANT TO PUBLIC SCHOOLS IN ONTARIO, FOR 1874.—(1) Apportionment to Counties for 1874. (2) Apportionment to Cities, Towns and Villages for 1874	65
MINUTES, COUNCIL OF PUBLIC INSTRUCTION	69
I. PAPERS ON LITERARY AND SCIENTIFIC SUBJECTS.—(1) The New English Dictionary; (2) English Literature; (3) Pleasant Readings; (4) Changes in Language; (5) Books for Boys; (6) The Parting of Douglas and Marjorie	71
II. PAPERS ON EDUCATIONAL SUBJECTS. (1) Public School Life; (2) Convocation Season; (3) The Provincial School of Agriculture; (4) County of Hastings; (5) Sex in Education	73
III. MATHEMATICAL DEPARTMENT.—(1) Solution of Six Problems	75
IV. PAPERS ON SCIENCE AND NATURAL HISTORY.—(1) Marvels in Telegraph; (2) The Signal Service in 1873; (3) Spare the Insectivorous Birds; (4) How long Animals live	76
V. MONTHLY REPORT ON METEOROLOGY OF THE PROVINCE OF ONTARIO	77
VI. EDUCATIONAL INTELLIGENCE.—Knox College	78
VII. SHORT CRITICAL NOTICES OF BOOKS	80
VIII. DEPARTMENTAL NOTICES.—(1) Voters for Members of the Council of Public Instruction; (2) Notice; (3) Engravings of School House Plans; (4) Payment of Teachers' Cheques; (5) Correspondents of the Department; (6) Examination Papers	80

than last year, and in addition to the increased amount available on the basis of population, those Townships in which there are feeble schools and a sparse population have been specially considered in an additional apportionment from the poor School Grant.

Where Roman Catholic Separate Schools exist, the sum apportioned to the Municipality has been divided between the Public and Separate Schools therein, according to the average attendance of pupils of both classes of Schools during last year, as reported and certified by the Trustees.

The grants are, by law, payable on the 1st April, by the Hon. the Provincial Treasurer, on the certificate of the Chief Superintendent. These certificates will be issued on or before 30th June, in favour of those Municipalities which have sent in duly audited school accounts and Inspectors' reports to this office.

I trust that the liberality of your Council will be increased in proportion to the growing necessity and importance of providing for the sound and thorough education of all the youth of the land.

I am, Sir, your obedient servant,

E. RYERSON,

EDUCATION OFFICE,

Toronto, May, 1874.

APPORTIONMENT OF THE LEGISLATIVE SCHOOL GRANT TO PUBLIC SCHOOLS IN ONTARIO, FOR 1874.

Circular to the Clerk of each County, City, Town and Village Municipality in the Province of Ontario.

SIR,—I have the honour to transmit herewith a certified copy of the apportionment for the current year, of the Legislative School Grant to each City, Town, Village, and Township in Ontario.

The basis of apportionment to the several Municipalities for this year is the population as enumerated in the census of 1871. The total amount available for apportionment is \$20,000 more

Apportionment to Counties for 1874.

1. COUNTY OF GLENGARRY.		
Townships.	Apportionment.	
Charlottenburgh	\$883 00	
Do for Separate Schools	\$51 00	730 00
Kenyon		640 00
Lancaster	11 00	
Do for Separate Schools		509 00
Lochiel	203 00	
Do for Separate Schools		265 00
Total for County	\$3027 00	2762 00
2. COUNTY OF STORMONT.		
Cornwall	\$749 00	
Finch	403 00	
Osnabruck	854 00	
Roxborough	495 00	
Total	\$2501 00	

3. COUNTY OF DUNDAS.		
Townships.	Apportionment.	
Matilda	\$703 00	
Mountain	481 00	
Williamsburgh	697 00	
Winchester	603 00	
Total	\$2484 00	
4. COUNTY OF PRESCOTT.		
Alfred	\$250 00	
Caledonia	189 00	
Hawkesbury East	505 00	
Do for Separate Schools	175 00	
Do West	292 00	
Longueuil	271 00	
Plantagenet, North	408 00	
Do for Separate Schools	34 00	
Do South	232 00	
Total for County	\$2356 00	2147 00

5. COUNTY OF RUSSELL.		
Townships.	Apportionment.	
Cambridge	\$113 00	
Clarence	393 00	
Cumberland	431 00	
Russell	345 00	
Total	\$1282 00	
6. COUNTY OF CARLETON.		
Fitzroy	\$505 00	
Gloucester	706 00	
Goulbourn	477 00	
Gower, North	373 00	
Huntley	388 00	
March	253 00	
Marlborough	312 00	
Do for Separate Schools	21 00	
Nepean	707 00	
Do for Separate Schools	41 00	
Osgoode	541 00	
Do for Separate Schools	88 00	
Torbolton	130 00	
Total for Count	\$4542 00	4392 00

7. COUNTY OF GRENVILLE.

Townships.	Apportionment.
Augusta	\$762 00
Edwardsburgh	778 00
Do for Separate Schools	18 00
Gower, South	153 00
Oxford on Rideau	580 00
Do for Separate Schools	18 00
Wolford	376 00
	36 00
Total for County	\$2685 00

8. COUNTY OF LEEDS.

Bastard and Burgess, South	\$522 00
Crosby, North	314 00
Do South	303 00
Elizabethtown	793 00
Elmsley, South	183 00
Escott, Front	205 00
Kitley	423 00
Leeds and Lansdowne, Front	555 00
Do Rear	349 00
Yonge, Front	246 00
Yonge and Escott, Rear	248 00
Do for Separate Schools	16 00
	16 00
Total for County	\$4157 00

9. COUNTY OF LANARK.

Bathurst	\$475 00
Beckwith	290 00
Burgess, North	202 00
Dalhousie	269 00
Darling	118 00
Drummond	364 00
Elmsley, North	209 00
Lanark	335 00
Lavant	70 00
Montague	470 00
Pakenham	358 00
Ramsay	475 00
Sherbrooke, North	60 00
Do South	135 00
Total	\$3830 00

10. COUNTY OF RENFREW.

Admaston	\$293 00
Algona	110 00
Alice and Fraser	222 00
Do Separate Schools	23 00
Bagot and Blithfield	168 00
Brougham	91 00
Bromley	178 00
Do for Separate Schools	36 00
Brudenell, Raglan, Radcliffe and Lynedoch	298 00
Grattan	152 00
Do for Separate Schools	74 00
Griffith	103 00
Horton	187 00
McNab	421 00
Matawatchan	102 00
Pembroke	96 00
Petewawa	116 00
Rolph and Wylie, Buchanan and McKay	162 00
Ross	248 00
Sebastopol	130 00
Stafford	128 00
Westmeath	388 00
Wilberforce	288 00
	133 00
Total for County	\$4014 00

11. COUNTY OF FRONTENAC.

Barrie	\$105 00
Bedford	271 00
Clarendon and Miller	135 00
Hinchinbrooke	176 00
Howe Island	118 00
Kennebec	139 00
Kingston	566 00
Do for Separate Schools	39 00
Loughboro'	350 00
Olden	153 00
Oso	149 00
Palmerston and Canonto	124 00

11. COUNTY OF FRONTENAC.—Continued.

Townships.	Apportionment.
Pittsburgh	\$579 00
Portland	408 00
Storrington	440 00
Wolfe Island	311 00
Do for Separate Schools	109 00
	148 00
Total for County	\$4172 00

12. COUNTY OF ADDINGTON.

Amherst Island	\$175 00
Anglesea and Kaladar	182 00
Camden East	854 00
Denbigh, Abinger, Ashby, and Effingham	144 00
Ernestown	624 00
Sheffield	333 00
Do for Separate Schools	56 00
	56 00
Total for County	\$2368 00

13. COUNTY OF LENNOX.

Adolphustown	\$112 00
Fredericksburgh, North	254 00
Do South	221 00
Richmond	480 00
Do for Separate Schools	27 00
	27 00
Total for County	\$1094 00

14. COUNTY OF PRINCE EDWARD.

Ameliasburgh	\$487 00
Athol	257 00
Hallowell	524 00
Hillier	328 00
Marysburgh, South	316 00
Do North	265 00
Sophasburgh	399 00
Total	\$2576 00

15. COUNTY OF HASTINGS.

Carlow and Mayo	\$92 00
Elzevir and Grimsthorpe	229 00
Faraday and Dungannon	121 00
Hungerford	683 00
Huntingdon	421 00
McClure, Wicklow, Bangor, Herschel, and Monteagle	274 00
Madoc	513 00
Marmora and Lake	251 00
Rawdon	544 00
Sidney	776 00
Thurlow	765 00
Tudor, Wollaston, Limerick, and Cashel	293 00
Tyendingaga	990 00
Total	\$5952 00

16. COUNTY OF NORTHUMBERLAND.

Alnwick	\$201 00
Brighton	532 00
Do for Separate Schools	18 00
Cramahe	564 00
Haldimand	844 00
Do for Separate Schools	19 00
Hamilton	844 00
Monaghan, South	169 00
Murray	537 00
Percy	515 00
Do for Separate Schools	57 00
Seymour	622 00
Do for Separate Schools	10 00
	104 00
Total	\$4932 00

17. COUNTY OF DURHAM.

Cartwright	\$371 00
Cavan	702 00
Clarke	845 00
Darlington	875 00
Hope	749 00
Manvers	607 00
Total	\$4149 00

18. COUNTY OF PETERBOROUGH.

Townships.	Apportionment.
Asphodel	\$326 00
Do for Separate Schools	48 00
Belmont and Methuen	440 00
Burleigh, Anstruther, Monmouth, Cardiff, and Chandos	255 00
Douro	394 00
Dummer	287 00
Dysart, Dudley, Harcourt, Guilford, Harburn and Burton	249 00
Ennismore	165 00
Galway and Cavendish	171 00
Harvey	108 00
Minden	178 00
Monaghan, North	226 00
Otonabee	572 00
Do for Separate Schools	17 00
Smith	506 00
Snowdon and Glanorgan	165 00
Stanhope and Sherborne	151 00
	65 00
Total for County	\$4258 00

19. COUNTY OF VICTORIA.

Anson, Hindon, and Lutterworth	\$201 00
Bexley	127 00
Carden and Dalton	220 00
Draper, Ryde, and Oakley	210 00
Eldon	450 00
Emily	439 00
Fenelon	582 00
Laxton, Digby, and Longford	188 00
Macaulay	202 00
Mariposa	791 00
Ops	494 00
Somerville	170 00
Stephenson	150 00
Verulam	397 00
Total	\$4621 00

20. COUNTY OF ONTARIO.

Brock	\$763 00
Mara and Rama	531 00
Pickering	1088 00
Reach	734 00
Scott	409 00
Scugog Island	130 00
Thorah	290 00
Uxbridge	494 00
Whitby, East	503 00
Do West	475 00
Total	\$5417 00

21. COUNTY OF YORK.

Etobicoke	\$427 00
Do for Separate Schools	13 00
Georgina	293 00
Gwillimbury, East	580 00
Do North	340 00
King	1104 00
Markham	1017 00
Scarborough	681 00
Vaughan	1072 00
Whitchurch	740 00
York	1284 00
Do for Separate Schools	192 00
	205 00
Total for County	\$7743 00

22. COUNTY OF PEEL.

Albion	\$598 00
Caledon	706 00
Chinguacousy	904 00
Gore of Toronto	211 00
Do for Separate Schools	19 00
Toronto	881 00
	19 00
Total for County	\$3319 00

23. COUNTY OF SIMCOE.

Adjala	\$425 00
Essa	623 00
Flos	259 00
Gwillimbury, West	448 00
Innisfil	788 00
Do for Separate Schools	20 00
Medonte	375 00
Mono	587 00
Monck	173 00
Morrison	182 00
Muskoka	166 00

23. COUNTY OF SIMCOE.—Continued.

Townships.	Apportionment.
Mulmur	517 00
Nottawasaga	782 00
Orrilla and Matchedash	223 00
Do for Separate Schools	56 00
Oro	644 00
Sunnidale	294 00
Tay	240 00
Tiny	474 00
Tecumseth	697 00
Tossorontio	232 00
Vespra	284 00
Do for Separate Schools	22 00
	98 00 8413 00
Total for County	\$8511 00

24. COUNTY OF HALTON.

Esquesing	\$784 00
Nassagaweya	437 00
Nelson	558 00
Trafalgar	741 00
Total	\$2520 00

25. COUNTY OF WENTWORTH.

Ancaster	\$738 00
Barton	423 00
Beverley	856 00
Binbrooke	287 00
Flamorough, East	562 00
Do for Separate Schools	12 00
Do West	470 00
Do for Separate Schools	33 00
Glanford	300 00
Saltfleet	410 00
	45 00 4046 00
Total for County	\$4091 00

26. COUNTY OF BRANT.

Brantford	\$1011 00
Burford	818 00
Dumfries, South	512 00
Oakland	164 00
Onondaga	284 00
Total	\$2789 00

27. COUNTY OF LINCOLN.

Caistor	\$319 00
Clinton	410 00
Gainsborough	445 00
Grantham	304 00
Do for Separate Schools	58 00
Grimsby	461 00
Louth	279 00
Niagara	309 00
	58 00 2527 00
Total for County	\$2585 00

28. COUNTY OF WELLAND.

Bertie	\$433 00
Crowland	194 00
Humberstone	365 00
Pelham	371 00
Stamford	427 00
Do for Separate Schools	15 00
Thorold	369 00
Wainfleet	394 00
Willoughby	184 00
	15 00 2737 00
Total for County	\$2732 00

29. COUNTY OF HALDIMAND.

Canborough	\$178 00
Cayuga, North	297 00
Do South	143 00
Dunn	155 00
Moulton and Sherbrooke	310 00
Oneida	449 00
Do for Separate Schools	20 00
Rainham	305 00
Seneca	484 00
Walpole	797 00
Do for Separate Schools	11 00
	31 00 3118 00
Total for County	\$3149 00

30. COUNTY OF NORFOLK.

Townships.	Apportionment.
Charlotteville	\$604 00
Houghton	312 00
Middleton	481 00
Townsend	807 00
Walsingham	786 00
Windham	680 00
Do for Separate Schools	28 00
Woodhouse	570 00
	28 00 4234 00
Total for County	\$4262 00

