



# JOURNAL OF EDUCATION.

Volume XII.

Quebec, Province of Quebec, May, 1868.

No. 5.

SUMMARY.—LITERATURE.—Poetry: The Blind Man of Jericho, by Mrs. Leprohon.—Revolutions in English Literature, by the late Hon. T. D. McGee.—EDUCATION: Teaching Rhetoric and Composition.—Preponderance of Female Teachers in the United States.—Too Much Arithmetic.—Oliver Optic.—Where lies the Blame.—SCIENCE: Curious Application of Electricity.—OFFICIAL NOTICES.—Appointments: School Commissioners and School Trustees.—Diplomas Granted by Boards of Examiners.—Erection of School Municipality.—Notice to Secretary-Treasurers.—Notice to Teachers.—Situations Wanted.—EDITORIAL: The so called "American System."—OFFICIAL DOCUMENTS: Table of Distribution of Grant for Superior Education.—Books and Publications Received.—MONTHLY SUMMARY: Educational Intelligence.—Literary Intelligence.—Meteorological Tables from Quebec for the Months of March and April, and from Dr. Smallwood, from Records of Montreal Observatory for April.

## LITERATURE.

### POETRY.

(Written for the Journal of Education.)

#### THE BLIND MAN OF JERICHO.

BY MRS. LEPROHON.

He sat by the dusty way side,  
With weary, hopeless mien,  
On his worn brow the traces  
Of care and to want were seen;  
With outstretched hand and with bowed down head,  
He mutely begged for alms — for bread.

The palm tree's feathery foliage  
Around him thickly grew,  
And the smiling sky above him  
Wore Syria's sun — bright hue;  
But dark alike to that helpless one  
Was murky mid-night, or noon-tide sun.

But voices breaking the silence  
Are heard, fast drawing nigh,  
And falls on his ear, the clamour  
Of vast crowds passing by:  
"What is it?" he asks with panting breath;  
They answer: "Jesus of Nazareth."

What a spell lay in that title,  
Linked with such memories high  
Of strange miracles of mercy,  
Wrought 'neath Judea's sky!  
Loud calls he with pleading voice and brow,  
"Oh! Jesus, on me have mercy now!"

How often had he listened  
To wond'rous tales of love —  
Of the Galilean's mercy,

Of power from above,  
Giv'n as yet to none of human birth,  
To heal the afflicted sons of earth.

As with growing hope inspired,  
Still louder rose his cry,  
Despite the stern rebuking  
Of many standing nigh,  
Who bade him stifle his grief or joy,  
Nor "the master rudely thus annoy."

But, ah! soon that voice imploring  
Struck on the Saviour's ear,  
He stopp'd, and to his followers,  
He ordered: "Bring him here!"  
And turning towards him that god-like brow,  
He asked the suppliant, "what would'st thou?"

Though with awe and hope all trembling,  
Yet courage gaineth he,  
And imploringly he murmurs,  
"Oh, Lord! I fain would see!"  
The Saviour says in accents low:  
"Thy faith hath saved thee — be it so!"

Then upon those darkened eye balls,  
A wond'rous radiance beamed,  
And they quick drank in the beauty  
That through all nature gleamed;  
But the fairest sight they rested on,  
Was the Saviour, David's royal son.

Oh! rapture past all words to tell  
The bliss that vision brought;  
Say could a Life's praise, thank *Him* for  
The wonder he had brought?  
Yes,—where Jesus stepp'd was sacred sod,  
Him he thenceforth followed, thanking God.

#### Revolutions in English Literature.

A LECTURE: BY THE HON. T. D. MCGEE. (1)

Ladies and Gentlemen,

The language we speak has become a property and inheritance of exceeding great value to every one born within the sphere in which

(1) A melancholy interest attaches to this *Lecture* as being the last ever delivered by the late Mr. McGee. It appears now a faithful print of his own MS. as sent from Ottawa March 31st to the *Assistant Editor* of this Journal.

it is spoken. That sphere includes in Europe, the United Kingdom; in India, the official and commercial classes, at least; in America about all north of the Isthmus of Panama; in Australia, the entire civilized population; and in Africa, many cities and settlements, chiefly situated on the coasts. In point of mere geographical extent ours is the most widely diffused language of ancient or of modern times; and the mental wealth of which it is at once the storehouse and the vehicle—the wit, the wisdom, and the knowledge,—are a reserve, to borrow an illustration from the Banks, equal in value to the vastness of its circulation. These are truisms, Ladies and Gentlemen, familiar to you all; and I repeat them only by way of preface to certain illustrations I am to night to offer you, as to some of the literary revolutions, wrought and recorded in that language.

We all, I think, must have observed that there are fashions in literature—in the making and using of books,—as there are fashions in dress and furniture. But it is not merely of such ephemeral fashions of the month I wish to speak; that would be a task too minute for this place, and the time at our disposal: my subject indicates only a reference to those greater revolutions, which changed the mental character of our predecessors in speech—which supplanted the former established principles of taste to a national extent, for a period of time not less than one generation: those definite periods of time when the leading spirits of the period carried particular styles of composition to their highest perfection in the maintenance or gratification of particular principles. It will be best, perhaps, to say at once, that of these literary revolutions in our language I propose to night,—I am compelled indeed by the amount of material at hand,—to confine myself to two,—our theatrical and our periodical literature,—the revolutions of the theatre, and those of the periodical press,—now so marvellously advanced and developed, especially in our language.

You will perceive at once how large are the omissions I must make as to other revolutions, regard being had to our literary history as a whole: it seems fatal to the subject to omit Bacon in one century, Newton and Locke in another, and Swift and Pope in a third; but I must leave untouched (perhaps for some future lectures) (2) our philosophical and political literature; I must pass by all the formidable brotherhood of satirists from Andrew Marvel to Peter Pindar; and all our metaphysical writers; our grave historians, and our novelists from Daniel DeFoe to Charles Dickens. These are dynasties deserving separate lectures, and we are warned by Æsop not to grasp at too much, lest we should be obliged, as a punishment for our greed, to go away altogether empty.

The century which began with the accession of Queen Elizabeth and extended to the restoration of King Charles II. (1558-1660), may be called, in the history of our literature, the century of the elder Drama. It was an age of action and activity by sea and land; the age of the Armada, and the civil war; of Drake's voyage round the world; of the first settlements in America; of Spenser and Bacon and Milton; of the tragedies in real life of Essex, of Raleigh and of Buckingham; of King Charles and his ministers; the age of the union of the three crowns; of Cromwell's rise to power, and the recall of the exiled fugitive who flying before his enemies had found shelter in the royal oak. Even the most recluse observer must have felt the heaving of the tides which in those days ebbed and flowed so actively for England. The marvellous extremes of personal fortune exhibited before their eyes must have made all thoughtful spectators of their times moralize on the endless drama of man's existence, and must have of itself suggested the prevailing dramatic cast of thought and reflection. There were indeed, in that century, but two great vehicles of popular communication—the pulpit and the theatre. The Parliaments were held at long and uncertain intervals; their debates were privileged against publicity; and the only sketches of them which have come to light, have been from the note-books of private members, like Sir Simon Dewes, whose curious journal is familiar to parliamentary students. The periodical press as yet was an unreach'd discovery, and the pulpit and the stage were the whole world, the eastern and western hemisphere of English public opinion in that most dramatic century. So prevailing was the cast of thought, that poets of a high order, but not eminently dramatic, threw their conceptions perforce into acts and scenes, and conducted their themes, dialogue-wise, under no less penalty than that of being unheard by their own generation. The age of "the general reader" did not come till later: when the excellent custom of printing the text of stage plays was created by the Puritan prohibition of their performance on the boards. In 1647, when the theatres were closed by statute, Shirley in the preface to his edition of Beaumont and Fletcher, congratulates the reader that now "the theatre hath been so much outacted," they have "the liberty to read these inimitable plays."

(2) *Man proposes but God disposes.*

During the Commonwealth while stage-plays were forbidden as godless and profane amusements, the press began first to supply the daily craving of the people, for amusement and information, in the shape of ballads and broadsheets and pamphlets, the precursors of the newspaper and magazine of after times.

The quantity of theatrical writing in the century of the old Drama was enormous. Every theatre was obliged to provide its own stock of plays, and there were no less than seventeen of these theatres in full blast in London alone, during the reign of James I. Not to speak of the utterly rejected, and the unnumbered anonymous multitude, there are given in Charles Lamb, specimens of some thirty famous dramatic writers, from Shakespeare to Shirley, and of these, besides Shakespeare himself, Ben Jonson, and Beaumont and Fletcher, there are certainly six or seven of enduring merit: such as Marlowe, Massinger, Heywood, Tourneur, Webster, and Ford. Of Massinger's thirty-eight works, but eight are known to us; as assets of the literary partnership of Beaumont and Fletcher, or by Fletcher alone, we have remaining fifty-two plays; Ben Jonson's dramas and masques fill seven volumes; Thomas Heywood tells us there were no less than two hundred and twenty plays, "in which he had an entire hand or at least a main finger." Shakespeare's editors have agreed to recognize thirty-seven plays as undoubtedly his, in whole, or in the greater part. Of new plays of merit, no national stage now averages more than one in a season, even if so much; but in that Dramatic Century, there must have appeared three, four, and five original dramas from such powerful writers as we have mentioned—in one and the same season. The public opinion and the public spirit of England were, almost as intimately influenced and reflected then by the stage, as now by the press; and this brings us to inquire into the qualities which characterized this vast body of theatrical literature.

Of the whole body, we may make three parts—Ist. the serious dramal or tragedy; the comedy; and the masque. The masque, a lyrical performance, reached its highest excellence in Milton's "Comus," where it is made to glorify the virtue of maiden modesty; but Ben Jonson, one generation earlier may be supposed to have naturalized it in English. The "Faithful Shepherdess" of Fletcher is a work of genius scarce inferior to Milton's; but it wants the crowning glory of moral purity which hallows "Comus." In "the Midsummer Night's Dream," Shakespeare engrafts a masque upon a comedy, and we can there see that if he had chosen that walk, and attached himself to the private theatricals of the great, instead of serving directly the public, as actor and author, and joint-lessee of the "Globe," he might have as easily attained the first place in that walk, as he did in the legitimate drama. As to Ben Jonson's masques, I quite subscribe to Miss Mitford's judgment, that the exquisite lyrics which burst out from many of his scenes, are worth all the high-piled comedy and tragedy that "Rare Ben" ever wrote to be spouted in the usual fashion, on the private or public stage; but at the same time, we must add Sir Walter's judgment, that the text of those masques is a revolting mass of grossness and sensuality.

The old Comedy of England like most modern comedy everywhere, turns generally on the passion of love. A marriage, a divorce, or a reconciliation of separated spouses or lovers, is the usual *denouement*. Of the fifty-two plays which go by the names of Beaumont and Fletcher, the staple of every one is this apparently inexhaustible passion. Ben Jonson's comedy illustrates rather particular follies and vices, as Volpone, Avarice, and the Alchemist credulity; a remark which is true in a higher degree of Shakespeare. Shakespeare's Comedy like his Tragedy is mostly of the kind Schlegel calls "Mixed;" the former having serious, pathetic, and even terrible scenes; while the tragedy is relieved not infrequently by the grotesque use of humour, as in the well-known scene with the grave-diggers in Hamlet. The mixed Comedy of Shakespeare is as often a moral play, taken in its totality as his Tragedy. Thus the Tempest and Merchant of Venice, teach the doctrine of retributive justice, and bring it home to the popular comprehension with a force that even the Puritan pulpit might have admired; while Cymbeline glorifies the constancy of Imogen; as "the Winter's Tale" illustrates still more wonderfully the sadder story of Queen Hermione, with the self same moral!

In Shakespeare's Comedy love is always an element; sometimes the critical element; but it is not, by any means, the invariable staple of the Poet's resources. As to the freedom of the dialogue in our old comedies, it is to be admitted and deplored, that they are smutched in many places with a coarseness of expression, which renders them unfit for the perusal of this generation. The satyr-like beastliness of Ben Jonson and Fletcher, like indecent statuary in a fair garden, disenchant the loneliest scene, and revolts the most deeply engaged imagination. Even the great Archimandrite from Avon's shore, is not free from such passages—the more's the pity. Of him, however, it may with truth be said, that seldomer than any other of his contemporaries does he depend on the instrumentality of beastly appetite

to give interest to his scenes or persons. His sins are incidents in his dialogue, as they are in even a good man's life; but the keen sense of moral obligation very rarely deserts Shakespeare—and never for any great length of time.

