Technical and Bibliographic Notes / Notes techniques et bibliographiques

copy availa		•			_										illeur rer. L	•	•	•			
may be bib		•	-			ny									uniq		-		ue		
of the imag	-	-			-	2				-					modi			•			
checked be		ne usua	ii memoa c):	my, are	3				reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués											
										i-dess						0 0011		1403			
1 1	ured cover								Γ	\neg	Coloui	red pa	ges/								
Couv	erture de c	couleur							L	۱ لـــــا	Pages (de cou	leur								
	rs damaged								Γ	1	Pages o	_	•								
Cou	erture end	ommag	jée						L		Pages 6	endon	nmagé	સ્ટડ							
Cove	rs restored	and/or	laminated	/					Γ		_				aminat						
Cour	erture rest	aurée e	t/ou pellic	ulée					L	F	Pages I	estau	rées e	t/ou p	ellicu	lées					
Cove	r title miss	ing/							Γ	/ 1	_				ed or						
Le ti	tre de couv	verture	manque						[7		Pages o	décolo	rées,	tache	tées o	u piqı	ıées				
Colo	ured maps,	/							Γ	7	Pages o	detach	ed/								
Carte	es géograph	niques e	n couleur						l_	<u></u>	Pages o	détach	iées								
Colo	ured ink (i.	.e. othe	r than blue	or bla	ck)/				٢	75	Showt	hroug	h/								
Encr	e de coulei	ur (i.e. a	autre que b	leue o	u noire	e)			Į.		Fransp	arenc	е								
Colo	ured plates	and/o	r illustratio	ns/					Γ	7	Quality	y of p	rint v	aries/							
Plane	ches et/ou	illustra	tions en co	uleur					L	<u>v</u> (Qualité	é inégi	ale de	l'imp	ressio	n					
1./ 1	nd with oth								Γ	• / !	Contin				•						
LV Reli	avec d'aut	tres doc	cuments						L	<u>v</u> F	Pagina	tion c	ontin	ne							
1 / 1	t binding m		se shadows	or dis	tortion	n				1	nclud		,,	•							
	g interior m liure serrée	_	rauser de l'	ombre	വ ർം	la			L	(Compr	end u	n (de:	s) ind	ex						
	rsion le lor	•				•••				٦	Γitle o	n head	der ta	ken fi	rom:/						
Plan	k leaves ad	dod d	ina rastara	tion m		•				ı	_e titr	e de l'	en-têt	e pro	vient:						
1 1	in the text.		_			•			Г		Γitle p	age of	issue	/							
	been omitted from filming/ Il se peut que certaines pages blanches ajoutées						L	Page de titre de la livraison													
	paut que ca d'une resta		. •		•				Г	<u> </u>	Captio	ກ of is	ssue/								
	, lorsque ce		possible, d	es pag	es n'or	nt			L		Titre d	e dép	art de	la liv	raison						
e ssq	pas été filmées.										Masthead/										
											Générique (périodiques) de la livraison										
Addi	tional com	ments:	/	Pag	inati	on is	s as i	follo	ws: [i]-ii	i, [7	39]-7	54 , i	ii-i	v p.						
Com	mentaires s	supplén	nentaires:																		
This item i	s filmed at	the red	luction rati	o chec	ked be	wols															
Ce docume	nt est film	é au tai	ux de rédu	ction in	ndiqué	ci-de	ssous.														
10X		14X		~	18X				22X				26X		 ,		30×				
																	1				
	12X		16X		·	············	20X				24X		·		28X	لير			32×		

U. W. O. LIBRARY Educational Week

Vol. II.

THURSDAY, NOVEMBER 19TH 1885.

Number 47

TEACHERS WANTED.

TEACHERS WANTED FOR THE TOWNSHIP
Town Hall on Saturday, 28th November, to make appointments. Applicants to furnish certificates, date of same, state salary, and address.

J. KEATING, Secretary,
Oil City, Ontario.

TEACHERS—TWO—FOR THE IROQUOIS HIGH School—a Head Master to teach Classics, Chemistry, French and English subjects; and Assistant for Mathematics, Writing, Bookkeeping and Drawing. Applicants to send testimonials and state salary expected to the undersigned on or before December 1st, 1885. John N. Tuttle, Secretary I.H.S. Board, Box 124.

SCHOOLS.

BUSINESS TRAINING.

DAY'S COMMERCIAL COLLEGE.—ADVANTAGES: Individual instruction by experienced accountant; thorough training; limited attendance.

JAS E. DAY, Accountant, 94 and 96 King STREET WEST, FORONTO.

GALT COLLEGIATE INSTITUTE

Candidates prepared for First, Second and Third Class Certificates, and for Law, Medicine and Junior Matriculation, with honors in all departments. Literary Society, Football and Cricket Clubs, beautiful grounds, a well-equipped Gymnasium. Drill and Calisthen: 'ught. For catalogue apply to

THOS. CARSCADDEN, M.A., Principal.