31. COUNTY OF OXFORD.

Blandford	\$296 00
Blenheim	944 00
Dereham	625 00
Nissouri, East	541 00
Norwich, North	490 00
Do South	476 00
Oxford, North	274 00
Do East	385 00
Do West	414 00
Zorra, East	681 00
Do West	501 00
Total	\$5627 00

32. COUNTY OF WATERLOO.

Dumfries, North	\$580 00
Waterloo	1157 00
Wellesley	738 00
Do for Separate Schools	105 00
Wilnot	791 00
Do for Separate Schools	66 00
Woolwich	822 00
	171 00 4088 00
Total for County	\$4259 00

33. COUNTY OF WELLINGTON.

Amaranth	\$287 00
Arthur	429 00
Do for Separate Schools	101 00
Eramosa	554 00
Erin	786 00
Garafraxa, East	381 00
Do West	461 00
Guelph	436 00
Luther	261 00
Maryborough	652 00
Minto	447 00
Nichol	377 00
Do for Separate Schools	27 00
Peel	760 00
Do for Separate Schools	85 00
Pilkington	292 00
Do for Separate Schools	49 00
Puslinch	667 00
	262 00 6790 00
Total for County	\$7052 00

34. COUNTY OF GREY.

Artemesia	\$493 00
Do for Separate Schools	21 00
Bentinck	602 00
Collingwood	527 00
Derby	289 00
Egremont	581 00
Euphrasia	428 00
Glenelg	486 00
Do for Separate Schools	111 00
Holland	453 00
Do for Separate Schools	26 00
Keppel and Brooke	321 00
Melancthon	306 00
Normanby	786 00
Do for Separate Schools	34 00
Osprey	447 00
Proton	291 00
Do for Separate School	31 00
Sarawak	151 00
St. Vincent	734 00
Sullivan	457 00
Do for Separate Schools	8 00
Sydenham	554 00
Do for Separate Schools	38 00
	269 00 7906 00
Total for County	\$8175 00

35. COUNTY OF PERTH.

Townships.	Apportionment.
Blanchard	\$576 00
Downie	511 00
Do for Separate Schools	43 00
Easthope, North	442 00
Do South	337 00
Ellice	403 00
Do for Separate School	23 00
Elma	533 00
Fullarton	429 00
Hibbert	498 00
Logan	473 00
Mornington	543 00
Do for Separate Schools	18 00
Wallace	528 00
	84 00 5273 00
Total for County	\$5357 00

36. COUNTY OF HURON.

Ashfield	\$574 00
Colborne	358 00
Goderich	533 00
Grey	514 00
Hay	571 00
Howick	799 00
Hullett	521 00
Do for Separate School	22 00
McKillop	562 00
Morris	522 00
Stanley	562 00
Stephen	452 00
Do for Separate School	89 00
Tuckersmith	545 00
Turnberry	295 00
Usborne	522 00
Wawanosh, East	391 00
Do West	382 00
Do for Separate School	23 00
	134 00 8103 00
Total for County	\$8237 00

37. COUNTY OF BRUCE.

Albemarle and Eastnor	\$205 00
Amabel	266 00
Arran	558 00
Brant	726 00
Bruce	535 00
Carrick	698 00
Do for Separate School	40 00
Culross	566 00
Elderslie	361 00
Greenock	440 00
Huron	602 00
Kincardine	604 00
Kinloss	506 00
Saugeen	240 00
	40 00 6327 00
Total for County	\$6367 00

38. COUNTY OF MIDDLESEX.

Adelaide	\$429 00
Biddulph	433 00
Do for Separate School	48 00
Caradoc	747 00
Delaware	374 00
Dorchester, North	607 00
Ekfrid	471 00
Lobo	512 00
London	1621 00
McGillivray	675 00
Do for Separate School	12 00
Metcalfe	361 00
Mosa	355 00
Nissouri, West	525 00
Westminster	911 00
Do for Separate School	31 00
Williams, East	421 00
Do West	235 00
Do for Separate School	78 00
	169 00 8677 00
Total for County	\$8846 00

39. COUNTY OF ELGIN.

Aldbrough	\$517 00
Bayham	722 00
Dorchester, South	305 00
Dunwich	550 00

39. COUNTY OF ELGIN.—Continued.

Townships.	Apportionment.
Malahide.....	\$688 00
Southwold.....	820 00
Yarmouth.....	821 00
Total.....	\$4423 00

40. COUNTY OF KENT.

Townships.	Apportionment.
Camden.....	\$431 00
Chatham.....	643 00
Dover.....	489 00
Harwich.....	851 00
Do for Separate School.....	30 00
Howard.....	666 00
Orford.....	459 00
Raleigh.....	500 00
Do for Separate School.....	102 00
Romney.....	105 00
Tilbury, East.....	272 00
Zone.....	160 00
Total for County.....	\$4708 00

41. COUNTY OF LAMBTON.

Townships.	Apportionment.
Bosanquet.....	\$645 00
Brooke.....	374 00
Dawn.....	165 00
Enniskillen.....	225 00
Euphemia.....	352 00
Moore.....	557 00
Do for Separate School.....	33 00
Plympton.....	572 00
Sarnia.....	507 00
Sombra.....	441 00
Do for Separate School.....	61 00
Warwick.....	490 00
Total for County.....	\$4422 00

42. COUNTY OF ESSEX.

Townships.	Apportionment.
Anderdon.....	219 00
Do for Separate School.....	60 00
Colchester.....	\$431 00
Gosfield.....	442 00
Total for County.....	\$4708 00

42. COUNTY OF ESSEX.—Continued.

Townships.	Apportionment.
Maidstone.....	\$303 00
Malden.....	230 00
Mersea.....	479 00
Rochester.....	317 00
Sandwich, East.....	553 00
Do West.....	329 00
Tilbury, West.....	353 00
Pelee Island.....	60 00
Total for County.....	\$3716 00

DISTRICTS.

Nipissing.....	\$264 00
Muskoka.....	278 00
Parry Sound.....	224 00
Manitoulin Island.....	297 00
Algoma.....	739 00

Apportionment to Cities, Towns, and Villages for 1874.

CITIES.	Public Schools.	R. C. Separate Schools.	Total.
	\$ cts.	\$ cts.	\$ cts.
Hamilton.....	3204 00	737 00	3941 00
Kingston.....	1230 00	600 00	1830 00
London.....	2047 00	287 00	2334 00
Ottawa.....	1476 00	1702 00	3178 00
Toronto.....	5880 00	2394 00	8274 00
Total.....	13837 00	5720 00	19557 00

TOWNS.	Public Schools.	R. C. Separate Schools.	Total.
	\$ cts.	\$ cts.	\$ cts.
Amherstburgh..	130 00	155 00	285 00
Barrie.....	374 00	128 00	502 00
Belleville.....	771 00	306 00	1077 00
Belin.....	358 00	46 00	404 00
Bothwell.....	147 00	147 00	294 00
Bownaaville.....	448 00	448 00	896 00
Brampton.....	306 00	306 00	612 00
Brantford.....	1036 00	159 00	1195 00
Brockville.....	565 00	187 00	752 00
Chatham.....	705 00	161 00	866 00
Clifton.....	167 00	70 00	237 00
Cobourg.....	594 00	84 00	678 00
Collingwood.....	417 00	109 00	526 00
Cornwall.....	192 00	144 00	336 00
Dundas.....	318 00	144 00	462 00
Durham.....	147 00	147 00	294 00
Galt.....	564 00	564 00	1128 00
Goderich.....	583 00	583 00	1166 00
Guelph.....	807 00	207 00	1014 00
Ingersoll.....	518 00	75 00	593 00
Lindsay.....	359 00	238 00	597 00
Milton.....	134 00	134 00	268 00
Mitchell.....	266 00	266 00	532 00
Napanee.....	437 00	437 00	874 00
Niagara.....	178 00	58 00	236 00
Oakville.....	171 00	77 00	248 00
Orangeville.....	215 00	215 00	430 00
Owen Sound.....	497 00	497 00	994 00
Paris.....	316 00	73 00	389 00
Perth.....	277 00	74 00	351 00
Peterborough.....	504 00	178 00	682 00
Petrola.....	392 00	392 00	784 00
Pictou.....	290 00	58 00	348 00
Port Hope.....	756 00	756 00	1512 00
Prescott.....	249 00	137 00	386 00
Sandwich.....	172 00	172 00	344 00
Sarnia.....	338 00	94 00	432 00
St. Catharines..	746 00	414 00	1160 00
St. Mary's.....	461 00	461 00	922 00
St. Thomas.....	262 00	62 00	324 00
Simcoe.....	274 00	274 00	548 00
Stratford.....	501 00	135 00	636 00
Strathroy.....	476 00	476 00	952 00
Tilsonburgh.....	236 00	236 00	472 00
Walkerton.....	157 00	157 00	314 00
Whitby.....	366 00	37 00	403 00
Windsor.....	627 00	627 00	1254 00
Woodstock.....	587 00	587 00	1174 00
Total.....	19391 00	3466 00	22857 00

VILLAGES.

	\$ cts.	\$ cts.	\$ cts.
Acton.....	123 00		123 00
Almonte.....	307 00		307 00
Arnprior.....	253 00		253 00
Arthur.....	73 00	42 00	115 00
Ashburnham.....	177 90		177 90
Aurora.....	167 00		167 00
Aylmer.....	132 00		132 00
Bath.....	89 00		89 00
Bolton.....	118 00		118 00
Bradford.....	167 00		167 00
Brighton.....	200 00		200 00
Brussels.....	115 00		115 00
Burlington.....	123 00		123 00
Caledonia.....	184 00		184 00
Carleton Place..	178 00		178 00
Cayuga.....	118 00		118 00
Chippawa.....	136 00		136 00
Clifford.....	122 00		122 00
Clinton.....	297 00		297 00
Colborne.....	120 00		120 00
Dresden.....	149 00		149 00
Dumville.....	215 00		215 00
Elora.....	177 00	44 00	221 00
Embroy.....	72 00		72 00
Exeter.....	148 00		148 00
Fergus.....	216 00	29 00	245 00
Forest.....	162 00		162 00
Fort Erie.....	123 00		123 00
Gananoque.....	300 00		300 00
Garden Island..	113 00		113 00
Georgetown.....	190 00		190 00
Harriston.....	147 00		147 00
Hastings.....	134 00		134 00
Hawkesbury.....	246 00		246 00
Hespeler.....	117 00		117 00
Holland Land'g	94 00		94 00
Iroquois.....	115 00		115 00
Kemptville.....	127 00		127 00
Kincardine.....	281 00		281 00
Lanark.....	110 00		110 00
Listowel.....	146 00		146 00
Lucan.....	139 00		139 00
Markham.....	126 00		126 00
Merrickville..	137 00		137 00
Merriton.....	218 00		218 00
Millpoint.....	126 00		126 00
Morrisburgh.....	171 00		171 00
Mount Forest..	190 00	12 00	202 00
Newburgh.....	122 00		122 00
Newbury.....	116 00		116 00
Newcastle.....	163 00		163 00
New Edinburgh	88 00		88 00
New Hamburg..	148 00		148 00
Newmarket.....	218 00	42 00	260 00
Oilsprings.....	81 00		81 00
Omeme.....	119 00		119 00
Orillia.....	195 00		195 00
Oshawa.....	355 00	115 00	470 00
Paisley.....	185 00		185 00
Parkhill.....	161 00	31 00	192 00
Pembroke.....	120 00	100 00	220 00
Portsmouth.....	179 00	71 00	250 00
Port Colborne..	98 00	46 00	144 00
Port Dalhousie	98 00	62 00	160 00
Port Elgin.....	140 00		140 00
Port Perry.....	260 00		260 00
Preston.....	185 00	24 00	209 00
Renfrew.....	90 00	40 00	130 00
Richmond.....	71 00		71 00
Richmond Hill.	115 00		115 00

VILLAGES.

	\$ cts.	\$ cts.	\$ cts.
Seaforth.....	200 00		200 00
Smith's Falls..	170 00		170 00
Southampton...	129 00		129 00
Stayner.....	208 00		208 00
Stirling.....	115 00		115 00
Streetsville....	90 00		90 00
Thamesville....	116 00		116 00
Thorold.....	172 00	68 00	240 00
Trenton.....	265 00		265 00
Uxbridge.....	219 00		219 00
Vienna.....	87 00		87 00
Wardsville....	80 00		80 00
Waterloo.....	235 00		235 00
Watford.....	133 00		133 00
Welland.....	166 00		166 00
Wellington.....	78 00		78 00
Wingham.....	178 00		178 00
Wyoming.....	116 00		116 00
Yorkville.....	321 00		321 00
Total.....	14073 00	726 00	14799 00

Summary of Apportionment to Counties, 1874.