As the serious drama of the Greeks was chiefly drawn from mythological or heroic times, so that of the English, was mainly drawn from historical materials; from Roman and Italian, Spanish and French, and in Shakespeare's hands especially from English history. The taste for Roman subjects, was set by those founders of the regular drama, whose works have been eclipsed by the noonday blaze of one great name;—and who were almost all Oxford or Cambridge men. A revival of that taste was attempted in Addison's *Cato* as a protest against the Charles II or French school of tragedy; and more recently, in our own day, it has had its triumphs in "Virginius" and "Spartacus." But to the greatest of our dramatists is due our greatest debt, for putting our own history bodily before us on the stage. He gives us both the legendary and the middle age periods of British story in scenes and speeches which can never die. To the legendary period, I assign *Cymbeline*, *Lear* and *Macbeth*; to the historic period,— "the chronicle plays," which extend from king John to king Henry VIII,—but especially, the unbroken series of kingly dramas from Richard II to his next namesake,—a period of a hundred years. No one who has not gone over the originals which Shakespeare so closely copied, can imagine how carefully that great genius, "of imagination all compact" as he was, studied his details. Nothing escapes his observation; he seizes upon Hotspur's limping gait, the second Richard's ruddy complexion, Glendower's belief in ghosts and any other apparent trifle, which can give form and reality to his impersonations. It was but a just tribute paid by our greatest orator to our greatest dramatist, when Lord Chatham confessed to have learned the history of England from the pages of Shakespeare's plays. And in so learning he acquired much more,—he was in the very best possible school for the oratory of our language: for I have long thought that a most excellent text-book of English Oratory could be compiled from these dramas under the title of "Shakespeare's Speeches." The Kings, Courtiers, Chancellors, Conspirators and Demagogues of Shakespeare's mimic world, are studies as worthy of every statesman's leisure, as their speeches are of every orator's careful examination and analysis. It may seem a strange recommendation, to send any one to a Playwright for political wisdom; but I feel that I am quite free from exaggeration when I declare, that I know no English book, which contains so many admirable observations on government and governors, as the serious drama of Shakespeare. I have no desire to exalt the Theatre as it was then, or at any time to an undue place among the teaching and formative influences, of national character: but it is only fair to remember, what that influence apparently was as traced on the cavalier character of England, from Sidney to Falkland. And as the restoration neither restored it, nor gave a sequel to the grand old serious drama of England, the loss in another generation began to tell sensibly on the national character. I think there can be very little doubt on any observer's mind that the English character of the first half of the 17th. century was far nobler in every way than that of the second half of the same century, and the first half of the next one.

The play-houses which the Puritans shut up, by act of Parliament in 1647, "as schools of seduction and chapels of the Devil," remained closed for thirteen years. They were in the interior very primitive concerns; the boxes or galleries only were covered in; the pit was open over head; the shifting scene had not been invented; "the wings" only enabling the persons of the drama to go on or off, and the centre of the stage remaining always open. The performances were all by daylight, and the female parts were performed by boys, so long as their voices preserved the necessary tenor. It was only under Sir William Davenant's patent, after the restoration, that the Italian aids of shifting scenery and characteristic costume were introduced. I believe the union of a regular orchestra with the stage work, dates from the same reign as does the invention of the tin thunderbolt by Tom D'Urfey, whose one tragedy, in which the thunder was to play a part, was damned, while the scarcely more loud-sounding mechanical contrivance of the author was, as he thought, unfairly transferred to the more popular texts of Dryden and Nat. Lee.

Sir Walter Scott with that wise considerateness in the bestowal of praise and blame which distinguishes him, speaks in the introduction to one of the cantos of *Marmion* of the literature of the restoration era with the bitterness it well deserves, as the forced-plant of "a ribald king and court," but of John Dryden's principal share in its production, as a subject for regret and sympathy, rather than for censure. He conceives that Dryden if left to himself would have revived for his own, and for all time, the tender and noble legends of the Arthurian romance—

"And Dryden in prophetic strain  
Had raised the Table Round, again,  
But that a ribald king and court  
Bade him toil on to make them sport."

I hope it will not seem an unpardonable presumption on my part if I say, that I cannot subscribe to this judgment of Dryden's relation to our Dramatic poetry, and our literature generally. Every allowance made for the wild unbridled reaction, which had set in against the Puritan *regime*, it does not seem to me, that Dryden was inevitably compelled "to toil on," for the Philistines of the court of Charles II. Well-born, well connected, and well educated, he was not yet thirty, when the Restoration took place, and eight years later he became "a Laureat bold."

"With his but of sherry  
To make him merry  
Who would not be a Laureat bold!"

During the thirty-five years he wrote, willingly enough, for the stage, he produced twenty-seven Dramas, wholly or in most part his own; and twenty-seven worse works never perhaps disgraced any literature. In all, tragic or comic, there are constant gleams of genius; without which he could not write; but in the subjects themselves, he seems to have been as a living critic truly says, in search of "whatever is unholy, unlovely, or of bad report." He lays his scenes, in Pagan and outlandish climes and times, where such things may seem more congruous: he is fond of Moorish and Indian subjects and spectacles; his nearest land in Europe is generally Spain. It is usual to say of a rejected play, that it is "damned," and certainly of Dryden's twenty-seven, it would be hard to find one, that deserved to be saved. Fortunately no one now, thinks of him as a Dramatist; as the ring-leader of the unclean group—Wycherley, Vanbrugh, Congreve, and I am sorry to add Otway and Farquhar, who departed more and more, from the reign of Charles II. to that of George II., from the heroic standards of the older Drama, while they exaggerated the worst abuses of the genius of Ben Jonson and Fletcher.

While this deluge of corruption was sweeping over the minds and homes, and daily lives, of the men and women of England, two reformers arose, who accomplished a literary revolution, almost coincident in time, with the political one, of 1688. In the second last year of the century, after the Caroline drama had had nearly forty year's undisputed possession of the English people, appeared "A Short View of the Immorality and Profaneness of the English Stage," by Jeremy Collier. This was the celebrated polemic all whose hardihood as a controvertist was called for, to carry him through the battle he thus provoked with all the wits and wittings of his day. This "short view" led to a long war: Dennis and Drake and Settle and their tribe swarmed out of Grub street, to the assault of the stout Nonjuror; Congreve and Vanbrugh, were obliged to attempt their own defence; Dryden fallen into the sear, was at first silent, and afterwards, candidly cried *peccavi*. In the midst of the Collier crusade unexpected auxiliaries arrived in the persons of an ex-ensign of the guards, and an actual commissioner of appeals—Richard Steele and Joseph Addison. Not only the whole tone of criticism in the *Tatler* and *Spectator* was on Collier's side, (not avowedly, but substantially), but as an illustration of the possibility of redeeming the stage, instead of utterly destroying it, "Cato" appeared in 1713, and for thirty-five nights was hailed with acclamations such as never had been conferred on Congreve, or even on Dryden, in their days of supreme Dramatic success. The period of our dramatic literature of which Lord Macauley says that it is "never to be mentioned without a blush," "might be almost said to have closed with the success of "Cato": a weak conspiracy however having been attempted by Colley Cibber and others, on behalf of the fallen dynasty of bad taste and worse morality. But even "Comedy became more modest"—to use an expression of Johnson's, and the glory of completing this reformation was reserved for an illustrious succession of Irish wits and humorists Macklin, or McLaughlin, Oliver Goldsmith, Arthur Murphy and Richard Brinsley Sheridan. I have, as I said, no desire to exaggerate the place of the stage in the mental economy of our own, or past age; and the dream of seeing the theatre become a school of morality has never been, and never may be, realized: but men and women, too, need amusement, and one has only to pass a week in any great city, such as London, Paris, or New York, to estimate how powerful an influence for good or evil, this institution still exercises. Our modern dramatic literature has returned, in a great degree, to the standards and style of the old English Drama; but it differs both from the works of that epoch, and those of the Dryden-Cibber dynasty, in being written rather for readers than hearers—for the closet more than for the stage. The dramas of Joanna Bailey, of Byron, Milman, and Talfourd are of this class; those of Sheridan, Kowles, Banim, Lord Lytton, Douglass

Jerrold, are of the class intended and designed to be acted, as the first and main object, of their composition. In both there has been a return to modern historical, and to classic subjects; as in "Riche-lieu," "the Foscari," "Wilhelm Tell," "Virginius," "Spartacus" and "Damon and Pythias." Thus have we returned, if not in tone or in treatment, by a law apparently hereditary, to the same class of subjects, in the reign of Queen Victoria, which excited the enthusiasm of our ancestors, in the reign of Queen Elizabeth.

I have already made allusion to the suppression of stage plays during the commonwealth era. To the same period we can trace the rise of our periodical literature. If it is an accurate estimate, (that of Dr. Craik in his *History of English Literature*) to make, that 30,000 pamphlets appeared during the quarrel between Charles I. and his Parliament, they must have issued from the press at the rate nearly of thirty a week—with the frequency and continuousness of modern periodicals. Such an enormous mass of ephemeral print must of itself have suggested the field for periodical publications, and accordingly we may trace the rise of the newspaper as an English power, to the same years, as the rise and fall of Cromwell. It is true some ingenious artist did indeed impose upon the British Museum certain copies of a pretended "English Mercurie" of the year 1588—the Armada year—which were thought a great prize, till they turned out to be forgeries. But the true date comes sixty years later. When the civil war between king Charles and the Parliament broke out, the daily demand for news in London, led to the establishment of a whole nest of journals, whose strong family resemblance may be read in their names: *News from Hull*, *Truths from York*, *Tidings from Ireland*, the *Dutch Spy*, the *Scots Dove*, the *Irish Mercury*, the *Parliamentary Kite*, and the *Secret Owl*. Then squibs and crackers also flow in profusion about the streets; "Mercurius Acheronticus," says Chalmers', "brought them hebdomadal *News from Hell*; *Mercurius Democritus* communicated wonderful news from the Moon; "the *Laughing Mercury* gave perfect news from the Antipodes; and "Mercurius Mastix, faithfully lashed all Scouts, Mercuries, Spies "and Posts, and other Intelligencers." In some of these originals we can see the venerable ancestry of *Mr. Punch*, and his rivals, and in others, the antetype of the legitimate "news-paper" which lay on your table this morning, at breakfast.

In the ninth year of the next century (1709) our periodical literature took its second great step under the tuition of that ex-Ensign of the Guards, best known to posterity, as Sir Richard Steele. This venture was the tri-weekly *Tatler*, the sprightly parent of a numerous progeny. The *Tatler* was succeeded by its more celebrated first born, and heir, the *Spectator*, early in 1711, as a daily paper, price six pence, of which as many as 20,000 copies were known to have been sold in a day. I need not mention the *Guardian*, and other imitators, till we come to Johnson's *Rambler*, in the middle period of the century,—the second in celebrity of all the offspring of Ensign Steele's fertile imagination and generous spirit. The *Rambler* was a semi-weekly, and was not popular in its day: the sale in only one case, ever exceeded 500 copies, and that was a number written by Richardson the Novelist (No. 97) in which Johnson had no hand whatever. It is not too much to assert that the *Rambler* was, in its kind, quite as well written as the *Spectator*; but it certainly wanted the charming variety, the flexibility, and the novelty, of that greatly successful periodical essayist. However we must remember also that the *Rambler* as we have it, is not the *Rambler* as it appeared every third day of the week: Johnson almost re-wrote it, in after years, making no less than 6,000 changes and alterations, in the first impressions. He lived to see ten large editions of it, in the corrected form, published in England, besides those printed without his authority, beyond the reach of copyright, in Ireland and the Colonies. It has been usually the case, of late, that our writers for the press, commenced in that vocation as very young men; but the ripeness of judgment in the old essayists will be accounted for, when we remember that Steele, Addison, and Johnson, were all three verging close upon the fortieth year of their lives, when they assumed the duties, of voluntary Ministers of Public Instruction.

A successful attempt to combine the newspaper proper, with the periodical essayist paper was made in the last years of George I. (1724), by a Mr. Jenour, in his "Daily Advertiser." This paper was owned in shares, which were sold at public auction at high premiums. In the last decade of this reign and the first half of the next, the use of such a newspaper, combining original articles, domestic and foreign news, and advertisements, as a political lever, began to be felt. It is instructive to find in the middle of Queen Anne's reign, Bolingbroke working the *Examiner*, and Lord Chancellor Cowper, answering one of his attacks, through the columns of the *Tatler*. The *World*, owned by Horace Walpole, Lord Chesterfield, and others (1753 to '56), and edited by Moore, author of the *Gamester*, was another specimen of "a party organ," of a class now so familiar to

us all. Smollett commenced the *True Briton* with Lord Bute at his back, and Wilkes the following week started his *North Briton* with the aid of Lord Temple, and the Pitts. In the *Public Advertiser* of which Woodfall was the manager, Garrick was a shareholder, and was systematically puffed accordingly; but this paper is best known to us as the vehicle of the letters of *Junius*, whoever he was. The sixty-nine letters appeared between January, 1769, and November, 1771, but it is a curious fact to us, that before the letter to the king appeared, at the close of the first year of *Junius*, this writer had made no sensible impression on public attention. The letter to the king by its unexampled boldness, sold off 1,750 extra copies of the *Advertiser*: the letter to the *Duke of Grafton*, 700 extra, and that to Lord Mansfield only 600. It has been shown by Mr. Knight Hunt in his "Fourth Estate" that while the circulation of Woodfall's paper, had been increasing steadily at the rate of 60 per cent before the contributions of *Junius* enriched its columns, it only continued to gain during that writer's connection, at the rate of 12 per cent. The monthly sales rose from 75,000 to 83,000 copies; from say, in round numbers, from less than 3,000 to about 3,300 copies, per day, (sundays and holidays excluded.) By these curious figures—

"Chaps that will na ding,  
And dare na be disputed,"

we see that the traditional immediate popularity of *Junius* must not be taken without salt; that at all events, he certainly did not make at once his own public, as Addison and Steele must have done. Of the gradual development of the London daily press, from the *Junius* period downwards, it will be perhaps, enough for me to mention the long and brilliant reign of James Perry of Aberdeen, as editor of the *Morning Chronicle* from 1771, to 1818; the *Morning Post* started by Sir Bate Dudley in 1772, and still flourishing; the *Herald* commenced by the same gentleman, on separating from his partners in the *Post*, in 1780; and the *Times* begun by Mr. John Walter of Printing House square, on the 1st of January 1788. These are the most conspicuous morning papers: of their older evening contemporaries, we may mention the *Evening Post* (1727); the *Courier*, (date uncertain) which rose during the Napoleonic wars, to a sale of from 8 to 10,000 an evening; the *Globe* and the *Sun*, still flourishing. Cobbett's *Weekly Register*, founded in 1800, and sustained almost single-handed by that great writer for thirty years, was the most eminent of all the weeklies; the *John Bull*, High-Church and Tory, when it counted Tooke, Maginn, and Cooley on its staff, was the most brilliant competitor of Cobbett. With very much that is coarse and occasionally repulsive in utterance, it is doubtful if any one writer of our language, ever sustained for so long a period, so uniformly powerful a paper as Cobbett's *Register* was from 1800 to 1830. His best writings are among the very best, that ever adorned our language. Cobbett may be said to have closed the tribunitary dynasty of Wilkes and *Junius*: the great press Corporations, (especially after the adaptation of steam to the mechanical labors of the art, in 1814), expanded beyond the power of any individual writer however able, or individual publisher however wealthy, to contend with, or contend against.