DENGOUGH'S SHORTHAND AND BUSIToronto. Shorthand, Type-writing, Business Forms, and
Correspondence. Experienced and Practical Feachers.
Thorough Tuition. Rates reasonable. Thos. Bengouch,
(Official Reporter, York Co. Courts), Principal. Gro. Bengough. Sec. Mary Bengough, Type-Writing Supt.

McILWAIN'S SHORTHAND INSTITUTE.—Young Men and Women dependent upon themselves cannot do better than to learn this easy method of Shorthand. Many have mastered this system in two months. We aid our pupils in securing profitable situations. 30 King St. E., Toronto.

MISCELLANEOUS.

RELIABLE WATCHES FIRST-CLASS JEWELLERY AND ELECTRO-PLATE.

B. WINDRUM

(Late London and Paris House).

31 KING STREET EAST, UP STAIRS

+ COMMUNION WARE +

He has Watham and Swiss Watches at all prices, in gold and silver cases, French and American Clocks, English and American Jewellery, Electro-plated Spoons and Forks, etc. Repairing Watches and Jewellery a specialty.
Foot Balls, Boxing Gloves, Cricketing Outflt and Tennis Goods.

A Good Investment.—It pays to carry a good watch. I never had satisfaction till I bought one of Weech & Trowern's reliable watches, 171 Yonge Street, east side, and door south of Queen.

SUNDAY SCHOOL

NEW AND COMPLETE CATALOGUE JUST READY.

Sent free on application to

S. R. BRIGGS, Toronto Willard Tract Depository,

COR. YONGE AND TEMPERANCE STS.

BOOKS.

JUST RECEIVED, ANNUAL VOLUMES, 1885.

Rand of Hope Review, 35c.
Child's Own Magazine, 35c.
British Workman, 5oc.
British Workman, 5oc.
Child's Companion, 5oc.
Child's Companion, 5oc.
Child's Companion, 5oc.
Children's Friend, 5oc.
Friendly Visitor, 5oc.
Infants' Magazine, 5oc.
Chatterbex, \$1. Sunday, \$1.
Little Wide Awake, \$1.25.
Hoy's Own Annual, \$2.
Every Boy's Annual, \$2.
Every Boy's Annual, \$2.
Voung England, \$2.25.
The Quiver, \$2.50.

JOHN YOUNG, Upper Canada Tract Society, 48 King Street West.

XMAS PRIZE BOOKS.

Ontario School Book Lipot, Whitby, Ont.,

Have now in stock a very large line of MISCLANEOUS BOOKS, suitable for PRIZE BOOKS, BIRTHDAY GIFTS, XMAS PRESENTS, etc. Teachers and School Boards will be liberally dealt with. Write for catalogue and terms, or, if convenient, call personally.

STAFFORD & WILLCOX, DRUBERLL'S BLOCK, WHITBY, ONT.

Afammoth Book Emporium, R. W. DOUGLAS & CO., (Successor to A. Piddington,) DEALERS IN ANCIENT AND MODERN BOOKS.

School Books a Specialty. Stationery, Etc.
The Most Extensive and Valuable Retail Stock in Canada
250 YONGE ST. TORONTO.

ORDER your books (new or second-hand) from DAVID BOYLE, 253 Yonge Street, Toronto

MISCELLANEOUS.

FOOTBALLS.

LUMSDEN & WILSON,

Price list, Rubbers alone, Melntosh's best make: No. 1, 65c.; No. 2, 8oc.; No. 3, 95c.; No. 4, 51 to; No. 5, 51.25. Football Inflators, \$1.10 each; Football Shin Guards, \$1.75 per pair.

Any of the above mailed free to any address in the Dominion on receipt of price. During the last three years we have sent enormous quantities of these goods by mail, from Nova Scotia to Alberta, and as yet not one has gone astray.

LUMSDEN & WILSON, Importers of Foetball Goods. Seaforth, Ontario. PHOTOGRAPHIC ART STUDIO,

J. FRASER BRYCE,

J. FRASER BRYCE,

107 Eing Stroot Woot, Teromto.

SUGGESTION.—Teachers and students! Having returned from your holidays thoreughly rejuvenated, now is just the time to get your portraits taken. We have just completed extensive alterations, which gives us the best equipped Photo Studio in the Dominion.

HOWIE'S DETECTIVE AGENCY,

HOWIE'S DETECTIVE AGENCY,
Twenty years' experience. 13 Mehmla St., Toronto, Ont.
NUMBERINGES:
To apple, and Dougall &
or, Henderson & Small Bayesow & Morson, Murphy & Murlocke,
I. Frace, H. B. Oder, Harrister, Toronto: Thos. Robertsor,
C., M.P.F., John M. Gibram, M.P., Barrister, John Lrear, County
town Attorney, Edward Martin, QC., Carcallen & Cahla, Rhond
fartin, Frank McKelkin, Barristers, Hamilton; Chiefs of Police of
Amilton, London, Belleville, Calt and Dandax
M. HOWIE, Manager.

BOOKS.

NOW READY.

KINDER - UND HAUSMARCHN

GEBRUDER GRIMM,

Selected and edited, together with SCHILLER'S

DER TAUCHER,

With English Notes Glossaries, and Grammatical Appendices, by

W. H. VAN DER SMISSEN. A: M:

Lecturer on German in University College, Toront

Crown 8vo., Cloth, 224 pp., \$1.