COUNTIES.	Public Schools.	R. C. Separate Schools.	Total.
	\$ cts.	\$ cts.	\$ cts.
1 Glengarry.....	2762 00	265 00	3027 00
2 Stormont.....	2501 00		2501 00
3 Dundas.....	2484 00		2484 00
4 Prescott.....	2147 00	209 00	2356 00
5 Russell.....	1282 00		1282 00
6 Carleton.....	4392 00	150 00	4542 00
7 Grenville.....	2649 00	36 00	2685 00
8 Leeds.....	4141 00	16 00	4157 00
9 Lanark.....	3830 00		3830 00
10 Renfrew.....	3881 00	133 00	4014 00
11 Frontenac..	4024 00	148 00	4172 00
12 Addington..	2312 00	56 00	2368 00
13 Lennox.....	1067 00	27 00	1094 00
14 PrinceEdwd	2576 00		2576 00
15 Hastings.....	5952 00		5952 00
16 Northum-berland	4828 00	104 00	4932 00
17 Durham.....	4149 00		4149 00
18 Peterboro'..	4193 00	65 00	4258 00
19 Victoria.....	4621 00		4621 00
20 Ontario.....	5417 00		5417 00
21 York.....	7538 00	205 00	7743 00
22 Peel.....	3300 00	19 00	3319 00
23 Simcoe.....	8413 00	98 00	8511 00
24 Halton.....	2520 00		2520 00
25 Wentworth	4046 00	45 00	4091 00
26 Brant.....	2789 00		2789 00
27 Lincoln.....	2527 00	58 00	2585 00
28 Welland.....	2737 00	15 00	2752 00
29 Haldimand..	3118 00	31 00	3149 00
30 Norfolk.....	4234 00	28 00	4262 00
31 Oxford.....	5627 00		5627 00
32 Waterloo....	4088 00	171 00	4259 00
33 Wellington.	6790 00	262 00	7052 00
34 Grey.....	7906 00	269 00	8175 00

COUNTIES.	\$ cts.	\$ cts.	\$ cts.	Districts of—	\$ cts.	\$ cts.	\$ cts.	GRAND TOTALS.			
								\$ cts.	\$ cts.	\$ cts.	
35 Perth	5273 00	84 00	5357 00	Nipissing.....	264 00	264 00	264 00	Counties and			
36 Huron	8103 00	134 00	8237 00	Muskoka.....	278 00	278 00	278 00	Districts	182006 00	3123 00	185129 00
37 Bruce	6327 00	40 00	6367 00	Parry Sound.	224 00	224 00	224 00	Cities	13837 00	5720 00	19557 00
38 Middlesex...	8677 00	169 00	8846 00	Manitoulin I.	297 00	297 00	297 00	Towns	19391 00	3466 00	22857 00
39 Elgin	4423 00	4423 00	Algoma	739 00	739 00	739 00	Villages	14073 00	726 00	14799 00
40 Kent	4576 00	132 00	4708 00								
41 Lambton ..	4328 00	94 00	4422 00								
42 Essex	3656 00	60 00	3716 00	Total	182003 00	3126 00	185129 00	Grand Total	229307 00	13035 00	242342 00

MINUTES, COUNCIL OF PUBLIC INSTRUCTION.

Report of the proceedings at a meeting of the Council of Public Instruction held May 1st., 1874. Published as authorized by the 24 Section of the Act to amend and consolidate the law relating to the Council, &c.

No. 368.

COUNCIL ROOM.

EDUCATION OFFICE, May 1st., 1874.

The Council met, pursuant to notice, at three o'clock, P.M., the Very Reverend H. J. Grasett, B.D., in the Chair.

Present: The Chairman.

The Chief Superintendent of Education.

The Venerable T. B. Fuller, D.D.

William McCabe, Esq., LL.B.

Hammell M. Deroche, Esq., M.A., M.P.P.

The minutes of the preceding meeting were read and approved.

The following communications were laid before the Council:—

2653 From Mr. A. P. Knight, M.A., Hawkesbury, respecting the revision of the Agricultural Chemistry.

2923 From the Asst. Provincial Secretary, transmitting the order approving of certain High School regulations.

3850 From Messrs. Adam, Stevenson & Co., respecting the effect of the copyright regulations, &c.

5495 From the same, requesting a reply, and making inquiries as to book lists.

4811 From the Chairman of the Committee of Examiners, recommending the establishment of a grade C, as well as A and B for First Class Certificates.

5055 From Mr. W. Warwick, submitting specimens of binding for the second book.

5151 From Mr. S. Graham, respecting the teaching of Phonetic Shorthand.

5909 From the Chairman of the Committee of Examiners, respecting the time for High School Entrance Examinations.

6418 From the Inspector of the Town of Brockville, on the same subject.

5455 From the Inspector of the County of Durham, on the same subject.

6102 and 6413 From the Chairman of the Committee of Examiners, respecting the preparation of the examination papers.

6220 From the Principal of the Normal School, respecting the Examination of the Students.

6476 From the Secretary of the Senate of Queen's University, Kingston, reporting the election of the Very Rev. Principal Snodgrass, D.D., as the Representative of Queen's College in the Council of Public Instruction.

The Chief Superintendent suggested that in consequence of the change in the law, the Council should confine itself to necessary and routine business until the new members were elected, which was concurred in.

The members present then proceeded to draw lots as to the dates on which they should respectively retire, as required by the new law, with the following result:—

The Very Reverend H. J. Grasett, to retire August, 1875.

The Venerable T. B. Fuller, to retire August, 1876.

William McCabe, Esquire, LL.B., to retire August, 1875.

Hammell M. Deroche, Esquire, M.A., to retire August, 1876.

The Clerk was then instructed to draw for the absent members, in succession, which resulted as follows:—

The Reverend J. Jennings, D.D., to retire August, 1875.

The Honourable W. McMaster, to retire August, 1875.

The Most Reverend J. J. Lynch, D.D., to retire August, 1876.

James MacLennan, Esquire, Q.C., to retire August, 1876.

Ordered, That a grade C, as well as grades A and B of First Class Provincial Certificates be authorized according to the recommendation of the Central Committee.

Ordered, That the next Entrance Examinations of pupils for admission to the High Schools and Collegiate Institutes, take place on the 29th and 30th days of June next, according to the recommendation of the High School Inspectors.

Ordered, That the Chief Superintendent be requested to instruct the Central Committee for the examination of Public School Teachers, to prepare the examination papers for the admission of pupils to the High Schools and Collegiate Institutes according to the standard of admission prescribed by the regulations approved by the Lieutenant-Governor in Council.

Ordered, That the Chief Superintendent be requested to instruct the same Committee to prepare the examination papers for the examination and classification of students at the Normal School, and for the examination and classification of Public School teachers, according to the legally prescribed programmes.

Ordered, That the examination for Public School Teachers' certificates of the second and third classes commence on Monday, 20th July next, and for first class on Monday, 27th July.

The Chief Superintendent was requested to inform the publishers and others who may inquire or may have inquired respecting the proposed action of the Council as to the approval of books, that such action will be deferred till the election of the new members of the Council.

The following applications for pensions from the Superannuated Teachers' Fund were approved, viz:—

5150 William Armstrong, of Euphemia, for 45 years service.		
271 Joseph Dean Booth, of Bradford,	21	do
3954 Michael Brennan, of Collingwood,	16	do
5597 Henry Beuglet, of Rochester,	21	do
5449 Patrick Donovan, of Burritt's Rapids,	28	do
896 John Fraser, of Weston,	16	do
5149 John Isbister, of Morris,	15½	do
5447 Barbara A. Irvine, of Kingston,	22	do
3956 Robert Martin, of Richmond,	26	do
2493 Archibald McSween, of Pickering,	20	do
2904 Daniel McRae, of Kingston,	14	do
5325 Timothy J. Newman, of Flam-		
borough West,	23	do
1572 Robert Power, of Huntley,	23½	do
2549 James Quin, of Ottawa,	13	do
3486 James Scott, of Delaware,	14	do
8648 James Simpson, of Osgoode,	10	do

The time of service claimed by Mr. McRae is 24, and by Mr. Quin 22 years. The Chief Superintendent was authorized to allow the additional time, on the production of the proper evidence, in both these cases.

The following applications were also approved, but upon condition that the Honorable Attorney-General gives a favourable opinion as to the eligibility of the candidates under the legal requirement as to subscriptions due, viz:—

10802 Bernard Boyd, of South Douro, for 18 years service.		
8795 Francis Reynolds, of Cobourg,	14	do
6018 Donald Peter McDonald, of St.		
Catharines (claims 44, proved 40)	40	do

The applications of (11736) C. F. Russell, and (5246) James Elliott were deferred for further inquiry, and the application of (13545) Timothy McQueen was not approved.

Adjourned.

(Signed) H. J. GRASETT,
Chairman.

Certified, ALEX. MARLING,
Clerk of the Council.

Education Office, Toronto, May 1st, 1874.

Report of the proceedings at a meeting of the Council of Public Instruction, held May 8th, 1874 :—

No. 369. COUNCIL ROOM, EDUCATION OFFICE,
TORONTO, May 8th, 1874.

The Council met, pursuant to notice, at three o'clock, p.m.—Hammell M. Deroche, Esq., M.A., M.P.P., in the chair.

Present—The Chairman *pro tempore*.
The Chief Superintendent of Education.
The Venerable T. B. Fuller, D.D.
William McCabe, Esquire, LL.B.

1. The following communications were laid before the Council :—

6637 From the Registrar of University College, Toronto, reporting the election of the Rev. John McCaul, LL.D., as the Representative of University College in the Council of Public Instruction.

6785 From the Master of the Boys' Model School, resigning his position, in consequence of his appointment as Inspector of Public Schools in Toronto.

6751 From the Principal of the Normal School, reporting that His Excellency the Governor-General had granted a silver medal for the Normal School, and one for each of the Model Schools.

6752 From the same, making a recommendation as to filling the vacancy in the Model School.

6773 From Messrs. Adam, Stevenson & Co., referring to previous communications.

2. *Ordered*—That the resignation of Mr. Hughes be accepted, to take effect, as he requests, on 15th May. That Mr. Scott be promoted to the Mastership of the Model School, Mr. McPhedrain to be first assistant, Mr. Davison to be second assistant.

3. *Ordered*—That in accepting the resignation of Mr. Hughes, this Council has pleasure in expressing its high sense of the ability, diligence and success with which Mr. Hughes has discharged his duties as a teacher in the Boys' Model School during his seven years' connexion with it, and the desire of this Council for his future success and happiness in the important office of City Inspector of Public Schools.

4. The following notices of motion were given :—

(1.) Mr. McCabe will move at the next meeting :—That applications for the vacancy in the mastership of the 4th Division in the Boys' Model School, from teachers holding first class Normal School certificates, be solicited by advertisement in the daily *Mail* and *Globe*, for such time as the Chief Superintendent may think necessary.

(2.) Mr. McCabe will move at the next meeting :—That a regulation be adopted by the Council, making but one session of the Normal School each year, and fixing its close at such time that the examination of students of that institution, and other candidates for certificates of qualification as teachers shall take place at the same time.

5. The following applications for pensions from the Superannuated Teachers' Fund were approved :—

949 Thomas Chaplin, of Campbellford, for 16 years' service, conditional upon an annual certificate of continued disability.

3641 James Cooke, of Portland, for 16 years' service, on the same condition.

6543 Mrs. Frances Johnson, of Brockville, for 19 years' service, on the same condition.

5727 Robert Rooney, [of Arthur, for 23 years' service, on the same condition.

788 John Gibbs, of Cannington, for 18 years' service.

4086 Robert Kerr, of Vaughan, for 28 years' service.

262 Charles Macartney, of Flamboro' West, for 15 years' service.

6601 Samuel James Trew, of Caledon, for 24 years' service.

Adjourned.

Certified (Signed) HAMMELL M. DEROCHE,
ALEX. MARLING, Chairman,
Clerk of the Council. *Pro tempore*.

Education Office,
Toronto, May 8th, 1874.

Report of the proceedings at a meeting of the Council of Public Instruction, held on Thursday, May 21st, 1874.

No. 370. COUNCIL ROOM,
EDUCATION OFFICE, May 21st, 1874.

The Council met, pursuant to notice, at three o'clock P.M., the Very Reverend H. J. Grasset, B.D., in the chair.

Present :—The Chairman.
The Chief Superintendent of Education.
William McCabe, Esquire, LL.B.
Hammell M. Deroche, Esq., M.A., M.P.P.

1. It was moved by Mr. McCabe, seconded by Mr. Deroche :—That whereas there is on the public mind an impression, more or less general, that Dr. J. H. Sangster, at one time Principal of the Normal School, has taken part in Teachers' Institutes throughout the Province, under the authority of this Council; therefore Resolved, that this Council has in no way whatever sanctioned, authorized, or recognised for any purpose or in any capacity whatever, the connection of said Dr. Sangster with such Institutes or with any other public educational work, since he ceased to be Principal of the Normal School in July, 1871, nor had this Council any legal right to so authorize him.

Moved in amendment by the Reverend the Chief Superintendent and seconded by the Very Reverend H. J. Grasset, B.D.:—That certain statements having appeared in the newspapers as to this Council having authorized the holding of Teachers' Institutes,

Ordered, That as the law does not authorize this Council to appoint any Teachers' Institute, much less to authorize any person to hold such Institute, this Council has never taken upon itself to appoint such an Institute or any person to conduct it.

Amendment carried, the Chairman giving his second vote.

2. The following communications were laid before the Council.

6996. From the Principal of the Normal School, respecting appointments in the Model School.

7194. From the same, respecting the duration of the sessions of the Normal School, and transmitting the opinions of (7195) the Mathematical Master, and (7196) of the Science Master.

7156. From the Chairman of the Central Committee, transmitting the opinion of the High School Inspectors respecting the time of holding entrance examinations.

6474. From the Inspector of the County of Stormont, as to a modification of the regulations respecting third Class Certificates.

7157. From the Chairman of the Central Committee, giving the opinion of his Committee on the point raised in the letter of the Inspector of Stormont.

7129. From Messrs. James Campbell & Son, being a list of books with prices of the same, for approval.

7095. From the Reverend the Provost of Trinity College, reporting the election of the Reverend Professor Ambery as the Representative of Trinity College in the Council of Public Instruction.

14072. From the Inspector of South Hastings, respecting certain proceedings of Mr. W. J. Byam.

6265. From the same, on the same subject.

5721. From the Principal of the Normal School, on the same subject.

Also the circular and forms issued to Publishers, respecting books for approval.

3. The Chief Superintendent reported that in the opinion of the Honorable the Attorney-General the literal terms of the law were adverse to the admission to pensions from the Superannuated Teachers' Fund, of those candidates whose cases were reserved for his opinion.

4. Respecting the letter of the Inspector of Stormont, the opinion of the Council was, that the present regulation as to third Class Certificates does not require amendment.

5. The Chief Superintendent proposed the following minute, the consideration of which was deferred :—

That Head Masters of High Schools and Graduates in Arts of any University in the British Dominions, if successful teachers, as attested to the satisfaction of the Central Committee appointed by the Council of Public Instruction, may be admitted to the examination for first Class Certificates without previously obtaining third and second Class Certificates.

6. The motion of which notice was given, respecting the Normal School session, was left over by request of the Chief Superintendent.

7. *Ordered*, That any lists and books for libraries and prizes, submitted by publishers and others, be referred to Messrs. McCabe, Deroche and MacLennan, such committee to report thereon from time to time.

8. *Ordered*, That applications for the vacancy in the fourth division in the Boys' Model School, from teachers holding First Class Normal School Certificates, be solicited by advertisement in the daily *Mail* and *Globe*, for such time as the Chief Superintendent may think necessary.

9. The Chief Superintendent was authorized to intimate that the Spring Term of the High Schools shall this year close on Friday, 26th June, in order to facilitate the holding of the entrance examinations on the 29th and 30th of that month.