If we take the *Times* as a sample of our English daily press, we will find that in the eighty years of its existence, its fortunes have been marked by many vicissitudes. The first Walter graduated at Newgate for an alleged libel on the sons of George III, and is said to have stood in the pillory; while the second, some twenty years ago, left a princely fortune to his son, in city and country estates, and a personality sworn under £90,000 sterling. The paper early went into opposition to the all-powerful Pitt, and remained steadily anti-Tory, until the passage of the Reform bill. Under its best known editors, Barnes, Stoddart, and Stirling, during the Regency, and the reign of George IV, it counted Lords Melbourne Russell, and Brougham, and Tom Moore, among its regular contributors; as the *Post* and *Herald* had Lord Palmerston's help, and that of Coleridge, Gifford and Southey. In short most of those we class strictly as literary men wrote for one or other of the political "organs" of the day; as did very many of the actual chiefs of parties.

Of what may be called, the highest class of periodical literature, this century has been prolific. The *Edinburgh Review* dates from 1802, the *Quarterly* from 1809, and "Blackwood" from 1817. I have lately seen a statement in the newspapers, that there are at present above one hundred magazines published monthly in Great Britain. In 1850, there were published in London one hundred and thirteen papers; in England, outside London, two hundred and twenty-three; in Ireland, one hundred and one; in Scotland, eighty-five; in Wales, eleven; in the Islands, fourteen. Of these the political classification was in 1850—liberal, two hundred and eighteen; conservative, one hundred and seventy-four; neutral, one hundred and fifty-five; for which—merely by way of forming an estimate of some sort of total,—if we were to suppose two thousand readers (not subscribers), to be

an average, we would have above one million of persons habitual readers of newspaper politics in 1850. Within the current twenty years, I fancy the proportion must have immensely increased, with the wider diffusion of English education, and the increased cheapness, enterprise and excellence of our present periodical publications. In that respect certainly England has not degenerated. Her periodical literature is at this day, the highest both as to skill, learning, and moral purpose of any the world has yet seen. On this side of the Atlantic, we are for the most part echoes of the English press; and better service we could not render our contemporaries than faithful imitation of the best as yet, unless we were fortunate enough to invent a higher and a better.

If the first century of which I have spoken—from Elizabeth to Charles II,—might be called the century of early English drama, the hundred years of which we are now seeing the '68th, will probably be called hereafter the "newspaper century." There has been a fabled age of gold and iron; but within the compass of our language, the present is entitled to be called, the age of paper. The difficulty is not now so much to tell what the newspaper contains, as what it does not contain; to tell in what affairs it interposes, as to point out any which it overlooks or omits. The pulpit, the senate, the courts of law, the Bourse, the theatre, are all Provinces in this new Dominion. You find last night's fire in one column, and the civil war in China in the next. Here a review of the Chancellor of the Exchequer's budget speech, and there a critique on Verdi's last Opera. In one column, we find chronicled the movements of a dethroned Prince, in another the particular marks of a lost Poodle; sometimes equal prominence is given to a set-to in the P. R. and a contest for the Premiership or the Presidency. There is nothing too high or too low for this,

"—map of busy life—  
Its fluctuations and its vast concerns."

Sometimes trespassing the bounds of a wise discretion Editors will break into the sanctuary of private life, and violate its privileges; in such cases converting the press which ought to be the guardian of society, into its most dangerous enemy: a character in which it is every good man's bounden duty to resist, oppose, and punish, such a perverted press. Those who commit such outrages by such a means, are doubly deserving of punishment; once for the grievous wrong done, and again for having prostituted so noble an instrument as the free press, to so base a purpose. The English periodical press of which I have chiefly taken account, in what I have said, has had during this century of its greatest triumphs, its bitter battles to fight against the political power. In the first quarter of the century, there were few years without from ten to twenty, and sometimes even thirty prosecutions, for "seditious libel in the London courts." These prosecutions gave occasion for the noble arguments of Erskine and Curran, Mackintosh, and Brougham, at the bar; and of Fox, and Sheridan in the House of Commons, in defence of the liberty of the press. In one of his brilliant addresses, on this favorite subject, Sheridan stated to Parliament, that there were, at that moment, in the reporter's gallery, not less than 23 graduates of Oxford, Cambridge, Dublin, and Edinburgh, working their way upward, in the meantime to honorable professions: and there is reason to believe that the proportion of College men has not diminished, on the London journals, of our own day. The mention of stenography reminds me, of how many arts and acquirements, now go to make up a great newspaper. Besides the varied education and experience of the editors and foreign correspondents a daily paper now is the product of metallurgy, mechanics, steam, and telegraphy, as well as of stenography and ready writing. Into the difficult questions of the fairness of anonymous writing, or the reverse, I do not propose to enter; preferring to pass it by, in this place, with the dictum of my favorite oracle in Don Quixote, "that much might be said on both sides of that question." This newspaper revolution, however, has taken place, and will not be turned backwards. We are, whether we will or not, a newspaper generation, born and bred. It is impossible to overrate the social importance of the newspaper. As Burke once observed (I quote from memory), "it is part of the reading of all, and the whole of the reading of many." It brings the ends of the earth daily, to our firesides and our breakfast tables. The poles are no longer "wide asunder," nor are the Antipodes distant, since Ariel has turned editor.—"The deserts wile and antres vast" of Abyssinia, and Central Asia, are not beyond the reach of this hundred-armed and hundred-eyed monster of activity and intelligence. And in the art of distributing, the press is quite as wonderful as in the art of acquiring information. "What is it," asks De Tocqueville, "drops the same thought at the same moment into ten thousand minds?" and he answers, "the Newspaper." I remember a curious estimate made some years ago in New York, was, that if all the copies of a

well known morning paper, issued daily, were spread out quilt-wise, they would cover twenty-seven acres: only fancy what a seed-sheet that was! Before closing, gentlemen, let me add the reflection, or rather the expression of a hope, that as this revolution brings us larger knowledge, it may, at the same time, imbue us with wider sympathies; that it may affect us, as to every good cause, in the same way his newspaper interested the recluse poet Cowper, in the fortunes of the Navigator, Captain Cooke,

"I tread his deck,  
Ascend his topmast, though his peering eyes  
Discover countries, with a kindred heart,  
Suffer his woes and share in his escapes."

Let us hope that it will be among the abiding effects of this new social power, to make public life nobler, and private life purer; to strengthen the arm of just authority, and weaken, or extinguish religious rancor; to be to the weak a shield, and to the strong a curb-rein; in short to make men more manly and women more womanly, and so to hasten the advent of the promised, "good time coming."

## EDUCATION.

*(Extracts from the American Educational Periodicals.)*

### Teaching Rhetoric and Composition.

No man should be expected to perform impossibilities; ought it then to be required of the teacher? Yet, I often think that he who has to teach rhetoric and composition, is commonly in much this position. By this I mean, that two things are required of him at the same time, which are so unlike as to be inaccessible through the same path of effort; and in the pursuit of neither, are the instruments consistent or adequate.

The teacher of rhetoric is expected to establish his pupil in the systematic theory of the art. This requires the use of a text-book or its equivalent.

What, now, is the true province of the text book in rhetoric? simply to unfold to the pupil in a clear, compact, correct, elegant and systematic form, the field, the facts, and the philosophy of the art.

But what does the pupil want of all this? that he may have a rational idea of what he has to do in mastering the art of composition; and that as he proceeds in the acquisition of this latter art, he may be able to frame all his acquirements into a consistent whole. In other words, that he may intelligently set to work in the practice of composition, and may be able to comprehend what he has done and why he has done it. A proper text book in the theory of the art of rhetoric is to the student in composition, what the chart is to the practical navigator. Without it, he can neither determine intelligently the track he is to pursue, nor satisfactorily set forth, either to himself or others, the route he has actually followed; without it, his practical efforts will be purely experimental, unsystematic, *haphazard*; and the attained results will be uncertain, detached, *incoherent*.

But this is practically saying, what else? What to some will seem strange, perhaps, heretical. It is to say that it is not the office of the text book to train the pupil to apply the principles of rhetoric to actual composition. It is to say that while the theory of the art is a necessary guide and light, it is not the art itself, it does not and cannot give the pupil command of the actual art. The power to think, select, reject, arrange, express, adorn, and thoroughly finish in practical composition, it cannot give him. These no book, no teacher, even working mainly with the book, can give him. They lie out of and beyond all such fixed instrumentalities; they are locked up with the powers, workings and struggles of the pupil's own intellect. As in the case of the navigator, the trimming of his sails and the careening of his vessel, so that she shall rightly take the wind, and skilfully thread her way through the tortuous channel; the power to make her do this, is a something altogether beyond charts and sailing directions; lies in the man's own practically acquired seamanship.

Some will doubtless inquire, can not the text book be made to teach the pupil, not only the principles of rhetoric, but also *how* to apply them in actual composition? Can it not, by minute personal directions, by examples, by exercises, make all this clear? But these minute directions will either fail to meet the peculiar wants of individual pupils, or will so cumber a text book with details, as to make it cumbrous, confused, impracticable. Besides, the larger number of those for whose guidance the examples are intended, either only half understand them, or take them altogether in an abstract way, and really fail to recognize them or their like anywhere else, especially in their own writing. It is often almost wonderful to see how generally the less mature and thoughtful class of pupils in rhetoric will turn from their text book to their own compositions, and become at once perfectly oblivious of properties, fallacies, figures, as if all these had now taken upon themselves a new and undistinguishable aspect; or as if an altogether new species of perception and insight were here needed for their detection, exposition or correction.

The truths, as in painting, music, elocution, indeed, every one of the arts of expression, so in composition, every practical rule or fact, must be exemplified to the pupil, and by the pupil in his own experimental exercises. Only as he actually does the thing himself, does he really discover *how* he was to do it, or fully comprehend *what* he was to do? For example, he may have learned from the book, that he should select practical subjects instead of abstract ones; but he will only learn how to obey the rule by having to choose subjects for himself. The book may tell him how to determine and arrange the topics involved in his subject; he will only learn how to do it, by repeatedly attempting to analyze his own subjects. The book may give him rules for the proper construction of his sentences; but only from the actual construction of sentences in continuous composition, will he really learn how to do it, or gain the power to do it intelligently.

The conclusion of the whole matter then is this: The pupil may gain an important knowledge of the theory of rhetoric from the text-book. But for that purpose, he does not want a diffuse, platitudinous four hundred page "course in rhetoric and composition," containing something of everything—capitals, punctuation, false syntax, taste, beauty, sublimity, wit, humor, figures, styles, with an after deluge of examples, exercises, extracts, themes in solid columns, and models in indefinite variation and dilution. We want rather a brief hand book, itself a model of searching analysis, systematic order, shrewd philosophy, compact treatment, and faultless style, and such a book as he should *master*.

And for the rest—the practical art of composition—he wants the living teacher, the daily exercise, the desk, pen, ink and paper; the actual choosing and scanning of themes; the varied limitations of his subject; the thoughtful development of the topics; the careful expressing of his thoughts; the close personal scrutiny of his sentences, phrases, and words, and the nice after-study of his figures. And this must go on from day to day, under the stimulus, the guidance, the criticism of the teacher, until the pupil has completed, to the best of his power, a composition. And then comes another, and still another, until he has acquired such a practical comprehension and skill, as will warrant his being set at the work by himself, to produce one to be afterwards studied and criticised en masse, by the teacher and himself *together*. After this practice has been so continued as to show satisfactory results, he may be required to write, and to criticise, and revise his own work, and upon the direction of his teacher, perhaps repeatedly, before it is subjected to the final scrutiny of both sitting in combined and cooperative judgment upon it.

No provision is here made for the solitary correction of compositions by the teacher, with his pen and red ink, over the sanguinary traces of whose criticism the pupil is afterwards to intelligently wander, or vaguely dream, or angrily complain.

It is, in all elementary training in composition, but little better than baying at the moon or pouring liquor into a rat hole. As for a time, the pupil's practice in compositions is wholly blind and unintelligent, except as carried on under the very eye of the teacher; so for a corresponding period, are the teacher's criticisms wholly unintelligible and ineffective, except as they are orally explained and justified to the pupil in person.—*Rhode Island Schoolmaster*.

### Preponderance of Female Teachers in the United-States.

It is generally admitted that women are naturally better fitted than men for the delicate work of teaching the younger pupils in our schools. It is almost as generally admitted that they are, as a rule, quite as successful as men are with the older children. Nevertheless, there is a very general popular indisposition to pay them, as teachers, in just proportion to the amount and value of the work they do. This is strikingly manifested in the following statistics, which we condense from an interesting paper lately published in the *Tribune*. The averages of monthly wages no doubt exaggerate the relative difference between the pay of the two classes, since the men, for the most part, occupy what are considered the higher positions, and consequently receive the greater pay. Yet, making due allowance for that, the discrepancy between the wages of male and female teachers is much too great to be consistent with justice. According to the last census, there were in the United States 150,241 teachers, of whom 100,000 were women. In some of the states the proportion of women teachers is still greater. In Massachusetts there are six times as many female teachers as males. In Vermont the proportion is five to one, and in Iowa three to one. In the large cities the preponderance of female teachers is most marked. In Chicago there are 24 men to 241 women; in Cincinnati, 60 to 324; in Milwaukee, 14 to 70. St. Louis has 18 to 166, San Francisco 25 to 183. In the eastern states the difference is increased: Boston has only 67 men to 565 women; Providence, 9 to 142; Brooklyn, 27 to 510; Philadelphia, 81 to 1,263; Baltimore, 42 to 335; and Washington, 4 to 56. Louisville has 29 male teachers to 103 women. In this city, in the year, 1860, three-quarters of the public school teachers were women. In 1866 there were only 178 males out of over 2,000 teachers, and the relative numbers have since remained about the same. The cause of this remarkable disproportion is simply that teaching does not afford as good an opening for men as other occupations; and as people will always seek for the best attainable pay and employment, this field has almost been abandoned to women.—*N. Y. Teacher*.

### Too Much Arithmetic.

The discussion on Higher Arithmetic at the meeting of the State Association in Zanesville in July, 1866, took me by surprise. It developed a unanimity of opinion in regard to arithmetical instruction, which was as unexpected as it was gratifying. My own convictions, that much more time was allotted to it than was consistent with the claims of other branches, had long been held and had often been expressed in conversation; but I was not prepared to find that so many others had reached the same conclusion. This opinion is not peculiar to Ohio. It comes to us now from various quarters. Earnest teachers are becoming greatly dissatisfied with the prominence given to arithmetic, and are giving utterance to their conviction that the school period can be made much more profitable than it is.

Let us look at the facts in our own State. According to the last report of the School Commissioner, the total number of pupils enrolled in the schools was 728,990. The report gives thirty-six branches of study, with the number of pupils attending to each. Omitting from the list the alphabet, reading, spelling, and writing, also composition, declamation, drawing, vocal music, map-drawing, and oral lessons, and also German, which was

studied mainly by German children, there are left twenty-five different branches, with the number of pupils engaged in the study of each. These branches are mental arithmetic, written arithmetic, geography, grammar, history, algebra, physiology, physical geography, natural philosophy, geometry, trigonometry, surveying, chemistry, geology, botany, astronomy, book-keeping, natural history, mental philosophy, moral philosophy, rhetoric, logic, Latin, Greek, French.

The number of pupils pursuing these various branches is as follows: Mental arithmetic, 210,036; written arithmetic, 247,552; geography, 156,851; grammar, 96,553; the twenty-one other branches, 32,746. This gives a total of 743,138.

The smallness of this total is surprising. If the pupils were studying each two branches, on the average, the total would have been twice the number of pupils enrolled; that is, 1,456,980, instead of 743,738. Making all due allowance for the number of children that are too young to learn lessons of any kind, one cannot but be surprised at the results stated above. A very large number of the pupils in the public schools are studying each but one study.

If we notice the distribution of the pupils among these various studies, we are still more surprised. Counting mental arithmetic and written arithmetic as one branch, we find that the twenty-five branches mentioned above occupied the attention of the pupils in the public schools in the following proportions: Arithmetic, 61 per cent.; geography, 21; grammar, 13; the twenty-one other branches, 5. Could anything be more astounding? Here are twenty-one branches of knowledge, nearly every one of which is considered indispensable to a well-educated man, to all of which is given only one-twelfth the attention that is paid to arithmetic alone! If other States show statistics like these from Ohio, the assertion which the writer made before the National Association of Teachers at Indianapolis in 1866, was fully warranted by the facts: "That in the case of a majority of the lads in the United States, time enough was *wasted* in the study of arithmetic to give a very fair knowledge of Latin."

Unquestionably, there is a large number of pupils in our schools that study nothing but arithmetic. Some take geography in addition, and a few others study grammar also. In our high schools, and to a limited extent in our grammar schools, the range is wider; but in very many of the ungraded schools the education obtained is most meagre and narrow, as our statistics show.

In arranging a course of study, two questions need to be considered with regard to each branch that is to be introduced. The first is, How much time can be devoted to it? The second is, How can that time be most profitably employed? Besides reading, writing, spelling, etc., and besides the exercises in declamation, composition, vocal music, etc., there are, say, twenty-five branches of knowledge to which it is desirable for the pupil to attend, and a fair knowledge of which not a few do obtain in the twelve years from six or eight to eighteen or twenty. But to accomplish this no one study must receive a disproportionate amount of time. The work must be properly laid out; the field must be carefully surveyed. It is evident that in the mass of our schools, arithmetic has monopolized the ground. Relatively to other branches, this one is largely in excess. With any just regard to the claims of the twenty and odd departments of knowledge whose aggregate time is *five*, while that of arithmetic is *sixty-one*, this last should not occupy the pupils in our schools more than one-third of the time which it now receives.

But if a proper regard to other studies makes it imperative on us to reduce the amount of time now bestowed on arithmetic, the duty is not less manifest from a consideration of the pupil's attainment in arithmetic itself. In answer to the second question propounded above, How can the time which may properly be devoted to a particular study be spent most advantageously? it may be said that so far as arithmetic is concerned, a part of the time should be given to something else. Too much time is spent on arithmetic absolutely, as well as relatively. Not

only is time devoted to it which ought to be given to other things, it is also studied too much without reference to other branches.

Our public schools are divided into two classes. Those of one class have the same teachers through the year; they are graded schools. In these arithmetic is taught systematically and continuously, till the pupil is supposed to be familiar with it. Usually, the pupil goes through a number of books on the subject. He goes over the same ground again and again, though not with the same book or in the same grade. In this way an undue proportion of time is given to this branch. Time is also wasted by keeping the pupil at the higher parts of it, when he has not sufficient maturity of years to enable him to comprehend them.

In the ungraded schools the loss arises in a different way. The pupil does not usually study so many arithmetical works in succession, but he goes over the same ground again and again in the same book. In many cases the pupil attends school three or four months in the winter only. During the summer he forgets partially what he had learned the previous winter, and on the commencement of the next school he begins back. Probably there are thousands of lads in the State who have studied arithmetic for half-a-dozen winters in succession, and yet have never finished the book.

The evil in the ungraded school could be remedied by the teacher more easily than in the graded one. In the latter, the teacher must conform to the course, substantially, though the course may be a bad one. But in an ungraded school the teacher should not allow the pupils to repeat the same work year after year. If the pupil wished to go back, because he had forgotten, still he could be taken rapidly along. In a multitude of cases it would be better to drop the arithmetic entirely for the winter, and substitute something else. This, however, would be regarded as an innovation. Arithmetic is almost sacred in the eyes of many parents. Algebra, geometry, natural philosophy, they know nothing about, and they do not believe they will be of any use to their boys, who expect to be farmers, or business men of some sort.

The most of our schools are narrow. They offer scarcely any variety. Reading, spelling, arithmetic—these are the staples. Sometimes a little geography is added, and more rarely a little grammar. Parents and children seem hardly to have dreamed of the possibility of doing anything outside of this meagre range. And thousands of teachers, I fear, are as ignorant as parents; or, if not absolutely ignorant, have not force sufficient to enlarge the course.

In the graded schools the difficulty is different. The course of study, as a whole, may be broad enough; but usually that part of it below the high school is narrow. The pupil is expected to pass an examination well-nigh perfect in arithmetic, geography, and grammar before he can enter the high school. In order to do this he is compelled to drill and drill on these; whereas, if he could have dropped them, at least arithmetic, and taken elementary algebra in place, and after an interval returned to his arithmetic, he would in a much shorter time have obtained a much better knowledge of arithmetic, and secured very considerable familiarity with algebra in addition.

Regarding, then, the knowledge of arithmetic alone, we ought to abridge the amount of time given to it. When the ground rules have been so well learned that the pupil can add, subtract, multiply, and divide with accuracy and rapidity, and to these have been added denominate numbers, reduction, and fractions, let the pupil take up elementary algebra. The study of this will help him amazingly when he comes back to arithmetic. He will understand better the portions which he has already studied, and his progress in interest, proportion, etc., etc., will be facilitated to an extent almost incredible to one who is ignorant of algebra.

The range of studies in our winter schools ought to be increased. The schools of the State will never approximate to the degree of excellence which they ought to attain, till this is

done. The same may be said of our town schools in the grade below the high school. Put algebra into the grammar school, and perhaps geometry, and perhaps also Latin. Let us give up the idea that a lad who has begun arithmetic must never lay it aside for anything else till he has become master of it. The idea is simply absurd. As well keep a blacksmith's apprentice at work at horseshoes till he is perfect in them, not allowing him to strike a blow at a piece of iron in any other form.

These statistics should be remembered: Arithmetic, 61 per cent: twenty-one other branches, including history, algebra, natural philosophy, etc., etc., 5 per cent.! And this in the enlightened State of Ohio.—*Ohio Educational Monthly*.

### Oliver Optic.

This widely-known and popular writer for children is a school-teacher. Mr. Wm. T. Adams—more generally known under the above name—was born in Medway, Mass., July 3d, 1822, and therefore is forty-five years of age. He became a school-teacher at the age of twenty, and for twenty years occupied that responsible position with credit to himself, and to the satisfaction of the parents whose children were under his charge. For six years he was Principal of the Boylston and Bowditch Schools in Boston, and at one time had twelve hundred scholars and twenty-five teachers under his immediate supervision. But not alone in 'common schools' has he labored; for twenty years he has been a Sabbath-school teacher, and seven years a superintendent. The first volume of the Boat-Club was published in 1854—and since then he has written the various series herein enumerated, the sales of which have amounted to the numbers annexed: Boat Club Series, 6 volumes, sale 100,000 copies; Woodville Series, 6 volumes, 100,000; Army and Navy Series, 6 volumes, 75,000; Riverdale Series, 12 volumes, 125,000; Young America Abroad, 3 volumes (3 out and 3 in process), 25,000; Starry Flag Series, 3 volumes (3 out and 3 in process), 21,000;—total, 36 volumes, with a sale of 446,000 copies. In addition to these, Mr. Adams has written a popular spelling-book, two novels which have been well received by the public, and one volume of miscellaneous stories, thus making *forty volumes* from his prolific pen!—*Illinois Teacher*.

### Where Lies the Blame?

Great complaint is often made, at the present day, that the Natural Sciences have not assigned to them sufficient prominence in the course of studies pursued in our schools; and complaint *might* be made, also, oftener than it is, that where they are introduced and used, they fail to furnish much mental discipline, or to supply the pupil with any considerable amount of practical information. Even more,—they do not often enkindle in the mind of the pupil that love for nature and nature's principles, and those habits of observation and investigation, which constitute so large a share of the benefits derived from this class of studies. Now where, we ask, lies the blame? In attempting to answer this question, somewhat briefly, let it not, by any means, be anticipated, that we are going to re-open the discussion of that vexed question, relating to the comparative merits of the Classics and the Natural Sciences. We have no such intention.

It is quite generally allowed, we believe, by teachers and scholars, that our most enthusiastic and successful naturalists are not made so by a study of the natural sciences, after the manner of the schools; and it is not too much to say that the young student of nature often throws down the text-book in disgust, and goes forth to pluck flowers, chase squirrels and butterflies, or to hunt for pollywogs and dragon-flies. Now there must be something wrong in such a state of things. To healthy minds the aspect of nature is certainly attractive, and the study of her works and laws, inviting.

It seems to us that the source of failure, in this class of studies, is to be found principally in the character of the text-books, and

the methods of teaching. Our text-books are radically defective and wrong; and teachers confine themselves to books too exclusively. They teach books too much, and nature too little. We can but confess that many of those books are artificial in the extreme, and rigidly mechanical, in the treatment of subjects which are, in themselves, easy and natural. They deal too much in the dry details of science, which are principally devoid of interest, except to the professional student; while the more popular treatment of the subjects is often so meagre as scarcely to deserve the name.

In school text-books on Natural History, altogether too much prominence is given to the uninteresting details of classification; and the animals described are mostly foreign, and those which the pupil never sees. The numerous forms of animal life in our common fields and waters, with their instincts and habits, which are always so intensely interesting to the young, are either entirely ignored, or treated in the most superficial manner.

How many students in chemistry can say, that a majority of the subjects treated in the text-book in that branch thoroughly enlist their interest by their method of treatment? They may discourse flippantly and parrot-like in regard to the nature of heat, and the most recent theory thereof, but can they tell you why they blow their cold fingers to warm them, and blow their hot pudding to *cool* it? Many authors would consider such an explanation of the *uses* of knowledge as actually marring a scientific text-book.