Adjourned.

(Signed) H. J. GRASSETT,
Chairman.

(Certified.) ALEX. MARLING,
Clerk of the Council.

Education Office,
Toronto, May 21st, 1874.

I. Papers on Literary and Scientific Subjects.

THE NEW ENGLISH DICTIONARY.

An elaborate article in the *Quarterly Review*, after giving an historical sketch of dictionary-making for the English language, and particularly describing the dictionaries by Bailey, Johnson, Webster, and Worcester, proceeds to give an account of the labours of the Philological Society in England, as follows:

"It is clear from this account of existing English dictionaries, that the Philological Society had good cause to set about constructing a new one. At the outset, however, their scheme was not devised to remedy the special defaults which we have as yet dwelt on. Their first intention, as their published papers record, was to complete the dictionary rather than to reform it. In 1837, they determined to form a collection of words hitherto unregistered in the dictionaries of Johnson and Richardson, with a view of publishing a supplementary volume which might be used with these. The idea was taken up energetically, and a committee was formed to carry it out, till the suggestion arose that the scheme should be extended to the compilation of a new complete dictionary more scientific than any existing. Accordingly the Philological Society, at its meeting on January 7, 1858, resolved that instead of a supplement to the standard English dictionaries, a new dictionary of the English Language should be prepared under the authority of the society. Two committees were appointed: one, literary and historical, consisting of the then Dean of Westminster, (Dr. Trench) Mr. F. J. Furnival, and Mr. Herbert Coleridge; the other, etymological, consisting of Mr. Hensleigh Wedgwood and Professor Malden. Arrangements were made for the publication of the work in parts, but fifteen years have since passed, and though a really vast work has been done in collecting and editing materials, no part has reached the final stage of completeness. What the future of the undertaking may be, not even those most devoted to it can predict with much certainty, but meanwhile we have in print the Prospectus and the Rules, with some subsidiary vocabularies, etc., and by the aid of these a brief account may be given of the scheme, and its merits judged of. The dictionary is to consist of three parts, viz., (i.) a "Main Dictionary"; (ii.) a vocabulary of technical and scientific terms and proper names of persons and places; and (iii.) an etymological appendix. The "Main Dictionary," and the supplement succeeding it, are to find room for all English words. "According to our view (say the framers of the proposal) the first requirement of every lexicon is that it should contain every word occurring in the literature of the language it professes to illustrate." It is not merely what may be called ordinary English that comes within the range of the programme. From the rules, it appears that the Main Dictionary is to admit obsolete, provincial, local, and slang words, where vouched for by some reliable authority. The treatment of these words, ordinary and extraordinary, is to be as thorough as the range is wide. The etymology is not only to give the proximate origin of each word, but also to exhibit several of its affinities in the related languages, always including that language (such as Sanskrit, etc.) which seems to present the radical element in its oldest form. The etymological appendix is to contain general philological information as to roots, affixes, etc., necessary to complete the special items of the vocabularies. The task of tracing the development of successive senses of words is fully faced by the committee, who lay it down thus: "In the treatment of individual words the historical principle will be fully adopted; that is to say, we shall endeavour to show more clearly and fully than has hitherto been done, or even attempted,

the development of the sense, or various senses, of each word from its etymology and from each other, so as to bring into clear light the common thread which unites all together." Moreover, they design to produce evidence of their linguistic growth, change, and decay, by a system of appropriate quotations, showing the epoch of the appearance of each word in the language, and the limits of its various phases of meaning.

"To carry out this immense scheme, an elaborate co-operative system has been arranged. English is, for convenience, divided into three periods; the first from Henry III's time (1250) to the printing of an English New Testament (1526); the second extending to Milton's death, (1674); the third, thence to our own time. All English words are to be classed in the periods they belong to; and, as aids in fixing their appearance and duration, standard lists are adopted or drawn up for the guidance of a volunteer army of readers, who undertake to overrun the field of English literature, amassing the linguistic material out of which a number of sub-editors have to select the items fit for actual use, upon which, by the laborious and critical processes of arrangement, definition, and derivation, the editing of the dictionary at large is to be at last accomplished. Directions for the use of readers willing to contribute materials may be had from the society; and it is unnecessary to enter into these details here. To judge from Mr. Furnival's last reports of the position of the undertaking, which give the state of sub-editing, letter by letter, it appears that this work, preparatory to the actual elaboration of the dictionary, may be now half or three quarters done, but is almost at a stand. The great question which arises is not so much When will the great work be done? as Will it ever be done? in our time at least. An effort as great, or greater than that which started the New English Dictionary, fourteen years ago, will be needed to complete it fourteen years hence."—*Conn. Sch. J.*

ENGLISH LITERATURE.

Perhaps no trite sentence of any author has been honoured with such frequent quotation as that of Bacon, "Reading makes a full man." Its truthfulness is so plain, it will not be disputed. The instances when extensive reading has added a wealth and power to life are too numerous to be gainsayed. Perhaps Macaulay was the most notable reader of modern times. At least it is most clearly seen in him. Pick up his history or essays, and you are overwhelmed with his wonderful acquaintance with literature, ancient and modern, secular and religious. So early did this develop itself in the youthful Macaulay, that he was familiarly known by his school-mates as "Macaulay the Omniscient." The wealth of literature to expand the mind, and to give abundant resource for conversation, illustration and address, is remarkably displayed in the "immortal historian."

But few persons have, however, the time for extensive reading. Business bustle, ever impulsive, ever encroaching, claims so many hours that the jaded mind refuses to turn with any fondness to reading. It becomes imperative then that whatever is read must be of an entertaining and cheering type. Indiscriminate reading will soon end in discouragement with literature generally. To try to read everything is madness. Floods of periodicals and works are poured upon society, and but few of them enrich the mind like the Nile the plains of Egypt. Selection is necessary. Culling a few of the finest works will be found infinitely more satisfying than an indiscriminate perusal of many.

Frederick Robinson says: "I never knew but one or two fast readers, and readers of many books, whose knowledge was worth anything." Mrs. Martineau says of herself that she is the slowest of readers, sometimes only a page an hour. But then what she reads she makes her own. It seems, then, that it is not the quantity so much as the quality which is so necessary to be thought of. Under this conviction we advise a close and continuous acquaintance with the best portions of English literature. There should be the founding of a habit of turning to the highest works, and very soon those light, unreal and worthless books of which our libraries and brains are unfortunately too full, will be laid aside as unworthy of the golden moments and noble energies of the mind.

No man is complete whose memory is not familiar with the history of his native land. HISTORY is an indispensable subject of study. To know the tendencies of our own age we must be able to contrast them with those of former centuries. Any lack here is a serious one indeed. It happens that some historical writings are so laborious that perusing them awakens weariness. They are mere "pigeonholes of facts." There is no enthusiasm imparted from the author to the reader. But the histories by Macaulay, and the voluminous works of Froude, seem to inspire one with such cheerfulness that the reader forgets himself in the theme.

POETRY is eagerly prized and appreciated by many present-day readers. However prosaic our life generally may be, there is still

a corner left somewhere for some poetical sentiments. But here it is necessary to select. To read even Tennyson, Longfellow, Whittier or Browning page by page is tiring in the extreme. To criticise our poets may be a dangerous pursuit. But it is clear that while poetical authors have given us much which is sublime, not a little is to be found in their works which would be simply considered rubbish were it not that a great man had written it. It is wise to take only the best pieces, where the whole soul of the poet shines forth, and master these.

The greatest care should be observed in selecting works of Fiction. The mass of volumes in this class is of a debilitating and destructive character. The mind is enslaved by passion or untruth. False ideas of life are awakened. The mind is familiarized with crime and follies until all the moral stamina is gone. The French nation is a terrible instance of the demoralizing effects of an overheated and distorted fictitious literature. How morally fragrant are the works of Walter Scott, or George Eliot, or Louise Alcott, and a host of others which might be named! A man arises from the witness of the deeds of their imaginary heroes, with a lordly ambition and stimulated faith. And this class alone can assist the up-raising of the morals and practices of society.

It is impossible in a brief article to more than throw out a hint or two on this widely extended topic. Our readers must be left to work out the suggestion at their leisure. But we are sure our opinions will find at least some consideration at the hands of those who find recreation in reading. Saxon literature transmitting Saxon ideas is the best pabulum for Saxon minds. German literature has its attractions for many minds. But the works of Germany are not the best food for those who think and speak in English. French and Spanish works must very largely be avoided, as they transmit the most damaging views of personal, social, domestic life. But in our own language there may be found noble works which will enlarge our sentiment, broaden our charity, stimulate our poetry, and strengthen our morals.

A word more. Our schools and colleges have not sufficiently regarded this important branch of study. Though the many works of good repute cannot be all perused at school, a taste may be developed and strengthened for literary studies which will confer a positive delight on after and older years. "As the twig is bent, the tree's inclined" is a proverbial truth. If from our school and college halls a love for literature be borne away by the retiring student, we doubt not that the fire thus kindled will be fanned in still higher flames of research. Many firesides are positively indigent of such recreating pursuits; what wonder then that many of the members drift away into scenes and practices the most questionable. Let a good and judicious study of the literature of our mother-tongue be engendered at our schools, and continued at our houses, and our business, and home-life cannot but be enriched thereby.—*London Advertiser.*

PLEASANT READING.

The *English Rock* newspaper says:—"The late Bishop Wilberforce, during the forty years of his active ecclesiastical life, collected all the pamphlets that came in his way, relating to the controversies of the busy days in which he lived. These were always arranged from year to year, and carefully indexed by his own hand; and they went on accumulating until at the time of his death, they mustered a formidable phalanx of no fewer than 175 thick, 8vo. volumes, all of which had inscribed on their blue morocco backs, the particular date to which they belonged. Not only is the series quite invaluable to the controversial student, but its interest is frequently enhanced by the circumstance, that a large proportion of the pamphlets, being presentation copies, carry the autograph of the writers. At the Bishop's sale there was a spirited competition for this lot, which was eventually knocked down to Mr. Sotheran, of the Strand, from whom it has been purchased (for £100) by the National Club. We heartily congratulate the Club on the acquisition of so unique a prize, which, we believe, will occupy a berth in the committee-room, where the very important library presented by the late Robert McGhee, is already established."

CHANGES IN LANGUAGE.

In one of Mr. Motley's scholarly addresses he mourned over the fact that a language was never perfect until it was dead. If King Alfred should come back to earth, for instance, he would probably not understand a word spoken in his kingdom. While a language is growing there is no accounting for the grotesque forms which words will take. Pocket-handkerchief, for instance, is an absurd mass of syllables for a little thing in common use. It began growing centuries ago. Kerchief is *couvre-chef*, a head covering; then it began to be carried in the hand, for obvious purposes, and at last was put in the pocket, gathering cumbrous additions to its name all the way. How much more sensible to call it as the French do, a *mouchoir*,

or wiper? The only objection to this would be the temptation afforded to low punsters, who would warn you whenever you put your mouchoir in your breast-pocket not to take a wiper to your bosom.

BOOKS FOR BOYS.

To the boy the printing-press has become the shaping influence of our time. Father and mother may be voted unsympathetic and slow. Comrades may show themselves arrogant and mean. Sisters may not be above temptation in the way of small tempers, tale-bearing, or fibs. But the friends in the story-books are all that the most exacting boy could desire. If they have weaknesses these are not visited on him, and he forgives them all sins but tediousness. He thinks their thoughts, speaks with their speech, sees with their eyes, adopts their conscience. Lesson-books are alien, to be respected or despised as the case may be. But story-books are bone of his bone and flesh of his flesh.

Yet not one conscientious Christian parent in ten troubles himself to see what books and papers his boy reads for pastime. Thus a free market opens to enormous supplies of profitless or poison literature. Not to speak of those prurient publications which, at least, do not lie open on news-stands or heap the shelves of reputable book-stores, there is a class of boys' books and papers hardly less menacing to morals and a thousand times more widely read.

Good Jacob Abbott with his model "Rollo," his amiable "Marco Paulo," and his preternatural "Jonas;" dear old Gaffer Day with his innocent "Sandford and Merton;" sweet Mary Howitt with her whole delightful library of stories; clever Miss Edgeworth, and, alas! even great Sir Walter; these and their gentle kindred who delighted the young world twenty years ago are shoved aside by bustling and coarse "Oliver Optic," "Walter Aimwell," Pierce Egan, and the evil brood of authors of "Boys of America," and "The Boys' Own." We have doubted, indeed, whether "Robinson Crusoe" and "Settlers in Canada" might not be out of print, since we heard a bright lad of sixteen declare that "Plutarch's Lives" was too slow to interest a boy of spirit, though that is the book to which the great Napoleon, who is thought to have had a reasonable taste for adventure, gave his school-boy days and nights.

According to this modern literature there is an experience called "life" wholly distinct from and incompatible with that simple existence which the home roof covers. Indeed, the youth whose noble aspiration impels him toward this joy of eventful living must begin by running away from home. Previously he will have shown the mark of his high calling by bullying his teachers and superiors, breaking up the school, perhaps, deceiving father and mother, and telling what white lies may be necessary to his large ends. Having thrown off the tyranny of loving-kindness he enters on the liberty of the street, the fore-castle, the frontier, the mines, or the forge. His companions are low-lived criminals. His ambition is the vulgar genteel. Everybody about him commits more than the seven deadly sins, but he remains a Bayard of spotlessness, delightfully reckless, picturesquely rollicking, always ready, one against ten, to floor the most dangerous "enemies," always loftily superior to circumstances, and, in the end, marrying the rich girl and setting up as a patron of the virtues; the inevitable moral being that the wilder the boy and the coarser his surroundings, the more admirable and successful will be the man.

The whole philosophy of even the best of these productions is false, their style is tawdry, their language ungrammatical, their atmosphere mephitic, and yet they are interesting. As the Greek youth heard the legends of Homer and was kindled to emulation of the triumphant gods and heroes, so the American boy pores over the "Adventures of Jack Harkaway," or the "Starry Flag Series," and daily sets up newer and shabbier images in his motley Pantheon. As a lad thinketh in his heart, so is he. The reader of these epics coarsens, his speech is garnished with cheap slang, the pitch he handles slowly defiles him. When Fifth Avenue and the Five Points hang delighted over the same literature, admire the same heroes, form themselves, more or less consciously, upon the same models, it is not because the Five Points have heard anything about sweetness and light.