Text-books in the sciences are generally too large and voluminous for the purposes for which they are intended. There are honorable exceptions, but they are most plainly in the minority. We have before us two works on Botany. One is a simple treatise, of not much more than two hundred and fifty small duodecimo pages, including the Flora, with numerous illustrations of the vegetable world; and the text gives, in very easy and racy language, the outlines of the science, and abounds in details of descriptions and facts which are attractive, and even fascinating. The Cedar of Lebanon and the Banian of the Orient, are probably not mentioned upon its pages; but the violet and the daisy, the crocus and the honeysuckle, and many common plants, grasses and shrubs, are described in language happily adapted to the understanding of children and youth. It is a book convenient and reasonable in size, and with very few, if any, superfluities.

The other work is a portly octavo volume, of more than eight hundred and fifty pages. It does not, perhaps, profess to treat of the whole vegetable kingdom, but it must include a good portion of that which is known. It gives a view of the subject in general and there is no lack of the minutiae of the science, *scientifically treated*. That it is a perfect thesaurus of Botany, and highly valuable as a book of reference for the expert in the science, is quite evident; but that one student in ten of those who study it will ever make use of a fifth part of the work in school, or even afterwards, is not to be reasonably expected.

In no one of the sciences has there been, comparatively speaking, so little success in making good text-books for school use, as in Astronomy. The science itself is so happily adapted, when properly studied, to extend the faculties of the learner and to give him profitable conceptions of the works of creation and their Great Author, that it seems a pity that he cannot have better helps for the pursuit of so noble a study.

What we have said in regard to the character of text-books in a few of the branches of Natural Science, will apply equally well, we think, to most of those books in other branches not mentioned. When we add to this the fact, too well known, that the teaching is not so good as the books, a bad matter is certainly made worse. We have known a person to teach a class—we beg pardon—to hear the recitations of a class in Botany for a whole summer, without carrying a dozen specimens of flowers or plants before the class during their whole course. Had the pupils been compelled to rely entirely upon the book—even an inferior book—would they not probably have obtained a better knowledge of

the subject than under such teaching? A gentleman of considerable experience in teaching, once remarked that he had taught Chemistry several years, but had never tried any experiments at all. Now it is true that many schools have no chemical apparatus; but it is also true, that with a few simple chemicals and a few glass dishes, a teacher may perform before his class one or two common but useful experiments, every week for a term of three months, and the expense of such experiments will hardly exceed as many shillings as he has fingers on both hands. Of themselves, they are of much more value to the pupil than the same number of recitations without experiments. The real defect in teaching the sciences is, that teachers do not become masters of their subject; they cannot go alone, and therefore they must lean upon the book. Of course, they teach the book, and not the subject. Enthusiastic they cannot be, for they are not thoroughly imbued with the matter in hand; and the class cannot be expected to be greatly interested in that which fails to enlist the interest of the instructor. When the text-book is so large that only a portion of it can be used, such teachers seldom have the knowledge, or the good judgment, requisite to make selections that will be profitable and interesting.

We need, then, text-books that are better adapted for the schoolroom. Let the attractive features of science be made prominent, so that while the book is constructed on scientific principles, it shall read like the *talks* of Agassiz. Let the next new edition be not enlarged, but reduced and pruned of all useless matter and form. Then let the teacher, having mastered his subject, teach what he really knows. The book may form the text for his instructions, but by no means the entire subject-matter. The teacher and the book together should be a kind of guide-board to point the learner onward in the pursuit of knowledge. Where the guide is intelligent, patient and companionable, the wayfarer passes pleasantly and successfully onward in his journey.—*Massachusetts Teacher*.

A. P. S.

## SCIENCE.

### Curious Applications of Electricity.

Robert Houdin, the greatest *prestidigitateur* of modern times, lives in a charming mansion called the "Priory," in the village of Saint Gervais, upon the right bank of the Loire, about one and a half miles from the city of Blois. His dwelling with the spacious grounds surrounding it, are believed by the common people of the vicinity to be controlled by some mysterious agent; and in their eyes the owner has an almost supernatural reputation. This impression has doubtless been produced, in no small measure, by the fact that M. Houdin has made extensive use of electricity to accomplish very many remarkable, and at the same time useful results. Some of these are exceedingly ingenious.

The main entrance to the Priory is a carriage-way closed by a gate. Upon the left of this is a door for the admission of visitors on foot; on the right is placed a letter-box. The mansion is situated a quarter of a mile distant, and is approached by a broad and winding road, well shaded with trees.

The visitor presenting himself before the door on the left, sees a gilt plate bearing the name of Robert Houdin, below which is a small gilt knocker. He raises this according to his fancy, but no matter how feeble the blow, a delicately tuned chime of bells, sounding through the mansion, announces his presence. When the attendant touches a button placed in the bolt, the chime ceases, the bolt at the entrance is thrown back, the name of Robert Houdin disappears from the door, and in its place appears the word "entrez," in white enamel. The visitor pushes open the door and enters; it closes with a spring behind him, and he cannot depart without permission.

This door in opening sounds two distinct chimes, which are repeated in the inverse order in closing. Four distinct sounds,

then, separated by equal intervals, are produced. In this way a single visitor is announced. If many come together, as each holds the door open for the next, the interval between the first two and the last two strokes indicates with great accuracy, especially to a practiced ear, the number who have entered; and the preparation for their reception is made accordingly. A resident of the place is readily distinguished; for knowing in advance what is to occur, he knocks, and at the instant when the bolt slips back he enters. The equivalent distant strokes follow immediately the pressing of the button. But a new visitor, surprised at the appearance of the word "entrez," hesitates a second or two, then presses open the door gradually, and enters slowly. The four strokes, now separated by a short interval, succeed the pressing of the button by quite an appreciable time, and the host makes ready to receive a stranger. The travelling beggar, fearful of committing some indiscretion, raises timidly the knocker; he hesitates to enter, and when he does, it is only with great slowness and caution. This the chimes unerringly announce. It seems to persons at the house as if they actually saw the poor mendicant pass the entrance; and in going to meet him they are never mistaken.

When a carriage arrives at the Priory, the driver descends from his box, enters the door by the method now described, and is directed to the key of the gate by a suitable inscription. He unlocks the gate, and swings open its two parts; the movement is announced at the house, and on a table in the hall, bearing the words, "The gate is—" appears the word "open" or "closed," according to the fact.

The letter box, too, has an electric communication with the house. The carrier, previously instructed, drops in first all the printed matter together; then he adds the letters, one by one. Each addition sounds the chime; and the owner, even if he has not yet risen, is apprised of the character of his dispatches.

To avoid sending letters to the village, they are written in the evening; a commutator is so arranged that when the carrier drops the mail into the box the next morning, the electricity, in place of sounding the chime in the house, sounds one over his head. Thus warned, he comes up to the house to leave what he has brought, and to take away the letters ready for mailing.

"My electric doorkeeper then (says Houdin) leaves me, nothing to be desired. His service is most exact; his fidelity is thoroughly proved; his discretion is unequalled; and as to his salary, I doubt the possibility of obtaining an equal service for a smaller remuneration."

M. Houdin possesses a young mare, whom he has named Fanchette. To this animal he is much attached, and cares for her with the greatest assiduity. A former hostler, who was an active and intelligent man, had become devoted to the art so successfully practiced by his employer in previous years. His knowledge, however, was confined to a single trick, but this he executed with rare ability. This trick consisted in changing the oats of his master into five-franc pieces. To prevent this speculation, the stable, distant from the house seven or eight rods, is connected with it by electricity; so that by means of a clock fixed in the study, the necessary quantity of food is supplied to the horse at a fixed hour, three times a day. The distributing apparatus is very simple, consisting of a square box, funnell-shaped, which discharges the oats in the proportions previously regulated. Since the oats are allowed to fall only when the stable door is locked, the hostler cannot remove them after they are supplied; nor can he shut himself in the stable, and thus get the oats, as the door locks only upon the outside. Moreover, he cannot reenter and abstract them, because an alarm is caused to sound in the house, if the door be opened before the oats are consumed.

This study clock transmits the time to two dial-plates. One, placed upon the front of the house, gives the hour of the day to the neighborhood; the other, fastened to the gardener's lodge, facing the house, gives the time to its inmates. Several smaller dials, operated similarly, are placed in the various apartments. They all, however, have but a single striking part, but this is

powerful enough to be heard over the entire village. Upon the top of the house is a tower containing a bell on which the hours of meals are announced. Below this is a train of wheel-work to raise the hammer. To avoid the necessity of winding up the weight every day, an automatic arrangement is employed, which utilizes a force ordinarily lost. Between the kitchen, situated upon the ground floor, and the clock work in the garret, there is a contrivance so arranged that the servants in going to and fro about their work, wind up the weight without being conscious of it. An electric current set in motion by the study regulator raises the detent, and permits the number of strokes indicated by the dial. This manner of distributing the time from the study. Houdin finds very useful. When, for any reason, he wishes the meals hurried or retarded, he presses a secret key, and the time upon all the dials is altered to suit his convenience. The cook finds often that the time passes very rapidly; while a quarter of an hour or more, not otherwise attainable, is gained by M. Houdin.

Every morning this clock sends, at different hours, electric impulses to awaken three perrons, the first of whom is the gardener. But, in addition, the apparatus forces them to rise, by continuing to sound until the circuit is broken by moving a small key placed at the further end of the room. To do this, the sleeper must rise, and then the object sought is accomplished.

The poor gardener is almost tormented by this electricity. The greenhouse is so arranged that he cannot raise its temperature above 10° C. (50° F.), or let it fall below 30° C. (37° F.) without a record in the study. The next morning Houdin says to him, "Jean, you had too much heat last night; you will scorch my geraniums;" or, "Jean, you are in danger of freezing my orange trees; the thermometer descended to three degrees below zero (27° F.) last night." Jean scratches his head and says nothing, but he evidently regards Houdin as a sorcerer.

A similar thermo-electric apparatus placed in the woodhouse, gives warning of the first beginning of an incendiary fire.

As a protection against robbers, all the doors and windows of the house have an electric attachment. This so connects them with the chime that the bells continue to sound as long as the door or window remains open. During the day time, the electric communication is interrupted; but at midnight—the hour of crime—it is reestablished by the study clock. When the owner is absent, however, the connection is permanent. Then the opening of a door or window causes the great bell to sound like a tocsin. Every body is aroused, and the robber is easily captured.

A pistol-gallery is upon the grounds, and Houdin often amuses himself in shooting. But in place of the ordinary method of announcing a successful shot, a crown of laurels is caused to appear suddenly above the head of the marksman.

A deep road passes through the park, which it is sometimes necessary to cross. On reaching it, no bridge is to be seen; but upon the edge of the ravine, a little car appears, upon which the person desiring to cross places himself. No sooner is he seated than he is rapidly transported to the opposite bank. As he steps out, the car returns again to the other side. This being a double-acting arrangement, the same aerial method is made use of in returning.

"I finish here my description," says Houdin. "Ought I not to reserve some few and unexpected details for the visitor, who comes to raise the mysterious knocker, below which, it will be remembered, is engraved the name of Robert Houdin?"—*College Courant (Yale)*.

## OFFICIAL NOTICES.

### Ministry of Public Instruction.

#### APPOINTMENTS. SCHOOL COMMISSIONERS.

His Excellency, the Lieutenant-Governor, was pleased, by minute in Council, dated 14th ult. to appoint the following School Commissioners, viz:

County of Portneuf.—St. Raymond: Messrs. Michel Paquet and François Déry.  
County of Montcalm.—St. Calixte de Kilkenny: Mr. Damase Thoin.  
Quebec.—St. Roch, North: Messrs. Nicolas Maheux, Jean Lortie, J. Camaléon Richard, Pierre Bouchard, and O. E. Paradis.  
County of Ottawa.—Wright Township: Messrs. Octave Labelle, J. Laframboise, Godefroy Gareau, James Mercier, and Amable Lacroix.  
County of Beauce.—Ste. Marie: Mr. George Bélanger.

#### SCHOOL TRUSTEES.

County of Portneuf.—St. Raymond: Mr. Thomas Sissons.  
County of Lévis.—Notre-Dame de la Victoire: Messrs. Joseph Simons and George Davie.  
County of Napierville.—St. Cyprien: Mr. James A. Manning.

#### DIPLOMAS GRANTED BY THE BOARDS OF EXAMINERS.

##### KAMOURASKA BOARD.

*Elementary School Diplomas.—1st Class (F):* Misses Alphonsine Brillan, Marie Lumena Caron, Marie Guy, and Arthémise Potvin.  
Kamouraska, 4th Feb., 1868.

L. DUMAIS,  
Secretary.

##### PONTIAC BOARD.

*Elementary School Diploma.—1st Class (E.)* Mr. James Simpson.

#### ERECTION OF MUNICIPALITY.

His Excellency, the Lieutenant-Governor, was pleased, by a minute in Council dated 14th ult. to erect the Township of Wright (with Township limits), County of Ottawa, into a scholastic municipality.

#### NOTICES.

Every scholastic municipality which shall not have transmitted to the Bureau, before the 1st September, its annual report of the elections of School Commissioners or Trustees, will be deprived of its share of the grant.

In view of the new postal law making *unprepaid* letters liable to nearly double postage on delivery, all letters or documents, addressed to the Hon. the Minister of Public Instruction, must be *prepaid*.

#### NOTICE TO SECRETARY-TREASURERS.

Secretary-Treasurers are held to transmit, to the Department, all information relative to any changes that may have taken place in the composition of the boards of Commissioners or Trustees.

#### NOTICE TO TEACHERS.

Teachers of Academies and Model Schools must mention in their reports, under their signature, the *date* when they obtained their diploma, in addition to the name of the Board of Examiners or Normal School granting it.

#### SITUATIONS WANTED.

An experienced English teacher (Protestant) having Diploma of qualification and highly satisfactory testimonials desires an engagement. Application may be made at the Education Office, Quebec.

F. E. O'Doherty with common school diploma and good references desires an engagement. Teaches both English and French. Address P. Office, Quebec.

Mr. V. E. Bate, having diploma of qualification, and experience as a Teacher, desires to meet with an engagement. Address, Mr. V. E. Bate, Hemmingford.

## JOURNAL OF EDUCATION.

QUEBEC, PROVINCE OF QUEBEC, MAY, 1868.

### The so-called "American System."

Notwithstanding the now somewhat frequent recurrence of the term "American System" as used by European writers in soliciting public attention to the progress of Education in the United States, the expression can scarcely be regarded as correct if it be meant to imply that there is any essential difference between the principal means had recourse to in Europe and in America. These have been often indicated in this Journal

and elsewhere, and may be stated generally to include "The establishment of Normal Schools, the regular inspection of schools by paid State functionaries, and the examination of candidates seeking employment as teachers" by commissioners or School Inspectors. (1) Whatever varieties of form and of extent may exist in the modes of sustaining and working the educational machinery, the aims and objects, and even the difficulties and obstacles to be overcome, are similar in character—modified of course by local peculiarities—but essentially the same, where ever people have adopted the idea that the State ought to care for the education of all its children.

In the United States, especially in the cities, as Boston and Philadelphia, also in great western cities as Chicago, we find the children of the wealthiest classes trained and taught in the very same public schools as those of the poorest citizens, to a far greater extent than has hitherto been the case in England and France. But this result does not flow so much from what may be styled as purely *American* in the organization and working of those schools as from other causes which would exercise a like influence in other civilized countries. For those schools, more particularly the boys' schools, are so excellent as regards their management and work, and the instructors employed are comparatively so well qualified and so well remunerated for their services, that whatever other consequences may be fairly ascribed to the fact of their being sustained and watched over by the State, their superior quality would anywhere secure for them universal support and set at defiance all competition based on private enterprise. Hence there is no opening for places of education expressly devoted to the wealthier classes, while the poorest may send their children, since they are free and open to all alike.

Some English writers nevertheless appear to attribute the general esteem in which such schools are held by all classes of the people to the operation of the so-called American System, (2) including under the term all the national as well as local arrangements in behalf of Education which exist in the United States. Amongst the principal means, mentioned above as those upon which reliance is now placed whether in Europe or America, for promoting Education, we ought also to recognize an additional element, inferior, perhaps, to none of the others in its influence and efficiency. There has come into being, since the various questions appertaining to National Systems of Education have been made objects of public attention in different countries, a considerable mass of literature of a kind which did not exist before, in the various forms of Official Reports published under state auspices and of numerous other publications issued at stated periods under the names of Journals of Education, Monthlies, Teachers, Educational Magazines, and so forth. Sometimes they are sustained wholly by private enterprise though more commonly in part supported by appropriations from the public chest. They are, in all cases, we believe, conducted by those who are or have been practically concerned in the business of education, whether as State officers or teachers. We need not here specify the nature of their contents further than to observe that educational affairs of every description, as well as articles, statements, theories, and information, having a bearing upon education, constitute almost exclusively the staple matter of these periodicals. What the London Lancet or any other expressly professional publication is to the physician such is or is intended to be the Educational Magazine to the teacher and his coadjutors in the business of Education. Varying, of course, in general tone, and in the ability by which they are characterized, as well as their other intrinsic merits measured with reference to their special purposes, they furnish to their customary readers whatever interests them locally while keeping

them informed upon educational matters elsewhere. Though indispensable to teachers who desire to succeed in their profession they are calculated to be scarcely less useful and necessary to all others who are in any capacity connected with teachers as regards the exercise of their vocation. In this latter category it would be well if we could include as readers not only parents and guardians of youth, the clergy, educational officials, School Commissioners, but likewise all whose function it is to legislate for the whole people.

In this journal, commenced in the year 1857, some space has always been devoted to extracts taken from other similar publications—such extracts, usually, as it has been thought would prove specially interesting or useful to teachers. The main object has been to present—something after the model of the Upper Canada Journal of Education—a good monthly compendium of Literature, Education, Official information and Science, but always keeping in view its professed character as indicated by its title. So numerous now are the Educational Periodicals that the selection of valuable articles in full, for republication in any particular journal, cannot but prove to its conductors far more embarrassing than in the earlier days of this species of literature. But there is one remedy for any defects springing from this cause which will readily suggest itself to our readers; and that is to take for themselves several other journals in addition, to the one in which they are for local reasons most interested.

We print elsewhere extracts from a few of the most recently issued American periodicals, three of which are somewhat old journals, while the other two are of later origin, but all remarkable for their vigorous style and modes of hand-ling educational topics, and dealing with these in an eminently practical fashion, such as we are accustomed to look for in the proceedings generally of our practical neighbours.

OFFICIAL DOCUMENTS.

TABLE showing the Distribution of the Grant for Superior Education for the year 1867, in virtue of the Act 18 Vict., Cap. 54.

LIST. NO. 1.—UNIVERSITIES.

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
McGill College.....	304	2290 00	2221 00
"    "    Contingencies.....		271 00	271 00
Bishop's College.....	16	1637 00	1588 00
Total.....		\$	4080 00

(1) Report of the Superintendent of Education for Lower Canada for the year 1866.

(2) "The Museum" an English Journal of Education.

LIST No. 2.—CLASSICAL COLLEGES.

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
Nicolet.....	179	1637 00	1588 00
St. Hyacinthe.....	215	1637 00	1588 00
Ste. Thérèse.....	203	1311 00	1272 00
Ste. Anne Lapocatière.....	234	1637 00	1588 00
L'Assomption.....	180	1311 00	1272 00
Ste. Marie, Montreal.....	258	1311 00	1272 00
High School of McGill College, for the instruction of 30 pupils named by the government.....	232	1106 00	1150 00
High School of Quebec.....	110	1106 00	1307 00
St. Francis, Richmond.....	112	982 00	953 00
Three Rivers.....	105	900 00	873 00
Morrin.....	12	382 00	391 00
Ste. Marie de Monnoir.....	170	561 00	545 00
Rimouski.....	122	476 00	650 00
Total.....			\$ 14449 00

LIST No. 4.—ACADEMIES FOR BOYS, OR MIXED.

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
Aylmer, (Catholic).....	79	216 00	210 00
Aylmer, (Protestant).....	33	216 00	210 00
St. Andrew.....	114		196 00
Baie du Febvre.....	92	144 00	140 00
Baie St. Paul.....	100	159 00	155 00
Barnston.....	40	144 00	140 00
Beauharnois.....	254	216 00	210 00
Bedford.....	129	98 00	148 00
Belœil.....	96	321 00	312 00
Berthier.....	150	321 00	312 00
Bonin, St. André d'Argenteuil.....	90	216 00	210 00
Buckingham.....	30	144 00	140 00
Cap Santé.....	20	144 00	140 00
Casseville.....	75	144 00	140 00
Chambly.....	88	168 00	164 00
Charleston.....	85	291 00	282 00
Clarenceville.....	68	286 00	277 00
Clarendon.....	65	144 00	140 00
Coaticook.....	42	127 00	123 00
St. Colomban de Sillery.....	164	144 00	140 00
Compton.....	78	144 00	140 00
Cookshire.....	39	144 00	140 00
St. Cyprien.....	135	144 00	140 00
Danville.....	106	216 00	210 00
Dudswell.....	44	144 00	140 00
Dufresne, St. Thomas, Montmagny.....	60	196 00	190 00
Dunham.....	62	286 00	277 00
St. Eustache.....	134	216 00	210 00
Eaton.....	45	74 00	74 00
Farnham, (Catholic).....	244	191 00	185 00
Farnham, (Protestant).....	75	216 00	210 00
Ste. Foye.....	51	144 00	140 00
Freleighsburg.....	51	191 00	185 00
Gentilly.....	105	144 00	140 00
Georgeville.....	45		197 00
Girouard.....	250	146 00	142 00
Granby.....	125	286 00	277 00
St. Grégoire.....	128	144 00	140 00
Huntingdon.....	70	319 00	310 00
Iberville.....	61	147 00	143 00
L'Islet.....	134	216 00	210 00
St. Jean Dorchester, (Catholic).....	161	383 00	371 00
St. Jean Dorchester, (Protestant).....	91	343 00	333 00
St. Jean, Montmorency.....	83	144 00	140 00
Kamouraska.....	91	319 00	310 00
Knowlton.....	40	286 00	277 00
Laprairie.....	200	191 00	185 00
Lotbinière.....	20	128 00	124 00
Ste. Marthe.....	66	144 00	140 00
Missisquoi.....	103	220 00	214 00
Montmagny, St. Thomas.....	213	239 00	232 00
Montreal, Académie Commerciale Cath.....	166	293 00	284 00
Pointe-aux-Trembles, Hochelaga.....	70	286 00	277 00
Philipsburg.....	50		197 00
Quebec, Académie Com. et Lit., St. Roch.....	82	144 00	140 00
Roxton.....	62	126 00	122 00
Shefford.....	185	331 00	321 00
Sorel, (Catholic).....	330	376 00	364 00
Sorel, (Protestant).....	22	128 00	124 00
Stanbridge.....	81	216 00	210 00
Stanstead.....	134	511 00	496 00
Sutton.....	72	181 00	175 00
Sherbrooke.....	78	319 00	307 00
St. Timothée.....	134	129 00	125 00
Vaudreuil.....	83	144 00	140 00
Yamachiche.....	106	216 00	210 00
Academy for Boys, Princeville.....	47		150 00
Total.....			\$ 13557 00

LIST No. 3.—INDUSTRIAL COLLEGES.

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
Joliette.....	151	805 00	781 00
Lachute.....	138	219 00	300 00
Laval.....	112	323 00	313 00
Longueuil.....	267	327 00	317 00
Masson.....	150	873 00	1000 00
Notre-Dame de Lévis.....	176	805 00	781 00
Rigaud.....	132	805 00	781 00
Sherbrooke.....	80	241 00	234 00
St. Laurent.....	275	476 00	462 00
Ste. Marie, Beauce.....	131	323 00	313 00
St. Michel de Bellechasse.....	126	609 00	591 00
Varenes.....	82	241 00	234 00
Verchères.....	117	323 00	313 00
Total.....			\$ 6420 00

LIST No. 5.—ACADEMIES FOR GIRLS.

LIST No. 6.—MODEL SCHOOLS.