In the distorted mirror of these prints every moral quality looks awry. Thrift is stinginess. Obedience is mean-spiritedness. Extravagance is open-handedness. Bluster and brag are manliness. Patriotism is the doctrine of Manifest Destiny. In the late Cuban excitement those students of "The Boys' Own" or "Oliver Optic" were few, who did not long to "lick Spain," declaring that a Spaniard was "too mean to live," that Cuba was rightfully ours, and that peace was disgraceful. Neither the sufferings of the patriots nor the cruelties of the volunteers were an appreciable factor in the sum of their conclusions. Not one boy in fifty took the pains to know the facts before fulminating this bloody ultimatum. It was the brute thirst for conquest, stimulated by a false notion of the glory of victory, which their reading had taught them.—*Christian Union.*

THE PARTING OF DOUGLAS AND MARMION.

Altered to dialogue form by James Hughes, Esq., late head master of the Boys' Model School, Toronto.

CHARACTERS :

DOUGLAS—A haughty Scotch peer.

MARMION—An English Knight, sent by Henry VIII, of England, to James the IV, of Scotland, with friendly overtures which were rejected. He has been, at the command of the Scottish King, the unwelcome guest of Douglas, and is about to recross the Border on the morning previous to the battle of Flodden Field.

MARMION :

At length the welcome hour has come,
When I may seek my English home ;
I've given my message and received
Reply at which I'm deeply grieved.
I came desiring peace, but find
That nought can change your monarch's
mind.

DOUGLAS :

My monarch but performs a part
Approved by every Scottish heart,
While true to friends whose worth he knows,
He proudly scorns to treat with foes,
Who, though they hate him, basely bow
And humbly seek his friendship now ;
We shun the love which springs from fear,
And spurn the aim which brought you here,
I'm not surprised that you lament,
Because my king would not consent ;
No doubt 'twould suit you well, if he
Were willing your ally to be,
While you, rejoicing at the chance,
Were warring with our friends in France.

MARMION :

Thy base suspicions show a mind
Well schooled to thoughts of darker kind ;
I'll treat them with deserved disdain,
For England's honour knows no stain.
Full soon, proud Douglas, you'll be taught
That not from fear King Henry sought
To stop the war you have begun,
And weld our nations into one ;
For, though your nation nobly chose
The time when we have other foes,
You'll find us ready even now
To teach your haughty king to bow.

Too well we know the Scottish heart
To let our bravest troops depart ;
So, while one army conquers France,
We've kept for you our strongest lance.

DOUGLAS :

Bold braggart, ere to-morrow's light
Has yielded to succeeding night,
The test will come, so words are vain
To settle what will then be plain.
I'll yield no praise to deeds undone,
Nor boast of battles till they're won ;
Nor can I deem his valor great,
Who in his foeman's halls can prate
Of glory, while his country's needs
Require not words, but noble deeds.
Away ! prepare you for the fight ;
Be worthy of the name of knight.

MARMION :

I go, and parting gives no pain,
" But though perhaps I might complain,
Of cold respect to stranger guest,
Sent hither at your king's request,
I go in friendship from your land
So noble earl receive my hand."

DOUGLAS :

" My manors, halls, and bowers, shall still
Be open at my sovereign's will.
To each one whom he sends, how'er
Unmeet to be the owner's peer.
My castles are my king's alone
From turret to foundation stone—
The hand of Douglas is his own ;
And never shall in friendship grasp
The hand of such as Marmion clasp."

MARMION :

" If 'twere not that a hoary beard"
Proclaimed a right to be revered,
The hand of Marmion had not spared
To cleave the head of him who dared
His honor to deride.
" And, first, I tell thee, haughty peer,
He who does England's message here,
Although the meanest in her state,
May well, proud Angus, be thy mate ;—
And, Douglas, more I tell thee here,
Even in thy pitch of pride,
Here, in thy hold, thy vassals near,
(Nay never look upon your lord,
And lay your hand upon your sword)
I tell thee thou'rt defied !

And if thou said'st I am not peer
To any Lord in Scotland here,
Lowland or Highland, far or near,
Lord Angus, thou hast lied !"

DOUGLAS :

" And darest thou then
To beard the lion in his den,
The Douglas in his hall ?
And hopest thou hence unscathed to go ?
No, by Saint Bryde of Bothwell, no !
Up drawbridge, grooms ! what, warder, ho !
Let the portcullis fall."

Marmion hastily retires from the platform and reappearing in another part of the room (outside the castle wall), hurls defiance to Douglas.

MARMION :

Ha, treacherous Scot ! although thy band
In haste obeyed thy base command,
My noble steed, in danger tried
Their promptest efforts has defied,
And now, I dare thee to maintain
Thine honor free from foulest stain
In combat on the open plain.
And know, proud Earl, that English
Knight
Seeks no advantage in the fight.
So, lest thy age should form a plea
For silence, send the bravest three,
Who dare deary my king or me,
And Marmion's hand shall make them feel
For England's honor by her steel.

DOUGLAS :

" To horse ! to horse ! give chase ! give chase
Shall Douglas bear this deep disgrace ?
But hold ! my king has given command,
Beneath the royal seal and hand,
To give safe conduct and a guide ;
This I must do whate'er betide.
A plague upon my fiery mood !
Old age ne'er cools the Douglas blood !
I thought to slay him where he stood.
But, though my hate I cannot hide,
I warrant him a warrior tried,
Bold can he speak and bravely ride.
A royal messenger he came,
Though most unworthy of the name,"
So call him back, a truce proclaim—
No stain must mar the Douglas fame—
And haste provide a trusty guide
With him to Surrey's camp to ride.

II. Papers on Educational Subjects.

PUBLIC SCHOOL LIFE.

A University man and an English Public School man are of a peculiar type. We do not say they are the highest breed of humanity, but they are a breed peculiar to themselves, with singular, cork-like faculty of floating, with other corks, to the top of whatever social gathering-bucket they happen to be in. The Eton boy is equally at home, charmingly unconscious of self, and yet with a deep inner self-respect that no vulgarity of others can impair or self-assertion of others reach, whether he be cooking rats with his fellow-middies' mess over the gun-room lamp, or dining with the King of Ashantee ; whether he be mate to " a horse thief and a cockney" in the gold diggings, or preaching a University or Whitehall sermon. He has his faults ; unless a religious re-action has set in, he is heartily selfish ; he draws that distinction between " ladies" and " women," between " girls" and " gals," which Charles Lamb so nobly scouted and tenderly reproved. His self-possession, too, can easily be called impudence by his enemies. But he belongs to the class which has been lately and is now moulding history and doing seven-eighths of all that is worth or not worth doing in the world. There is no better training school in the world for the race of life, so called, than the

English Public School, and hardly a wise father in England but sends his son, undoubtingly and as a matter of acknowledged advantage, to one. How few would sacrifice the ineradicable memories of Public School life, with its prefects and its roll-calls, its whole school days and half-holidays, for a baronetcy or even for a bishopric.

The faults and abuses of English Public Schools are trifling. What are their advantages ? Firstly, the boys are trusted and so are at once trustworthy. When asked who did anything they give in their names as a matter of course and take their punishment like men. Again, from the first they are brought into contact with thorough gentlemen and undeniable scholars as masters. The masters are all University men. Hence they learn to obey, or rather never to dream of disobedience, and to yield respect where respect is due gladly and happily, and to the sound growth of their own self-respect. Omitting much, remember how in all their games, the main part, after all, and the very salt of Public School life, they learn to forget themselves in a " cause," to recklessly sacrifice themselves to the success of their party. Self-denial, culminating in self-forgetfulness, is the highest virtue in men. How are these schools to be transplanted to this country ? State aid will not produce them. They depend on private munificence here as elsewhere. A respectable quota of English real estate and existing capital is of originally private bequest in trust for English Public School education. Too many English Public Schools are restricted to the rich.

That is not the case with their anti-types in Canada. At Radley the prime expense for a boy is \$625 per annum. The cost of a boy at our Canadian "English Schools," is much less. Large private donations and endowments are necessary to enable boys to have the untold advantages of first-class masters and handsome buildings and surroundings for this sum. It is the duty of all who can to contribute to perpetuate in Canada the schools which faithfully reproduce the advantages and merits of English Public Schools, and which yet, being free from the trammels of long-standing abuses and an almost irresponsible administration, are weeded of their imperfections and their faults.—*Montreal Gazette.*

CONVOCAATION SEASON.

The first blush of spring is a fitting season for our University to send forth its noble company of *débutants* on life's stage, each perhaps animated by hopes and desires peculiar to himself, but all alike sustained and nerved for the contest by the fervour of glorious youth. They leave their academic halls with eloquent words of counsel and admonition yet sounding in their ears, and while they revere and strive to follow the advice of their late instructors, they can hardly feel themselves left without a rudder in the stream of life. Year by year addresses of marked ability are delivered at these University gatherings, and though the unusual pressure upon our space prevented us from doing more than hint at the subject of them on the last occasion, there has been no falling off in the care and talent which they indicate, or the interest with which they have been received. We are not surprised at this, for the theme is of supreme importance, and even those who have passed the first stages during which such advice is most useful, must give their attention while the way which is thought best is pointed out to those who are pressing in their footsteps. The first statesmen of the day have not disdained the theme. Mr. Disraeli at Glasgow and Lord Derby at Liverpool have given to the British youth their matured thoughts upon it; and hardly any one is so low as to think he cannot add a little to the common fund of knowledge. Notwithstanding the multitude of counsellors, however, it is possible that we have not found out much which was not known at some time to our ancestors, though the precepts may have been forgotten or unnoticed. We cannot dispute the noble examples of individual culture which abounded even in the remotest times, but one thing we may claim, that a greater number of persons are in our time afforded the opportunity of drinking at the divine fountain of knowledge. We are not disposed to value this privilege lightly, for the success of educational work must be judged not by isolated examples of high culture, but by the diffusion of knowledge among the multitude; let the lives of the masses be lifted above the slow, unreasoning existence of undeveloped intelligence, and a great step has been taken beyond what ancient times can show us.

Those of us who listen to or read addresses on university education and mental culture, may imagine there is considerable diversity of opinion among those engaged in the work. It is true that there are differences of opinion, and it would be a great mistake to suppose that we have yet discovered an absolutely perfect system of education. But educationists are at least pretty well agreed in the rejection of certain injudicious systems which had their day. There is no longer hesitation, for instance, in disapproving the exclusively classical curriculum. Nor are there many intelligent admirers at the present day of that devotion to the midnight oil which took not into account the physical well-being of the student. It may be hoped that amidst all the impressive warnings respecting the importance of physical health, warnings which were recently reiterated by Lord Derby, there will be fewer victims to the *régime* lamented by Horace Mann, who said that in college he was taught all about the motions of the planets as carefully as though they would have been in danger of getting off the track if he had not known their orbits; but about his own organization, and the conditions indispensable to the healthy functions of his own body, he was left in profound ignorance. There have been pedagogues who considered all time wasted when the printed page was not before the pupil's eyes, but we trust their days are past; and while the subjects of study are more numerous than our fathers ever dreamed of, it will not be forgotten that it is essential to success in life that the mind should have a suitable temple in which to reign, and that mere book-lore without bodily energy, is of little profit to its possessor.

One thing which is apt to bewilder the student of the present day is the great variety of the subjects which by his various instructors are pressed upon his attention as of equal importance, and each of which seems to him to demand a lifetime for its mastery. It is undoubtedly becoming more and more important for those who aim to excel in any pursuit, to fix early their choice; after they have done so firmly and irrevocably, there is not much danger of extending their studies too far. But if the student wanders listlessly,

undecided and hesitating as to his future, there is danger that the keen memory and intellectual freshness of youth may grow dull before the time arrives when the actual preparation for life's work is entered upon. "Le mieux est l'ennemi du bien," says the French proverb. By seeking uneasily and anxiously after what shall approve itself to his judgment as absolutely the best work for him, the student will often be put to serious disadvantage in the battle of life. "The man who succeeds above his fellows," said the late Lord Lytton, "is the one who early in life clearly discerns his object, and towards that object habitually directs his powers."

At the same time we are far from urging our young friends to make pre-eminence in some particular pursuit the engrossing care of their life. Some one has lamented that so many excellent men in the United States have been spoiled by the hope of one day filling the Presidential Chair. So, too, we have no doubt that men capable of doing very useful work have been led to waste their lives by the hope of handing down a name to posterity. It must be admitted that specialists are not always the most complete of mortals. Few of them approach closely to the "superior man" of Confucian philosophy, who "while there is anything he has not studied, or while in what he has studied, there is anything he cannot understand, will not intermit his labour; while there is anything he has not enquired about which he does not know, will not intermit his labour." And still less does the restless toiling after distinction chime in with the idea of William von Humboldt, whom Matthew Arnold calls "one of the most beautiful and perfect souls that have ever existed," and who used to say that one's business in life was, first to perfect oneself by all the means in one's power; and secondly to try and create in the world around one an aristocracy, the most numerous that one possibly could, of talent and character. Those who hold these views would fain see the process of culture, mental, moral and physical carried very far before the student's mind is suffered to be engrossed with a specialty, though the need of honours and wealth be less; and while it is generally desirable to defer the time when the professional work of life should break in upon the work of general culture, so it is certain that it should never supersede it.—*Montreal Gazette.*

THE PROVINCIAL SCHOOL OF AGRICULTURE.

As the above-named institution is to be opened very shortly, it will be observed that a beginning is to be made in a very moderate way. Not more than thirty pupils can be received for some time to come. More buildings must be erected before a larger number can be accommodated. Applications for admission to be sent to the Principal of the Institution, Professor McCandless, Guelph. A very tempting offer is made for the first year. Board and tuition are to cost nothing, and each pupil who makes proper proficiency is to receive fifty dollars in money at the year's end. Our young men ought to jump at such a chance as this. It is incredible that there should be any difficulty in filling the school to its utmost capacity on such terms. We are afraid many will be crowded out and doomed to disappointment.

Candidates for admission to this preparatory term, are expected to know arithmetic as far as simple proportion, to be familiar with the rudiments of English grammar, the outlines of English and Canadian history, general and Canadian geography. This is the standard according to which transferences are made from a common to a high school. We have heard the opinion expressed that the requirements are too high, but, in our opinion, those who make this objection form too low an estimate of the attainments of farmers' sons. The schoolmaster is abroad, even in country localities, and there are many sharp lads under fifteen, the age fixed for entrance to the institution in question, who are well up to the required standard. But we apprehend that a candidate for admission to the School of Agriculture, who is otherwise qualified and promising, will hardly be rejected because he falls a little short of the required standard. That lays down the general rule, but it may fairly be supposed that there will be exceptions to it, as there are to every other general rule. A certificate of admission to any high school or college, or a certificate as a duly qualified teacher, will be accepted as proof of educational fitness without examination, and where these are not forthcoming, applicants will be examined. Proof of sound health, and evidence of good moral character, will be required, and an engagement must be entered into, with the consent of parents and guardians, to complete the term of one year, to submit to the prescribed rules, and to give undivided attention to the duties and studies of the Institution.

We learn that seven hours will be the average *maximum* of outdoor work; that often much less time than this will be so employed, though sometimes in hurrying seasons of the year it may be exceeded; that instruction will be given by intelligent foremen in the principles which govern the practical operations of the farm; and

that it will be a prime object to school the young men into the performance of the various duties of their calling, in the most expeditious and skilful manner.

We are glad to perceive that the moral and religious character of the pupils will receive watchful attention. Young men from the country are peculiarly liable to be unfavourably influenced amid the temptations incident to town and city life. It will relieve parents of no small anxiety to know that their sons at the tender and susceptible periods of early youth and budding manhood will be cared for in these important respects. Participation in morning and evening devotions, regular attendance at their respective places of worship, inculcation of right principles and cultivation of good habits at such a time of life, can hardly fail to be of lasting benefit to them through all their after years.

We most sincerely hope that the Institution about to be opened for the education of our young farmers will be eminently successful and useful. We believe in agricultural training, and in schools and colleges devoted to this special purpose. Our idea is that we ought ultimately to have a central college, and a net-work of local schools of agriculture, similar to the systems pursued in Ireland and on the continent of Europe. We trust that the success attendant on the Institution about to be opened will be such as to encourage a speedy enlargement of the plan. The Government having made a beginning, it rests with the people to say whereunto it shall grow. If the opportunity now offered for obtaining an agricultural education is eagerly embraced by a large number of young men, and it is plainly to be seen that a felt want is being supplied, we have no doubt the institution will soon assume larger proportions. Of course, the establishment of a school of agriculture in this Province is very much the nature of an experiment, and it remains to be seen whether the farming community is really ripe for such an enterprise. We confess that we shall be disappointed if the response made to the action of the Government be not hearty, earnest, and encouraging. We mistake the character of the agricultural class altogether, if they are not prepared to co-operate in this undertaking with right good-will. Should such co-operation be given, we are quite sure the Government will be prepared to prosecute the scheme they have begun with a strong-handed energy and an open-handed liberality.—*London Daily Advertiser.*

COUNTY OF HASTINGS.

At a recent meeting of the Teachers' Association the following resolutions were passed.

Resolved that we adopt Worcester's Dictionary as the standard of pronunciation in the schools of South Hastings. Carried.

The Committee appointed to consider matters pertaining to education report as follows: Whereas it is desirable that our Public Schools should be made more efficient. To effect this change, 1st, it is necessary to have a larger supply of efficient teachers; 2nd, to abolish the prevailing custom (particularly in rural districts) of changing teachers every year or oftener. Regarding the first, efficient men can be induced into the profession by the same means that men of ability are secured in other avocations—by giving a fair remuneration. It is very pleasing to observe a marked improvement of late in this direction. Regarding the second, so long as teachers are changed yearly, schools will never be what they should, no matter how efficient the teachers are. The first three or four months are spent not so much in teaching as in finding out the pupils' attainments, the disposition of each, and the mode of managing them, all of which must be done before progress is secured.

At the end of the year the teacher is expected to take another school and pursue a similar course, leaving his successor to do likewise. In this way a third of the time is wasted, and worse still, the strange teacher cannot have sufficiently strong influence over his pupils to secure that diligent application necessary on their part to ensure satisfactory progress. Therefore be it resolved, that this Association humbly and respectfully suggest to the Honourable the Council of Public Instruction, that all Teachers holding Provincial Certificates or who may obtain such certificates, be the teachers of the schools to which they are appointed or to which they may be appointed, during their pleasure and good conduct.—*Ontario.*

SEX IN EDUCATION.

The question of sex in its relations to education, which has been so ably discussed by Dr. Clark, Dr. Allen, and Dr. Weir Mitchell in this country, is beginning to receive serious consideration from scientific men in Europe. Dr. Maudsley has recently published an elaborate paper in *The Fortnightly Review*, in which he treats the subject with unflinching energy, and sums up his conclusions in a

manner not less resolute and determined than Mr. Herbert Spencer himself. He admits the force of the argument that much of the mental and moral difference between the sexes may be attributed to the position of subjection and dependence which woman has always occupied, but contends that when all reasonable allowance on that score has been made, there remain inherent and ineradicable differences as marked and as necessary as the complementary bodily variations of structure. He concludes with a logic which will seem merciless to some of the advocates of identical education for boys and girls, that such a system would injure women for their maternal responsibilities, and that as this is the chief duty and destination of the great majority, it would be unwise to modify our general system of education for the benefit of the exceptions. All European writers upon this subject point this moral with too frequent and sweeping references to the health of American women. They are misled by those who wrote upon this subject many years ago. Improved cooking, more rational dressing, more general attention to exercise and bodily training, have made a decided change in the appearance and the strength of American girls of the better class.

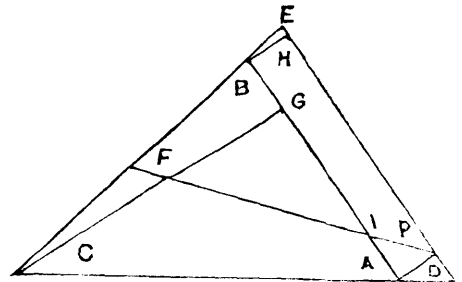
III. Mathematical Department.

Although the publication of the following solutions have been delayed for some time past, they will be found interesting to our mathematical readers. The solutions of the remaining problems will follow in due time. This department should be appreciated by teachers, as the *Journal of Education* is the only periodical in the Dominion, which publishes the solutions of mathematical problems. Due notice will soon be given to correspondents who have kindly favoured us with answers.

We respectfully invite teachers to send questions and solutions to this department.

SOLUTIONS OF SIX PROBLEMS.

6. The base of a triangle is 80, and sides containing the vertical angle are 65 and 55 perches respectively: required the length of the line drawn from a point without the triangle, 8.53 perches from the side (55), so as to cut off $\frac{5}{7}$ of the area.



$CB = 65 = f$; $AB = 55 = b$; $AC = 80 = d$; and ratio $5 : 7$ or $m + n = s = 12$.

By calculation,

we find the following results:—

$BE = 9\frac{2}{3} = g$; $EP = 58.67 = p$; $BF = x$; $AP = 8.58$; $CG = 59.71$; $BH = 8.53$; $EH = 3.67$. By similar triangles, we have, $g + x : p :: x : \frac{px}{g+x} = BI$. Then $BI \times BF : BA \times BC ::$

$m : m + n, \frac{px^2}{g+x} : b f :: m : s$; then, $b m f = \frac{s p x^2}{g+x}$, and $s p x^2 = b m f x + b m f g$, $\therefore x = 32.6172 = BF$. Then P, F the required line is easily found.

7. An iron wedge whose angle is 14° is driven into a mass of oak by a force of 125 lbs.: what force necessary to extract it?

$W_1 = W \times \frac{\sin. (31^\circ 50' - 7^\circ)}{\sin. (31^\circ 50' + 7^\circ)}$, or $W x \times \frac{\sin. 24^\circ 50'}{\sin. 38^\circ 50'} = 125 \times \frac{419980}{627057}$
 $W, = .66976 \times 125 = 83.72$ lbs., the required force.

8. A beam of oak 1 foot square has its end firmly embedded in masonry, from which it projects 9 feet: to what height could a wall of brickwork, 2 feet thick and resting on the beam, be carried without producing rupture!

Let a = natural length of the beam; b its depth, and c its breadth,

$W = \frac{s}{3} \times \frac{c b^2}{a^2}$; s being the modulus of elasticity. Then $w =$

$\frac{4992}{3} \times \frac{12 \times 144}{1082} = 246\frac{4}{9}$ = pressure for every inch of length of

beam. Then $246\frac{4}{9} \times 108 = 26618\frac{8}{9}$ lbs. sufficient to produce rupture.

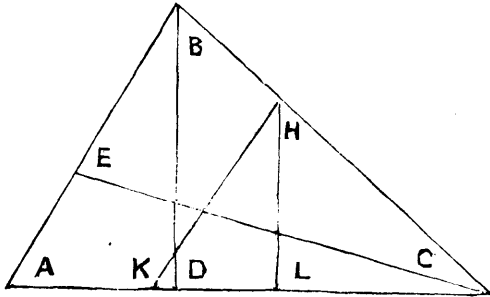
$9 \times 2 \times 1 \times 112$ lbs. = 2016 lbs. $\therefore 26618\frac{8}{9} \div 2016 = 13.203$ feet, the height to which the wall can be raised. One cubic foot of brickwork = 112 lb.

9. In a given triangle, the base $AC = 100$; $AB = 70$; $BC = 90$.

(I.) What is the length of a line parallel to the base?

(II.) Perpendicular to the base?

(III.) Inclined to the base at a given angle 15° , so as to cut off $\frac{7}{11}$ of the area?



(III.) Bisect the triangle by a line whose length is 49.32 perches. $AC = 100 = a$; $BC = 90 = b$; $HK = 49.32 = c$; $CD = 66$; $CK = x$; $HL = 43.7$; $KL = 22.864$; $CH = 64.276$; area = 3059.41; $BD = 61.1882$.

(I.) Let $x =$ length of the line parallel to the base; then by similar triangles, or similar figures are to one another as the squares of their like sides. $\therefore 100^2 : x^2 :: 3059.41 : \frac{7}{11}$ of 3059.41. $\therefore x = 79.77$, length of the line parallel to the base.

(II.) Area of triangle $BDC = 61.1882 \times \frac{90}{2} = 2019.2106$.

Let $x =$ the required perpendicular.

As $BD^2 : x^2 :: \triangle BDC : \frac{7}{11}$ of 3059.41; $\therefore x = 60.082$ perches.

(III.) Angle $A = 60^\circ 56' 27''$; angle $ACE = 15^\circ$. \therefore by trigonometry, AE is found = 26.68, and $EC = 90.11$.

$\triangle AEC = 1166.03$; and $EBC = 1893.88$. From $\triangle AEC$ cut off $\frac{4}{11}$ of the area of the whole by a line parallel to EC ; the remainder will be $\frac{7}{11}$ of the whole.

$EC^2 : x^2 :: 1166.03 : \frac{4}{11}$ of 3059.41; or, $8119.812 : x^2 :: 1166.083 : 1112.512$; $\therefore x = 88.0176$.

(III.) $AC \times BC = 2KC \times HC$ or $ab = 2x \times CH$, and $CH = \frac{ab}{2x}$.

By similar triangles, $b : d :: \frac{ab}{2x} : \frac{abd}{2bx} = CL$.

$KL = KC - CL = x - \frac{abd}{2bx} = \frac{2bx^2 - abd}{2bx}$; but

$$\therefore \frac{4b^2c^2x^2 - 4b^2x^2 - a^2b^2d^2 + 4ab^2dx^2}{4b^2x^2} = \frac{a^2b^4 - a^2b^2d^2}{4b^2x}$$

$$\therefore 4b^2x^4 - 4b^2c^2x^2 - 4ad^2x^2 = -a^2b^4 \therefore x = 70.$$

10. The rafters of a house are each 18 feet long, and tied by a wrought iron rod, 30 feet long and section $\frac{1}{4}$ square inch: what weight must be suspended from the vertical angle so as to break the rod?

Let the direction of the weight W bisect the base BC in D , and A representing the vertical angle; then we have, $W \times 30 \div 4AD =$ horizontal pressure; $AD = 9.95$

$$\therefore \frac{W \times 30}{39.8} = \frac{67200}{4}, \text{ or, } W \times 30 = 39.8 \times 16800$$

$\therefore W = 39.8 \times 560 = 22288$ lbs, the required weight sufficient to break the rod.

11. A bar of wrought iron suspended vertically breaks by its own weight, what is its length?

The tenacity of iron = 67200 lbs; let $x =$ length of the bar, and n the area of its section; then $67200n =$ the breaking weight of the bar. Specific gravity of wrought iron = 7.788, $\therefore \frac{7788}{144 \times 16} \times nx =$ weight of the bar.

$$\therefore \frac{7788}{2304} \times nx = 67200n; 7788x = 67200 \times 2304;$$

therefore $x = 19880$ feet, the length of the bar.

IV. Papers on Science and Natural History.

MARVELS IN TELEGRAPH.

A new telegraphic machine has been exhibited at the Signal Bureau, in Washington, which promises to effect a remarkable revolution in telegraphy. It is called a "multiplex telegraph," invented by Merritt Galley, and covered by several patents both in Europe and America. The object of the invention is to enable a number of instruments to be operated simultaneously on a single wire, in either or both directions, and at different stations along

the line, without conflict, each instrument to do as much as the Morse key or any other instrument in common use. It has long been known to telegraphers, that a telegraph wire is capable of transmitting scores of electric pulsations, where only one is now sent, for the reason that the human organs cannot keep pace with the flow of electric discharges. The "multiplex" instruments, however, are fitted with apparatus in the nature of "switches," which turn the messages off from the main wire to the branch offices. Whether the operator is transmitting to sounder or printer, he makes but one stroke for any letter of the alphabet. The transmitter is entirely original in construction; it is a single key, with a short printed alphabetical index, and but little practice is required to use it.

THE SIGNAL SERVICE FOR 1873.