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.	NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
St. Aimé.....	156	109 00	106 00	St. Andrew's School, Quebec.....	84	486 00	314 00
St. Ambroise de Kildare.....	110	91 00	89 00	British and Canadian School Society, Montreal.....	392	643 00	624 00
Ste. Anne de la Pérade.....	164	130 00	126 00	Colonial School Society, Sherbrooke.....	86	161 00	157 00
L'Assomption.....	186	130 00	126 00	British and Canadian School Society, Quebec.....	210	705 00	684 00
Baie St. Paul.....	150	109 00	106 00	National School, Quebec.....	180	357 00	347 00
Belœil.....	113	91 00	89 00	Point St. Charles, Montreal.....	172	238 00	231 00
Berthier.....	107	98 00	96 00	Société d'Education, Quebec.....	574	900 00	873 00
Boucherville.....	125	98 00	89 00	“ “ Three Rivers.....	315	486 00	471 00
Chambly.....	110	145 00	141 00	Amer Presbyterian School Society, Montreal.....	120	323 00	313 00
St. Charles, Industrie.....	299	193 00	187 00	Colonial Church and School Society, Montreal.....	959	643 00	624 00
Châteauguay.....	126	91 00	89 00	Sauvages de Lorette, boys.....	50	131 00	150 00
Les Cèdres.....	75	91 00	89 00	“ “ girls.....	50	131 00	150 00
St. Césaire.....	190	122 00	119 00	Sauvages de St. François.....	30	161 00	156 00
St. Clément.....	259	145 00	141 00	Infant School, Lower Town, Quebec.....	70	161 00	156 00
Cowansville.....	45	145 00	141 00	“ “ Upper Town, “.....	90	161 00	156 00
Ste Croix.....	74	145 00	141 00	St. Jacques, Montreal.....	530	804 00	780 00
St. Cyprien.....	165	91 00	89 00	Catholic Commissioners of Quebec.....	526	323 00	313 00
St. Denis.....	130	91 00	89 00	Acton Vale Convent.....	200	74 00	73 00
Ste. Elizabeth.....	111	193 00	187 00	Arthabaskaville.....	65	56 00	56 00
St. Eustache.....	90	94 00	94 00	Bagotville.....	71	56 00	56 00
Ste. Famille.....	79	185 00	179 00	Beaumont.....	64	74 00	73 00
Ste. Geneviève.....	130	91 00	89 00	Beauport.....	77	74 00	73 00
St. Grégoire.....	245	218 00	212 00	Berthier, Montmagny.....	100	74 00	73 00
St. Henry de Mascouche.....	95	91 00	89 00	Bécancour.....	155	56 00	56 00
St. Hilaire.....	86	91 00	89 00	Berthier, dissentiens.....	51	56 00	56 00
St. Hugues.....	90	289 00	280 00	Boucherville.....	130	74 00	73 00
St. Hyacinthe, Sœurs de Charité.....	190	130 00	126 00	Bury.....	47	74 00	73 00
“ “ Sœurs de la Présentation.....	180	130 00	126 00	Baie du Febvre.....	166	74 00	73 00
L'Islet.....	70	130 00	126 00	Cap St. Ignace.....	40	74 05	73 00
Isle Verte.....	96	128 00	124 00	Cap Rouge.....	145	56 00	56 00
St. Jacques de l'Achigan.....	178	193 00	187 00	Carleton.....	60	106 00	103 00
St. Jean Dorchester.....	450	218 00	212 00	Châteauguay.....	80	74 00	73 00
St. Joseph de Lévis.....	225	289 00	280 00	Château Richer, boys.....	76	74 00	73 00
Cacouna.....	125	161 00	157 00	“ “ girls.....	77	56 00	56 00
Kamouraska.....	95	145 00	141 00	Chicoutimi.....	74	134 00	130 00
Laprairie.....	140	91 00	89 00	Côtes des Neiges.....	70	74 00	73 00
St. Laurent, Jacques-Cartier.....	168	193 00	187 00	Côteau du Lac, boys.....	68	74 00	73 00
St. Lin.....	128	91 00	89 00	“ “ girls.....	95	56 00	56 00
Longueuil.....	346	289 00	280 00	Côteau Landing, dissentiens.....	40	56 00	56 00
Longue-Pointe.....	60	145 00	141 00	Côteau St. Louis.....	193	74 00	73 00
Lachine.....	272	200 00	194 00	Deschambault, boys.....	65	145 00	140 00
Notre-Dame de la Victoire.....	185	.....	111 00	“ “ girls.....	74	74 00	73 00
Ste. Marie, Beauce.....	127	161 00	157 00	Durham.....	108	128 00	100 00
Ste. Marie de Monnoir.....	124	145 00	141 00	Eboulements.....	72	74 00	73 00
St. Martin.....	113	91 00	89 00	Ecureuils.....	131	56 00	56 00
St. Michel.....	102	218 00	212 00	Escoumains.....	56	74 00	73 00
Sourdes Muettes de la Providence.....	85	431 00	418 00	Ely Sud.....	66	74 00	73 00
Académie St. Denis, Congrégation.....	173	180 00	174 00	Grande Baie, boys.....	30	74 00	73 00
St. Nicolas.....	95	91 00	89 00	“ “ girls.....	35	74 00	74 00
St. Paul, Industrie.....	54	91 00	89 00	Grande Rivière.....	51	74 00	73 00
Pointe Claire.....	81	91 00	89 00	Grondines.....	98	56 00	56 00
Pointe-aux-Trembles, Hochelaga.....	90	193 00	187 00	Henriville.....	69	56 00	56 00
“ “ “ Portneuf.....	109	193 00	187 00	“ Convent.....	152	56 00	56 00
Rimouski.....	154	218 00	212 00	Huntingdon.....	80	74 00	73 00
Rivière-Ouelle.....	80	166 00	162 00	Iberville.....	136	74 00	73 00
Ste. Scholastique.....	162	97 00	97 00	Inverness.....	36	74 00	73 00
Sherbrooke.....	217	289 00	280 00	Lacadie.....	114	74 00	73 00
Sorel.....	512	333 00	323 00	Lacolle.....	88	74 00	73 00
Terrebonne.....	127	91 00	89 00	“ dissentiens.....	131	74 00	73 00
Ste. Thérèse.....	154	91 00	89 00	Lachine.....	223	74 00	73 00
St. Timothée.....	110	129 00	125 00	“ dissentiens.....	69	74 00	73 00
St. Thomas de Pierreville.....	66	145 00	141 00	Leeds.....	70	74 00	73 00
“ “ Montmagny.....	208	218 00	212 00	Lotbinière.....	21	74 00	73 00
Trois-Pistoles.....	87	128 00	124 00	Magog.....	52	74 00	73 00
Three Rivers.....	372	218 00	212 00	Maria.....	52	74 00	148 00
Vaudreuil.....	87	91 00	89 00	Malbaie.....	75	74 00	73 00
Verchères.....	70	161 00	157 00	Matane.....	65	56 00	56 00
Yamachiche.....	102	145 00	141 00				
Youville.....	98	145 00	141 00				
Total.....	.....	.....\$	10268 00	Carried to 78.....	.....	.....\$	10185 00

## LIST No. 6.—MODEL SCHOOLS.—(Continued.)

## LIST No. 6.—MODEL SCHOOLS.—(Continued.)

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
Carried from 77.....			10185 00
Melbourne, girls.....	68	74 00	73 00
Montreal, Panet Street Protestant School.....	98	74 00	73 00
“ German Protestant School.....	54	56 00	56 00
“ Visitation Street School.....	1130	74 00	73 00
“ St. Patrick's School, Point St. Charles.....	105	74 00	73 00
“ St. Matthew's School, “.....	110	56 00	56 00
“ St. Ann Street Protestant School.....	148	74 00	73 00
“ Académie Ste. Marie.....	120	74 00	73 00
“ Trinity Church School.....	70	56 00	56 00
Nicolet, girls.....	124	56 00	56 00
Percé.....	54	56 00	56 00
Pointe-Claire.....	52	145 00	140 00
Pointe-aux-Trembles, Portneuf.....	68	74 00	73 00
Pointe du Lac.....	111	74 00	73 00
Portneuf, boys.....	64	56 00	56 00
“ girls.....	55		
Quebec, St. Roch South.....	83	74 00	73 00
“ “ “ Convent.....	967	74 00	73 00
“ St. John's Suburb.....	102	74 00	73 00
Rawdon.....	37	74 00	73 00
“ Convent.....	24	74 00	73 00
Rigaud, Convent.....	155	74 00	73 00
Rivière Ouelle.....	50	74 00	73 00
Rivière des Prairies.....	50	56 00	56 00
Rivière du Loup, Maskinongé.....	55	74 00	73 00
“ “ Temiscouata, boys.....	95	74 00	73 00
Sault-au-Récollet.....	75	74 00	73 00
Shefford, West.....	41	74 00	73 00
Sherrington.....	148	91 00	89 00
Somerset.....	32	145 00	140 00
Stanford.....	48	56 00	56 00
St. Aimé.....	143	74 00	73 00
St. Alexandre.....	72	74 00	73 00
St. Anicet.....	75	56 00	56 00
St. André, Kamouraska.....	64	74 00	73 00
Ste. Anne de la Pérade.....	112	74 00	73 00
Ste. Anne des Plaines.....	111	74 00	73 00
Ste. Anne, No. 2, Kamouraska.....	105	74 00	73 00
St. Anselme, Convent.....	101	74 00	73 00
St. Antoine de Tilly.....	31	74 00	73 00
Ste. Brigitte, Iberville.....	57	56 00	56 00
St. Calixte de Somerset, Convent.....	122	74 00	73 00
Ste. Cécile.....	163	74 00	73 00
St. Césaire.....	158	74 00	73 00
St. Charles, Bellechasse, boys.....	74	74 00	73 00
“ “ girls.....	67	74 00	73 00
“ St. Hyacinthe.....	122	74 00	73 00
Ste. Claire.....	75	74 00	73 00
St. Constant.....	120	109 00	106 00
St. Denis, Kamouraska.....	96	74 00	73 00
St. Denis, No. 1, St. Hyacinthe.....	71	74 00	73 00
St. Edouard, Napierville.....	112	74 00	73 00
Ste. Famille.....	55	74 00	73 00
Ste. Foye.....	94	74 00	73 00
St. François du Lac.....	120	74 00	73 00
St. Frédéric, Drummond.....	52	74 00	73 00
Ste. Geneviève, Batican.....	108	74 00	73 00
St. George, Cacouna.....	52	56 00	56 00
Ste. Gertrude.....	43	74 00	73 00
St. Gervais, Convent.....	66	74 00	73 00
“ boys.....	32	74 00	73 00
St. Grégoire, Iberville.....	32	74 00	73 00
St. Henri de Mascouche.....	56	74 00	73 00
“ Hochelaga.....	400	74 00	73 00
“ Dissentients.....	50	74 00	73 00
“ Convent.....	420	56 00	56 00
Carried over.....			\$ 14965 00

NAME OF INSTITUTIONS.	Number of pupils.	Annual grant for 1866.	Annual grant for 1867.
Carried over.....			14965 00
St. Henri de Lauzon.....	80	74 00	73 00
St. Thomas.....	98	74 00	73 00
St. Hilaire.....	82	74 00	73 00
St. Hubert.....	54	56 00	56 00
Ste. Hélène.....	69	56 00	56 00
St. Irénée.....	68	74 00	73 00
St. Isidore.....	87	74 00	73 00
St. Jacques de l'Achigan.....	112	74 00	73 00
St. Jacques le Mineur.....	114	109 00	106 00
St. Jean-Baptiste (Village).....	180	74 00	73 00
St. Jean Chrysostôme, Chateauguay.....	178	56 00	56 00
“ “ Lévis.....	51	56 00	56 00
St. Jean Deschailons.....	70	74 00	73 00
St. Jean Port-Joly, boys.....	40	74 00	73 00
“ “ girls.....	52	74 00	73 00
St. Jérôme, Convent.....	170	74 00	73 00
“ boys.....	108	56 00	73 00
St. Joachim, Two Mountains.....	76	74 00	56 00
St. Joseph, Chicoutimi.....	33	56 00	56 00
“ Lévis.....	160	74 00	73 00
Ste. Julie, Somerset.....	45	56 00	56 00
St. Lambert.....	60	100 00	97 00
St. Laurent, Montmorency.....	110	74 00	73 00
St. Léon.....	59	56 00	56 00
St. Lin.....	117	74 00	73 00
St. Louis de Gonzague.....	120	56 00	56 00
St. Martin.....	130	74 00	73 00
Ste. Martine, boys.....	134	56 00	56 00
“ girls.....	100	56 00	56 00
St. Michel Archange, boys.....	60	74 00	73 00
“ “ Convent.....	150	74 00	73 00
Ste. Monique.....	93	74 00	73 00
St. Narcisse.....	67	74 00	73 00
St. Nicolas, Lévis.....	40	74 00	73 00
St. Pascal.....	103	74 00	73 00
Ste. Philomène.....	78	74 00	73 00
St. Philippe.....	62	74 00	73 00
St. Pierre les Becquets.....	59	56 00	56 00
St. Placide.....	86	74 00	73 00
St. Polycarpe.....	82	74 00	73 00
St. Roch de l'Achigan.....	91	74 00	73 00
St. Romuald de Lévis.....	142	74 00	73 00
Ste. Rose.....	97	74 00	73 00
St. Sévère.....	75	74 00	73 00
Ste. Scholastique.....	92	74 00	73 00
St. Stanislas, Champlain.....	125	74 00	73 00
“ Beauharnois.....	113	56 00	56 00
St. Sulpice.....	93	56 00	56 00
Trois-Pistoles.....	82	74 00	73 00
Ste. Ursule.....	76	56 00	56 00
St. Valentin.....	92	56 00	56 00
St. Vincent de Paul, Convent.....	201	74 00	73 00
St. Alexandre, Iberville, Convent.....	120		56 00
Ste. Angélique.....	87		56 00
Ste. Croix.....	36		56 00
Ste. Cécile, Convent.....	220		56 00
Chambly, dissentients.....	40		56 00
St. Etienne, dissentients.....	104		56 00
Iberville, dissentients.....	77		56 00
St. Gabriel de Brandon, Convent.....	71		56 00
St. Louis de Gonzague.....	105		56 00
St. Luc.....	98		56 00
St. Zotique.....	75		56 00
Three Rivers, dissentients.....	42		56 00
Total.....			\$ 19218 00

**Books and Publications Received.**

Loomis' Treatise on Meteorology with Tables, Plates; p. 305, Harper & Brothers, N. Y. 1868.

"The Mastery Series" for German and English and for French and English with the "Handbook to the Mastery Series" by Thomas Prendergast; D. Appleton & Co., N. Y. 1868.

Set of "Phonic Charts" for self training in the sounds of language; by N. A. Calkins, Harper & Brothers, N. Y. 1868.

**MONTHLY SUMMARY.****EDUCATIONAL INTELLIGENCE.**

—The Duke of Marlborough rose (March 24) to call the attention of their lordships to the subject of Public Elementary Education. The noble duke spoke in substance as follows:—There is scarcely, I believe, any subject which ought to be so tenderly treated as that of Education. Whether we consider its great and vital importance, or whether we consider the vast amount of feeling and of voluntary effort that is enlisted in its support, we must, upon every side, acknowledge that it is a subject of the deepest public interest, and one in which if we were to take a false step, or to arrive at a hasty conclusion, we might be committing an irretrievable error, and instead of forwarding these objects which we must all have at heart, we might be doing irremediable mischief. If there ever were a subject upon which I might claim and entreat that the views of party politics might be laid aside, it is upon this. The Government, in considering this subject, have felt that, in order to propose any measure to Parliament which would be of a satisfactory character it would be necessary to take a wide and full view of the whole subject, so that any proposal they might submit to Parliament might have the characteristics of a national system—a system which might become part of our permanent legislation. We are not now beginning for the first time to deal with this question. The task that is imposed upon us is to review what is already in existence, to remember the great interests that are already in the question, and to survey what has already been done. In asking you to change to some extent the present system, it is only fair to consider at the outset what is the system and what are the wants which we have to supply. From the report of the commissioners of 1861—a report which I am surprised to find has been a good deal overlooked in the various discussions upon this subject—I find that in that year the number of children whose names ought to have been on the school books, according to the population, was 2,655,000, while the actual number of the children of the poor who were receiving elementary education in day schools was 2,213,000. Comparing that proportion with the proportion existing in Prussia, which is commonly supposed to have attained such great success in this matter, we find that whereas Prussia has one in six of the population at school, this country had in that year one in seven or one in eight. The commissioners went on to state how rapid and how great had been the increase of Education in this country since the year 1803. In that year there were 1 in 17½ of the population at school; in the year 1818, there were 1 in 17¼; in the year 1833, there were 1 in 11¼; in 1851, there were 1 in 8.36, and in 1858, there were 1 in 7.7. We cannot deny, therefore, that great progress has been made in Education. I do not contend that great wants do not exist in this case; but I contest the notion that the educational wants of this country are so very enormous as they have been represented to be.

It is the intention of the Government to ask Parliament to enable Her Majesty to appoint a Secretary of State, who shall have the whole range of educational matters under his direction and control, and not only administer the Grants now administered by the Privy Council, but shall on his own responsibility look into all the various matters connected with the education of the country, and propose to Parliament those schemes which may be thought desirable. We also, therefore, propose to insert in the Bill those portions of the Revised Code which relate to the distribution of the Grants, and the terms on which the Grants are made.

Earl Russell thought it was not desirable to stereotype the regulations of the Committee of Council, but that opportunity should be given for altering them from time to time. He thought the Revised Code had, in many respects, worked well, but it had been productive of some evil, and means ought to be taken to raise the pupil teachers to something like their former number. There was another question in which the whole country took an interest—that of rates. Mr. Norris, who had recently been examined on the question of Education, was asked what was the reason that, in certain districts, they had no schools; and he stated that it was on account of the apathy which prevailed there as regarded the matter of Education. He hoped that the Minister of Education, whose appointment he contemplated, would be able to establish a provision for rates. He thought that towns like Manchester and Birmingham should be at liberty to impose a rate. This power of primary Education was of

the greatest importance. He was very much struck with the observation of a gentleman at Birmingham, who stated his belief that the general conclusion to which the facts before them led, was that they needed power to establish a more comprehensive system than they at present possessed in order to bring children into the schools, and also to make them attend with regularity. He believed that if they had classes for Technical Education and the higher classes of instruction, and if those who went to the classes were not well grounded in the primary Education of reading, writing, and arithmetic, they would make no progress in Technical Education. He would not discuss the subject further at the present time, but he would do all he could to help the noble duke to pass the Bill, believing that it was a step in advance, and that the measure was one for the public benefit at present, and would lead to a more general system.

Mr. Whitworth the well known engineer, has signified to Government his intention of founding thirty scholarships worth £100 a year each, to advance industrial education. They are to be given by competitive examinations in mechanics and the cognate sciences, the object being to "bring science and industry into closer relation," or, as the Duke of Somerset put it, to make scientific foremen. The magnificent gift has been duly acknowledged, and was on Friday se'nnight, the subject of eulogistic discussion in the Lords. Lord Granville said no such benefaction had ever been made, and all the Peers hoped the example would be extensively followed. We look therefore, for an immense subscription from the House of Peers, which could afford £10,000 a head, or £600,000 quite easily. That sum would be quite sufficient, and half of it would found a good system of scientific education.

The following advertisement is from the *Times*: "Education.—Wanted, by a father, a school, where his son may receive an education to fit him for a manly and useful life, without any humbug as to nations dead and buried two thousand years ago."

There are 170,000 children in London who ought to be at school but are not, and there are eight London parishes with a population of above 7,000 where there is no school at all. The Archbishop of Canterbury, at an educational meeting at Tunbridge Wells, said, the denominational system must be maintained, and the Bishop of Oxford argued against the compulsory attendance of children.

**LITERARY INTELLIGENCE.**

—There has recently been erected over the grave of Alexander Smith, in the Warriston Cemetery, Edinburgh, an Iona or West Highland cross, of Binny stone, twelve feet in height, and set in a massive square base. In the centre of the shaft is a bronze medallion of the poet, by Mr. W. Brodie, R.S.A. Above it is the inscription, "Alexander Smith, Poet and Essayist," and below are the places and dates of his birth and death.

*Irreparable Loss by Fire.*—Science and literature have sustained a terrible loss in the destruction by fire of the immense establishment of the Abbe Migne, at Paris, with its treasures of erudition. There were in it manuscripts worth their weight in gold; and compilations, the result of thirty or forty years' labor of the best known savans of France. The stock was valued at twelve million francs. This was an ecclesiastical library and printing establishment, the largest of the kind in the world; and manuscripts of the first ages of the church have been destroyed in it. The fire took in the type foundry. Eight hundred persons have been thrown out of work by this catastrophe. The establishment was insured for six millions of francs in thirty-three insurance companies,

**METEOROLOGICAL INTELLIGENCE.**

*The Moon and the Weather.*—Meteorologists have laboured hard to verify the popular belief regarding the moon's influence on the weather; but their researches have generally led to negative results. Mr. Park Harrison, one of the latest and most persistent inquirers into the subject, has, however, just arrived at a more positive conclusion, one of which is interesting as a matter of science, and curious because it is paradoxical. The collation of a large mass of observations has revealed the fact that, when the moon is at first and third quarter, the temperature of the earth's surface is respectively above and below a certain average, so that there is manifested a tendency in the moon to warm the earth at first quarter, and cool it at last quarter, slightly, it is true, but still perceptibly. Now, at first quarter, the sun has been shining a short time, and at last quarter a long time on the face of the moon turned towards the earth. Hence—and here is the paradox—the cool moon warms the earth, while the warm moon cools it. A perfectly philosophical explanation can, however, be given of the anomaly. The fact is that the moon, by warming the upper regions of the atmosphere, lightens or evaporates the clouds floating therein, the earth's heat is thus permitted to radiate and pass away into space, and the lower strata of the atmosphere in consequence become cooled. This effect reaches its maximum at the time of the moon's third quarter and hence the comparatively high and low temperature at these times.

*Meteorological Report for March, 1868, Quebec.*—Lat. 46°48'30" N., Long. 4h. 44m. 49s. W., height above St. Lawrence 230 ft., by Sergeant John Thurling, A. H. Corps.

BAROMETER.				THERMOMETER.					HYGROMETER.				RAIN.		OZONE.		WIND.			CLOUD.		
Mean for month.	Highest on the 11th.	Lowest on 13th.	Range.	Highest on 31st.	Lowest on 2nd.	Range.	Mean of highest.	Mean of lowest.	Mean for month.	Mean of dry bulb.	Mean of wet bulb.	Mean dew point.	Mean humidity.	(c)		Mean at 9 a.m.	Mean at 3 p.m.	General direction.	Estimated force.	Horizontal movement.	At 9 a.m.	At 3 p.m.
														Number of days fell.	Amount collected.							
(a) 29.776	30.376	29.326	1.040	59°	-21°	80°	59°7'	16°7'	28°2'	30.1	21.7	17.5	57	6	(b) .90	1.0	1.0	W.	1.1	124.2	5.4	5.4

We have received the early proof sheets of corrected results, for the month of *January*, compiled from the returns of daily observations at ten Grammar School Stations, Ontario, together with the abstract for St. John, N. B., as prepared for publication in the *Ontario Journal of Education*. In this issue of our Journal we are unable to do more than acknowledge our indebtedness to the Educational authorities at Toronto for their courtesy in furnishing those tables.

*Meteorological returns* of observations at ten school grammar stations in Ontario for the month of February have also been received.

- (a) The Barometric readings were reduced and corrected.
- (b) The amount for the ground; at 10 feet elevation the amount was .72 inches.
- (c) Snow fell on 6 days.

*Abstract of Meteorological Observations.*—From the Records of the Montreal Observatory, lat. 45°31' North long; 4h. 54m. 11 sec. West of Greenwich, and 182 feet above mean sea level. For April, 1868. By Chas. Smallwood, M.D., LL.D., D.C.L.

30.034 inches; and the lowest was on the 3rd day, and indicated 28.869 inches—showing a range of 1.165 inches.

The amount of Rain which fell during the month was small, and was 0.241 inches, which was by 0.984 inches than the amount which fell in April, '67.

The amount of Snow which fell was 14.93 inches, which exceeded by 7.03 inches the amount which fell last April, (1867.)

— Meteorological Report for month of April, 1868, Quebec, Latitude 46°48'30" N., Longitude 71°12'15" W., height above the St. Lawrence, 230 feet; By Sergt. John Thurling, A. H. Corps.

DAYS.	Barometer corrected at 32°			Temperature of the Air.			Direction of Wind.			Miles in 24 hours.
	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.	
	1	29.289	29.298	29.342	42.7	42.2	39.7	W	NE	
2	.350	.350	.365	30.3	32.8	29.2	NE	NE	NE	91.11
3	.461	.460	.460	23.0	36.2	30.0	W	W	W	86.20 b
4	.250	.251	.261	32.0	37.1	28.9	WSW	WSW	WSW	104.24 c
5	.399	.461	.546	13.0	29.7	17.3	NEN	NEN	W	121.12
6	.650	.698	.711	12.9	36.4	21.7	W	W	W	194.10
7	.551	.347	.000	27.7	30.3	29.1	SW	SW	SW	101.24 d
8	28.867	.001	.275	29.7	40.3	23.0	W	W	W	99.20 e
9	29.811	.975	30.000	14.9	33.1	23.1	W	W	W	127.10
10	.975	.823	29.700	20.0	39.9	26.3	SW	SW	SW	99.29
11	.523	.410	.299	21.7	46.7	33.6	W	W	W	67.42
12	.591	.650	.761	23.2	33.4	23.1	wbyN	nbyN	wbyN	89.90 f
13	.987	.999	30.034	14.9	40.3	30.9	N	W	W	64.21
14	30.000	.801	29.600	26.9	46.5	40.1	WSW	SW	SW	41.11
15	29.501	.302	.300	38.5	61.1	55.0	E	S	SW	67.74
16	.199	.201	.275	52.1	68.2	49.4	WSW	WSW	WSW	67.16 g
17	.301	.300	.299	49.6	68.1	43.4	W	W	W	69.12
18	.562	.747	.800	36.0	37.4	36.2	wbyN	wbyN	wbyN	244.17
19	.998	.874	.811	40.6	61.3	43.0	W	W	W	201.17
20	899	.671	.672	42.8	63.1	49.7	W	WSW	WSW	198.24
21	.701	.649	.542	42.3	70.3	51.6	W	W	W	97.27
22	.801	.843	.851	43.0	60.7	44.1	NSW	W	W	114.10
23	.850	.979	.999	22.9	40.3	31.9	NE	NE	NE	91.11 h
24	30.002	.999	.995	31.6	43.4	40.4	W	W	W	121.10
25	.041	.960	.911	35.0	56.1	41.7	NE	NE	NE	204.20
26	29.975	.967	.951	34.0	54.4	32.9	NE	NE	NE	77.16
27	.950	.911	.855	33.8	53.0	37.0	E	E	NE	114.10
28	30.000	.959	.946	33.0	60.1	43.0	NE	NE	NE	97.12
29	29.950	.746	.634	37.3	66.2	52.9	NE	S	S	71.10
30	.297	.150	.456	43.4	54.1	34.3	S	WSW	NE	51.24 j

Barometer, highest reading on the 25th. ....	30.140 inches.
lowest " " .....	28.920
range of pressure.....	1.220
mean for month, corrected and reduced.....	29.664
Thermometer, highest reading on the 21st.....	66.2 degrees
lowest " 6th " .....	2.0
range in month.....	64.0
mean of highest.....	44.9
lowest.....	20.2
daily range.....	24.7
for month.....	32.5
maximum in sun's rays, black bulb, mean of.....	85.5
minimum on grass.....	82.3
Hygrometer, mean of dry bulb.....	35.4
wet bulb.....	30.8
dew point.....	23.4
Elastic force of vapour.....	.125 inches.
The weight of vapour in a cubic foot of air.....	1.4 grains.
Weight of vapour required to saturate do .....	1.0
Mean degree of humidity (Lat. 100).....	60
Average weight of a cubic foot of air.....	543.8 grains.
Wind, general direction of.....	North West.
mean daily horizontal movement of.....	152 miles.
Cloud, mean amount of cloud (0 10).....	5.3
Ozone, mean amount of (0 10).....	1.0
Rain, number of days it fell.....	4
amount collected on ground.....	0.95 inches.
Snow, number of days it fell.....	11

RAIN IN INCHES.—a, g Inapp; j 0.241.

SNOW IN INCHES.—b 1.46; c, e Inapp; d 6.09; f 0.24; h 7.14.

The mean temperature of the month was 38.95 degrees, showing a decrease in Temperature of 2.85 degrees compared with the mean temperature of April, 1867, when the mean temperature was 41.80 degrees.

The *Isothermal* for Montreal for the month of April, reduced from observations taken during a series of years, has been fixed at 45.80 degrees, showing that in the present month of April, the temperature was 6.85 degrees colder than the mean annual average temperature.

The highest reading of the Barometer was on the 13th day, and was

*December in Australia.*—The thermometer at the Melbourne observatory reached 104 degs. in the shade on the 19th. An instance of the extreme variability of temperature in the climate is afforded by the fact that at Grant, on the Crooked River, on the 10th, the heat was very great, the glass standing at 88 degs. in the shade—an altitude uncommon in that Alpine locality. On the 12th, only two days afterwards—the temperature was at freezing point and snow was lying six inches deep on the plains.