We see by the Signal Report that the percentage of verifications is considerably larger this year than last. For New England it was, 81.50; for the Middle States, 81.17; for the South Atlantic, 79.92; for the Lower Lakes, 78.90; for the Eastern Gulf, 77.16; for the Ohio Valley, 76.42; for the Western Gulf, 74.40; for the Upper Lakes, 75.25; and for the Northwest, 74. The general average given in last year's report was 76.8. Reports are regularly received from ninety-two stations, seventy-eight of which are in the United States; eleven are in Canada, and three in the West Indies. The regular telegraphic reports from Havana, Cuba, began on August 6th; from Kingston, Jamaica, on September 18th, and from Santiago de Cuba, on September 29th. Three other points in the islands of Porto Rico, Guadeloupe, and Barbadoes, will be equipped soon. Arrangements have been made with Russia and Turkey, to commence on January 1st, the exchange of one daily report, taken simultaneously at the different stations throughout the great territorial extent of the Russian and Turkish empires, and the United States. It is expected that other nations will soon co-operate with us in this service.

The practical benefit derived from these reports can hardly be overestimated. Great pains have been taken to benefit the farmers, and arrangements have been made for daily posting the reports at 4,491 post-offices, throughout the country. To protect the business interests from injury along the rivers, a large number of reports have been made daily, giving the state of the weather, and the results are gratifying.

During the year eighty-eight warnings of storms have been made, seventy of which proved to be serious. The mistakes, if any, have been on the side of caution. While on some occasions the signals ordered may have proved unnecessary, and are so reported unverified, on the other hand no extensive storms have occurred in the regions included in the system of cautionary signals without warning of its approach having been displayed in at least part of its course.

It is estimated that at least one-third of the people of this country, through these various sources, have the benefit of the weather observations.—*American Educational Monthly*.

SPARE THE INSECTIVOROUS BIRDS.

We would point out to our indefatigable police authorities that a number of young scamps are making havoc among the birds with slings and india-rubber "catapults." The law is stringent on this point, and a few examples made of the class referred to and their seniors, to whom years have not brought common sense or decency, who wander over the fields shooting the robins, grey-birds, &c., which enliven the country, would have a most salutary effect. Naturalists who have given the subject much time and attention, assert that the increase of slugs, spiders, &c., the pests of the gardener and farmer, is caused by the wholesale destruction of the small birds, and it was to remedy this miserable slaughter that the act protecting these birds was passed.

HOW LONG ANIMALS LIVE.

According to some naturalists the length of life of animals is as follows, though it is really puzzling to see how they can tell all this, especially about those that live a hundred years or more:

The Rabbit lives from 6 to 7 years.

The Squirrel from 7 to 8.

The Fox from 14 to 15.

The Cat from 15 to 16.

The Dog from 16 to 18.

The Bear and the Wolf from 18 to 20 years.

The Rhinoceros from 20 to 22. The Horse from 22 to 25.

The Hen from 25 to 30. The Crow and the Camel 100.

The Tortoise 110. The Eagle 120. The Swan 160.

The Elephant 40. The Whale, according to Cuvier, 100 years.

VI. Educational Intelligence.

—KNOX COLLEGE.—Last Thursday one of the most important events in the history of the Presbyterian Church in this country, transpired when the foundation stone of Knox College was laid. As will be seen from the statement of Principal Caven, published in full below, this is an institution which has passed through almost every grade of tribulation, so far as external difficulties have been concerned, but it is a matter for congratulation that since the commencement there has been a steady progress, and that the work has, in every department, shown marked signs of efficient and faithful labour. It is, therefore, an occasion of which the entire Presbytery should be proud, that this building should have been commenced under such favourable circumstances, with such good prospects that in the very near future it will stand entirely free from debt, and that additional facilities will thereby be afforded for carrying on the work which, during the past thirty years, has shown such magnificent results.

PLAN OF THE BUILDING.

The building now in course of erection is on the Crescent, a little north of College-street, and opposite Spadina-avenue, is designed in the Gothic style of architecture, and in plan is in the form of the letter E. The facade fronting the avenue is 230 feet in length, and the wings running north are each 150 feet in length. The main entrance is under a lofty tower of 130 feet in height, and is flanked on each side with stone pillars with carved stone capitals, tracery heads, and surmounted with moulded pediments and carved stone finials. The main entrance lobby under tower will be groined with oak moulded ribs, resting on carved stone corbels. The floor will be laid with encaustic tiles. The main entrance hall is 15 feet wide, with a heavy oak staircase opposite it, leading to the library, museum, reading-rooms, &c.; then to the right and left of this main entrance are the corridors, 10 feet wide, with arches at intervals, leading to the various class-rooms, professors' rooms, lecture-room, and dining hall. There are two class-rooms, holding 80 students each, and two holding 50 each. On the ground floor are also the Secretary's room, four Professor's rooms, Senate room, visitors' room, kitchen, laundry, wash-room, housekeeper's apartments, &c.; over these are the servants' rooms, and under are the cellars. The boiler-room is outside the central portion of the main building, and connected with the coal cellars, &c. On the first floor in the centre of the building is the library, 50 feet long and 30 feet wide, with reading-rooms opening out of it at each end. Over the library is the museum, with a handsome timbered roof. There are 36 rooms for the students, each room averaging 14 feet by 20 feet, thus giving accommodation for about 80 resident students. The building will be heated by steam, and ventilated with a system of flues connected with a rarefied air shaft around the boiler chimney flue. There are bath rooms and water closets on each flat for the use of professors and students. The building is being erected with white brick, with stone base courses, belts, strings, sills, and door steps, moulded drips to windows with carved bosses, stone angle columns to tower, with carved capitals. The upper windows of the tower will have moulded and carved balconies, supported on carved stone corbels. All the gable copings will be of stone, with wrought iron terminals. The windows of the lecture hall will have stone jambs and sills, resting on moulded stone strings with moulded drips, and bosses over them. The lecture hall will have a rich open-timbered hammer-beam roof. At the west end of this hall is the gallery, approached by a stair running up in a tower over the east side entrance. The whole of the roofs are to be covered with slates laid on felt.

THE CEREMONY.—The assembly at the ceremony was particularly large, and much interest was manifested in the proceedings.

At the appointed time the Rev. W. Reid, M.A., Moderator, came forward, and said that on this occasion they were assembled to inaugurate an undertaking of great importance, which was to be a worthy result of many years' labours, which took place under less favourable circumstances. For several years the College was carried on in Grosvenor-street, in a building formerly the residence of the Earl of Elgin, which, after some alterations, was adapted to the purpose of the College institution. The first building was found to be uncomfortably small, and it was considered that something better was needed, although, unlike a great many things in the present day, old Knox College was much better than it looked. The subject of the erection of a new building was laid before the Assembly last year, and it was then decided that the necessary steps should be taken for the erection of new buildings. Accordingly the necessary steps were taken, the work was commenced, and subscriptions flowed in through the exertions made by the Principal, Prof. Caven, and the other Professors in various parts of the country. But the canvass was not yet completed, although the result has been highly satisfactory. They had met to-day for the purpose of laying the corner-stone and invoking the blessing of God on the erection of the building. Before proceeding with the more especial work, they would unite in singing a few verses of one of the grand old psalms which were sung by their forefathers in the days of old. It was one of the psalms which often

animated the hearts of their forefathers when labour and suffering too, was demanded of them.

The 46th Psalm was sung, after which the Moderator read portions of Scripture from Psalms 126-127, and Ephesians iv. Prayer was then offered up, after which the Rev. Principal Caven read a statement of the progress of the College, as follows:—

HISTORICAL SKETCH OF KNOX COLLEGE, FROM ITS ESTABLISHMENT TO THE PRESENT DATE (MARCH, 1874).

Knox College, although the title was not given till 1846, may be said to have been instituted in 1844, when at the meeting of the Synod of the Presbyterian Church of Canada, on the 14th of October, it was resolved to appoint a Professor of Divinity, and a Professor of Literature and Science for conducting the studies of young men aiming at the Ministry, the Professors to be for the present stationed at Toronto. The Rev. Andrew King, a deputy from the Free Church of Scotland, interim Professor of Divinity; and Rev. Henry Esson, of Gabriel street Church, Montreal, was appointed Professor of Literature and Science. During the first session (1844-5), the attendance was in all fourteen, four of whom had been students of Queen's College, Kingston, before the disruption, which took place in July, 1844. The classes were conducted in an apartment of Mr. Esson's house, in James street, in the City of Toronto. The Synod, at the same meeting, in view of Dr. Robert Burns, of Paisley, who had been called by the newly organized congregation of Knox Church, in Toronto, coming out, and of his varied qualifications, appointed him as Professor of Theology, the appointment being subject to any contingency arising from the Synod resolving, at a future time, to separate the office of Professor from that of pastor, or such other circumstances as might affect the decision of the Synod as to the permanent institution or the locality of the Theological Seminary of the Church.

The Synod of 1845 confirmed the appointment of Dr. Burns as Professor of Divinity, and that of Mr. Esson as Professor of Literature and Philosophy.

In 1846, the Synod, with the view of placing the institution on a more extensive and efficient basis, appointed a Committee to consider the matter of the incorporation of the College, its name, the number of professors, the erection of suitable buildings and the establishment of an academy for the preliminary training of young men, and a boarding-house for the students. On the report of the Committee it was agreed that the College should be called "Knox College," and that steps should be taken for establishing an Academy or High School. This was done in the course of the year, the Academy being superintended by Rev. A. Gale, M.A., formerly of Hamilton, assisted by Rev. T. Wightman, formerly of Camden. No steps were taken for the erection of buildings, but the College and Academy found suitable accommodation in "Ontario Terrace," in the premises which, after having been enlarged and altered; now form the Queen's Hotel." During the session of 1846-7, able assistance was rendered in the College by Rev. Robert McCorkle, of St. Ninians, Scotland; also, by the Rev. W. Rintoul, who conducted the classes in Hebrew and in Biblical Criticism. The Synod of 1847 confirmed the appointment of Mr. Gale as Principal of the Academy, and as professor of Classical Literature in Knox College. The Synod at the same meeting, in consideration of the increased number, nine students, requiring the undivided services of a professor, resolved to separate the professorship of Theology in Knox College from the pastorate of Knox Church, Toronto, and to send Rev. John Bayne, of Galt, to Britain to confer with the Colonial Committee of the Free Church, and secure, if possible, the appointment of a Professor of Theology. This mission was undertaken and fulfilled, and the result was the appointment of the Rev. M. Willis, D.D., who continued to teach theology with distinguished success for the period of 23 years. The Synod, when resolving to separate the professorship of Theology from the office of pastor of Knox Church, expressed their sense of the great obligations under which they were to Dr. Burns for the valuable service he had rendered to the College, his watchfulness over the spiritual interests of the students, and his diligence and zeal in collecting books for the library.

In 1848 the Synod having expressed their great satisfaction at having obtained the valuable services of Dr. Willis, with the view of promoting the efficiency of the College, appointed Rev. William Rintoul as Professor of Hebrew, it being understood that the appointment would be an interim one, its permanence being dependent upon the provision that might be made for oriental literature in what was King's College, now the Toronto University. Mr. Rintoul discharged with great diligence and efficiency the duties of the Chair of Hebrew for several years, when, in consequence of changes in the University, it was considered no longer necessary to maintain a professorship of Hebrew in Knox College.

In 1849 and 1850 Rev. William Lyall afterwards connected with the Divinity Hall at Halifax, Nova Scotia, rendered important services to the College and the Church as Professor of Literature and Mental Training. The names of others might be mentioned with honour in connection with important services rendered when necessary to the College from time to time. It would be specially unjust not to mention the name of Rev. Ralph Robb, of Hamilton, who, until prematurely cut off in 1850, was ever ready to give aid when called upon to do so.

In the early part of 1853, Professor Esson, who had been connected with the College from the beginning, and had done much to advance its interests, and promote the improvement of the students, was removed by death. He was succeeded by the Reverend George Paxton Young, of Knox Church, Hamilton, who entered upon his duties at the beginning of the session 1853-4, and brought to his work talents of the very highest order, and a zeal and aptitude for teaching which were highly appreciated by the successive classes of students which came under his care.

In 1855, it became necessary to remove from the premises, hitherto occupied in Ontario Terrace, Front street, and the property of "Elmsley Villa," formerly occupied by the Right Hon. the Earl of Elgin, when Governor-General of Canada, was purchased, and enlarged so as to afford accommodation for the classes and boarding department.

In 1856, the Synod added to the Staff by appointing Rev. Dr. Burns

as an additional Professor; the Department of Church History and Evidences being assigned to him, while the Department of Exegetical Theology was assigned to Professor Young.

In 1858, an "Act of Incorporation" for the College was obtained from the Legislature. From the first establishment of the College it was not intended that permanent provision should be made for instruction in the literary branches. After Professor Gale's retirement and death, which took place in 1854, Rev. John Laing, and subsequently Mr. James Smith, acted as teachers in the preparatory department. After the retirement of the last named gentleman, instruction in the preparatory department has been given by some of the senior students, appointed from year to year by the Senate, with the exception of these years 1868-9, 69-70, 70-71, when Reverend Professor Young, who had resigned his position on the College staff in 1864, undertook at the request of the Synod, the charge of the literary classes.

Professor Young having resigned his professorship as has been mentioned in 1864, the Rev. W. Caven was in 1866 appointed Professor of Exegetical Theology; assistance having been given during the intervening years by Rev. W. Gregg of Cooke's Church, Toronto, and Rev. W. Caven of St. Mary's, as lecturer. In subsequent years valuable assistance was rendered in the College by the following gentlemen, who were appointed by the Supreme Court of the Church to lecture on particular branches, viz.—Rev. Robert Ure of Goderich, Rev. D. Inglis of Hamilton, Rev. Dr. Topp of Toronto, and Rev. Dr. Proudfoot of London, who continues by appointment of Assembly to lecture on Homiletics, and Pastoral Theology.

Dr. Burns having resigned his position as Professor of Church History in 1864, became Emeritus Professor, but continued to give service in the department until his death which took place in 1869.

In 1870 Dr. Willis, to the great regret of many friends, resigned the position which he had so long and so well filled. His resignation was accepted and the very warm expression of the Assembly's sense of his services, was placed on record. In the following year Rev. Dr. Inglis of McNab street Church, Hamilton, was appointed to the vacant chair. After holding it for one year, Dr. Inglis resigned his Professorship.

In 1872, Rev. W. Gregg, M.A., of Cooke's Church, Toronto, was appointed Professor of Apologetics. To fill up the vacancy occasioned by the Rev. Dr. Inglis, the Rev. W. McLaren of Knox Church, Ottawa, was appointed in 1873, Professor of Systematic Theology, the classes during the intervening session having been taught by Rev. Dr. Topp of Knox Church, Toronto, and Rev. Professor Gregg. It may be interesting to state that from the first establishment of the College to the present time, the number of names entered in the College register is 389. Of these there are, exclusive of probationers and students, and exclusive also of those who are in other churches, either on this Continent or in the parent countries in the service of the Canada Presbyterian Church, about 170.

At the Union in 1861 the Theological Institution of the United Presbyterian Church became united with that of the Presbyterian Church of Canada, so that both institutions are now represented by Knox College. It is proper, therefore, that in this connection some brief account should be given of the work of Theological education as conducted in the United Presbyterian Church previous to the Union.

The "Missionary Presbytery of the Canadas" representing what afterwards became known as the United Presbyterian Church in Canada, early recognized the importance of providing for a native trained ministry, but no steps were taken in the matter till 1845, when the Presbytery was constituted into a Synod. At this date a scheme for the establishment of a Theological Institution was adopted, and the Rev. Wm. Proudfoot, of London, was appointed first Professor of Theology.

The Institution was located in London. Owing to the position in which King's College, Toronto, then stood, it was found necessary to provide for the literary training of students, as well as for their instruction in the subjects of a theological course. The curriculum adopted embraced classics, mental and moral philosophy, logic and rhetoric as well as systematic theology, church history, and biblical literature; it was made to extend over four sections of eight months' each.

The work of the Institute commenced in the fall of 1845, the first student enrolled being Mr. J. J. A. Proudfoot, now the Rev. Dr. Proudfoot, of London, son of the eminent man appointed to preside over the Seminary.

The entire work of teaching rested upon Mr. Proudfoot till 1847, when the Rev. Alexander Mackenzie, of Goderich, was appointed to teach Hebrew, which he continued to do till the plan of study in the Institute was re-modelled and the Institute was removed to Toronto. Mr. Mackenzie was an accurate scholar and an earnest and painstaking teacher, and is affectionately remembered by those who had the privilege of waiting upon his instructions.

In 1849, it was carried in the Synod, "That owing to the change now effected in King's College, Toronto, whereby it was made a Provincial Institution, it is no longer necessary that the object of the Institute extend beyond the Teaching of Theology." It was at the same time resolved to transfer the Theological Institute to Toronto. Its next Session was accordingly held in that city, in the Church of the Rev. Dr. Jennings. This was the last session conducted by Mr. Proudfoot, for he became ill immediately on returning from London, at its close, and died on the January following. Mr. Proudfoot was a man of rare abilities and attainments, possessing a mind of uncommon strength and clearness, but finely harmonized in all its intellectual attributes. He was not less distinguished by his high moral qualities and the singleness of purpose with which he consecrated all his powers to his Master's service.

In 1852, the Rev. Dr. John Taylor, of Auchtermuchty, Scotland, who had been chosen successor to Mr. Proudfoot, came to Toronto, and continued to discharge the duties of Theological Professor till 1860, in which year he returned to his native land. The Institute flourished under Dr. Taylor, and sent forth from session to session men who proved valuable additions to the Church's staff of labourers. In 1860, as above said, Dr. Taylor, to the great regret of all, returned to Scotland, and the Church was deprived of the services of one preeminently fitted, by his high talents, his accurate scholarship, and his extensive acquaintance with theological learning, to take part in moulding the future ministry of the Presbyterian Church in Canada.

The union of the Presbyterian Church of Canada and the United Presbyterian Church in Canada was auspiciously consummated in 1861. At this time ten young men were in their theological course in connection with the United Presbyterian Church. These all entered Knox College and completed their curriculum there, and from this date till the establishment of the Presbyterian College in Montreal, the history of Knox College is the history of theological education in the Canada Presbyterian Church. The larger stream and the smaller have now united, and Knox College is now regarded, it is believed, with equal affection by all members of the United Church who take an enlightened interest in the Church's work.

For some time it has been felt that more commodious and suitable buildings were necessary for College purposes. The matter was taken up by the College Board in 1873, and the sanction of the Assembly having been obtained, an appeal was made to the congregations, the Professors taking a leading part in the work. The result has been highly satisfactory, and it is hoped that the building, the corner-stone of which is to be laid to-day, will long remain an ornament to the city, and a credit to the Presbyterian Church, and that from it will go forth many able and faithful ministers of the New Testament.

The staff at present is as follows:—Rev. W. Caven,—Principal and Professor of Exegetical Theology. Rev. W. Gregg,—Professor of Apologetics and Church History. Rev. W. McLaren,—Professor of Systematic Theology. Rev. J. J. A. Proudfoot, D.D.—Lecturer on Homiletics and Pastoral Theology. H. H. McPherson, M.A., and P. Strath,—Classical Tutors.

Professor Caven said, that up to the present 76 congregations of the Church had been canvassed with much success, the subscriptions up to the present amounting to \$74,400. But he might state that still more was required. A further sum of \$26,000 was required in order to make the list secure. There were some 130 congregations on the list, but a large number of these were not expected to do much. They wanted the old congregations to do all they could, and he hoped that many of the strong congregations would do as well as those at Hamilton, Toronto, Guelph, and other places. The work was begun in the name of God; and they must not forget the words of Psalmist, as just now read by the Moderator: "Except the Lord build the house they labour in vain that build it." This was a religious work, and he trusted that the work of the College would continue to be conducted in a religious spirit.

The Moderator then called the Hon. J. McMurrich to lay the foundation stone. Hon. Mr. McMurrich said he felt very much gratified in being called on to take part in this interesting ceremony. Some thirty years ago Knox College commenced in an humble building on James St. and the history of the College was continued to be raised up from that time until now. They commenced with two professors, one of whom had long since gone to his rest and reward. Professor Burns, Rev. Mr. Gale, and the Rev. Mr. Rintoul, had all gone to the rest where they rest neither day nor night. When the College was first started, the accommodation provided was very small; in the following year more extended accommodation was provided, and more respectable too—by the leasing of two houses on Front street, which were united by the breaking through of the dividing walls of the two houses. Ten years' work was carried on in these premises, and in 1855 they removed to other buildings close by, where the good work had been carried on with success for the past nineteen years, making thirty years from the commencement. The work had been carried on with success attending it, although surrounded with inconveniences and difficulties, arising from the fact of the building not having been originally built for the purpose of college work. The time has now come when the Church has become alive to its duty. They have commenced this building, which, when erected will be worthy of the Presbyterian Church, and the pride of all the Presbyterian brethren who take an interest in it. This was a step in the history of the college which marks not only the progress to completion of the work, but also from this time the church and college will take their various departures. And when the building is completed and set apart for the purposes for which it is being erected, he trusted there will be found within its walls professors eminent for their piety—men of ability, apt to teach and keep abreast of the times; and that the result of their labours will be to send forth from year to year, able ministers of the New Testament. With these few remarks, he would proceed in laying the foundation stone in the name of the Lord Jesus Christ, the only King and Head of His Church. May He crown their labours with abundant success, and to the glory of His name. The stone, having been properly prepared, was then lowered into position, and Mr. McMurrich declared the stone to be well made and truly laid.

Professor Gregg said, that reference had already been made to the steps taken towards the erection of the present building, the amount of money required to complete it, and the amount of money already subscribed, and therefore he would not again revert to these topics. But he might make a few remarks as to the present state of the College, so far as the students are concerned. They had, at the close of the last session, 38 theological students in the classes, of whom sixteen were graduate students, who probably would receive their licenses during the next few months. Besides these there were the literary classes immediately under their charge, in which there were eighteen students pursuing their studies within the walls of Knox College and the University. In illustration of this he might mention that they had thirty-six students in the University pursuing their studies with a view of entering Knox College. So altogether in Toronto they had in connection with the Church upwards of 90 young men who were to become ministers in the Canada Presbyterian Church. There were also about 40 students pursuing their studies in the Montreal Presbyterian College and McGill University with a view of becoming ministers of the Church. Thus there were 130 students in the literary and theological classes pursuing their studies. He hoped to have another opportunity of saying a few words in the evening, and he would be glad if those present would try to be present at that meeting, which would be held in the school house at Knox Church.

The Rev. Dr. Topp then pronounced the Benediction, and the proceedings closed. — *British American Presbyterian.*

VII. Short Critical Notices of Books.

—The ALDINE* for May sustains the extremely good reputation which the publication has acquired since its first issue. This month's illustrations of scenery in Florida by T. D. Woodward—a subject seldom attempted, and still more seldom successfully treated—are excellent. In addition to their value as delineations of tropical scenery, they are really fine pictures, especially "Moonrise on the coast of Florida!"—"The Hemlocks of Lake Ostego," by Mr. Hows, a more northern story, is good. The other illustrations are "A Dying Hound," (a touching incident of the "Deerslayer" times), "The Bashful Lover," "A Retriever," and "The New Capitol at Hartford, Conn." The letter press contains, among other things, an account of the Exhibition of the American Society of water-color Painters, which contains criticisms on Foreign artists who contributed to the Exhibition—some of which sound strange to our ears.

—THE LAND OF THE WHITE ELEPHANT,† by Frank Vincent, Junr.—A volume of travel in Farther India, Burmah, Siam and Cambodia; or as the author poetically terms it, the "Land of the White Elephant." This is a region which must now attract our thoughts as we view the influx of so many of the neighbouring people (the heathen "chince") into our continent, knowing as we do the important changes which have been silently in progress in Japan, and other eastern countries, and which the writer assures us are spreading to the land where he has been travelling, and about which he has here written. The only merit the author claims for his book is one which cannot be too steadily kept in view by writers, that of *truth*. It is one which is constantly obtaining more recognition as superior to beauty of style, and which should underlie the rest—though not as some put it, far too deep down to be seen or felt. It is not this, however, as Mr. Vincent modestly asserts, which is the only recommendation of his book, for we do not doubt that the interesting descriptions of many places which he visited will be read with great interest by those who have themselves seen the "White Elephant," and not less so by those who are as yet but prospecting voyageurs.

—THE ATMOSPHERE,‡ by Camille Hammarion, edited by James Glashier, F.R.S. This is, as the Editor of the English edition tells us, an abridgment of a most exhaustive work in a popular form on the science of Meteorology. Our planet, light, temperature, wind, clouds and rain and electricity, in fact, everything which bears on this comparatively modern science, is treated in a way which makes it especially valuable to a student, without degenerating into every general reader's horror—a mere text book. The work is well illustrated with over ninety chromos and woodcuts of interesting phenomena, while the style is like that of most French writers, easy and flowing. We commend the book as a most valuable one to those who, like ourselves, like to speculate over the daily weather "probabilities" of the meteorological Bureau.

—We have received the Library edition of Adolphus Trollope's "Diamond cut Diamond," and Gail Hamilton's latest, "Twelve miles from a Lemon," the latter we shall refer to in our next number.

VIII. Departmental Notices.

VOTERS FOR MEMBERS OF THE COUNCIL OF PUBLIC INSTRUCTION.

Several inquiries having been made as to whether all persons holding valid certificates are entitled to be enrolled in the list of voters for a member of the Council of Public Instruction, notice is hereby given, that the law confines that privilege to the "Teachers in the Public and Separate Schools." Those who are not in active service in the Schools at the time the list is being made up and corrected, that is to say between 15th June and 14th July, are not entitled to vote.

NOTICE.

The Spring Term of the High Schools this year will close on Friday, 26th June, in order to facilitate the holding of the entrance examinations on the 29th and 30th of that month.

ENGRAVINGS OF SCHOOL HOUSE PLANS.

The Chief Superintendent of Education proposes to have engraved and inserted, from time to time, in the *Journal of Education*, the perspective and ground plan, with description of any Public or High School House in Ontario which may be sent to him for that purpose, and which he may deem of sufficient merit to warrant it. The perspective and plan may either be from a photograph or a sketch; but the perspective should in no case exceed six inches in length by four in width, and the plan should not be larger than three inches by four. A full description of the building, with specifications, should also be sent for insertion in the *Journal*.

PAYMENT OF TEACHERS' CHEQUES.

The Education Department requests that Inspectors will add the following words to the cheques which they may issue to Public Schools, or write them across the face of the cheque:—"This cheque must be presented to the Treasurer for payment within two weeks of its date."

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

CORRESPONDENTS OF THE DEPARTMENT.

1. Letters should be addressed to the "Education Office," or "Education Department," and not to the "Normal School," which is a Branch of the Department, having its own letter-box at the Post Office.

2. Application for Maps, Apparatus, Prize or Library Books should (as stated on the face of them) be accompanied with the remittance named in the application. It should not be enclosed in a separate envelope, unless the fact is specially noted on the application. Very often the application (stating that a certain sum *is enclosed*) comes in one envelope and the money in another. This discrepancy should not occur without an explanation being given in the letter. The Post Office authorities do not now allow the form of application filled up to pass through the post as printed matter.

3. The name of the Post Office of the writer, or School Section, should invariably be mentioned in the letter. Frequently letters are received without either the date or post office being given in them.

4. Letters are often posted and registered at one office, while another one is mentioned in the letters themselves. This fact should be noted in the letter by the writer, otherwise the discrepancy causes confusion and inconvenience in the letter registry of money receipts.

EXAMINATION PAPERS.

The sets of Examination Papers used in the Normal School during the 20th, 21st, 22nd, 23rd and 24th Sessions can be sent free of postage on receipt of 30 cents each. Those of the 25th, 26th, 27th, 28th, 31st, 33rd, 36th, 38th, 39th, 40th, 41st, 42nd, 43rd and 44th Sessions, at 40 cents each, and those of the 45th, 47th and 48th Sessions, at 50 cents each.

The entire sets of Examination Papers for First, Second and Third Class Teachers for July 1871, July 1873, or December, 1873, neatly stitched, can be sent free of postage on receipt of 60 cents per set. Those used at the County Examinations for Second and Third Class Teachers for July 1871, July 1872, December 1872, July 1873, or December, 1873, can also be sent, free of postage, on receipt of 50 cents per set.

* Toronto Office, 50 King St., East.

† Harper and Brothers, New York; Hart and Rawlinson (late Copp, Clark & Co.,) Toronto.