WILLIAMSON & CO.,

Publishers, Toronto.

THE PRACTICAL BOOK-KEEPER.



This is the most practical work on the Science of Accounts and Business Correspondence yet published. It differs in some respects from other books on these subjects:—ist, in its simplicity; 2nd, in its completeness; 3rd, in the practical character, or its contents; 4th, in the practical method in which Business Correspondence is treated.

AN INVALUABLE TEXT BOOK. Get a Copy and be Convinced. Price, \$1.00.

Address, CONNOR O'DEA, TORONTO, ONT

MUSIC IN SPEECH.

Musical Octaves in whispered and spoken vowels. Use of Vowels for like interjections by many nations.

Simple Vowel Code for use in Dictionaries and in

Study of Elocution.

See Rouse's Pamphlet on "The Number and Nature of Vowel Sounds," read before the Canadian Institute and the American Association.

POWS. LL & AUTCHISON, King Street East, TORONTO.

The EDUCATIONAL WEBKLY says: "The author states his views clearly, illustrates fully, and draws his conclusions ably."

The Educational Weekly,

THE GRIP PRINTING AND PUBLISHING CO.,

SAMUEL J. MOORE, General Manager. C. FRASHR, Business Manager Educational Weekly Dept. JOHN E. BRYANT, M.A., Editor

CONTENTS OF THIS NUMBER

CONTENTS OF THIS NOMBER	
SHORTER EDITORIAL 739	
CONTRIBORARY THOUGHT 740	3
NOTES AND COMMENTS 741	i
LATERATURE AND SCIENCE:	
November A. STRVENSON 74:	,
SonnetJ. O. MILLER 742	2
The Right Honorable John Bright,	
Chantanguan for October 742	t
EDUCATIONAL OPINION:	
Our Examining Boards	j
The Tyrant Examination John Bradshaw 745	í
Corporal Punishment	į
	•
LONGER EDITORIAL:	
Correctness in Writing 746	•
BOOK REVIEW	,
TABLE TALK 747	,
SPECIAL PAPERS:	
Report on Algebra A. E. Journal of Education 748	ţ
PRACTICAL ART:	
Elementary Drawing, VIIeirthur J. Reading 749	ŀ
THE PUBLIC SCHOOL:	
Literature for Entrance into High Schools IX, "Boadicea."	
X. "The Geysers of Iceland"Philetus 750	
Educational Suicide N. Y. School Journal 751	

EDUCATIONAL INTELLIGENCE :

West Huron Teachers' Association,

Huron Signal 752

West Kent Teachers' Association,

Chatham Banner 752

CORRESPONDENCE:

Reynold's Experimental Chemistry,
H. B. Spotton, M.A. 754
"Outis," on "Modern Instances".....Teacher 754

TERMS OF SUBSCRIPTION.

Two Dollars per annum, in advance.

Clubs of five at \$1.60 each, or the five for \$8.00. Clubs of twenty at \$1.50 each, or the twenty

Business communications and communications intended for the Editor should be on separate papers.

ADDRESS-

EDUCATIONAL WEEKLY,
GRIP OFFICE, TORONTO.

TERMS OF ADVERTISING.
[NO DERVIATION.]

Number of insertions, 1 5 13(3m.) 26 (6m.) 52 (1 yr.)

Per line....... 10c. 45c. \$1.00 \$1.75 \$3.00 Twenty per cent. advance on the above rates for preferred position, when specified.

Advertisements must be acceptable in every respect.
Copy received until Tuesday noon.

New York Agency: 150 Nassau Street. Azro Gorr, sole advertising agent for the Middle and New England States.

THE IMPROVED MODEL



Washer and Bleacher.

Weighs only six pounds and can be carried in a small valise. Satis-faction guaranteed or money refunded.

\$1,000 REWARD

FOR ITS SUPERIOR.

Pat Aux. 2,884 Washing made light and easy. The C.W.Dennis, Toronto clothes have that pure whiteness which C.W.Dennis, Toronto clothes have that pure whitness which no other mode of washing can aroduce. No rubbing required, no frictien to injure the fabric Aten-year old girl can do the washing as well as older person.

To place it in every household the price has been placed at \$3,00, and ifnot found satisfactory within one month from date of purchase, money refunded.

Send for circulars. AGENTS WANTED. Delivered to any Express office in Ontario or Quebec, charges paid, for \$2,50.

for \$3.50.

C. W. DENNIS,

Toronto Bargain House,

Please mention this paper. 213 Yonge St., Toronto, Ont.

BABYLAND.

The Magazine for the Babics, this coming year, in addition to its bright pictures, and gay little jingles, and sweet stories, will have some especial delights for both Mamma and Baby:

THE MAGIC PEAR

Will provide Twelve Entertainments of dainty jugglery and funny sleight-of-hand for the nursery pencils. This novelty is by the artist-humorist, M. J. Sweeney ("Boz").

ALL AROUND THE CLOCK

Will give Baby Twelve Tiny Lessons in Counting, each with wee verses for little lips to say, and pictures for bright eyes to see, to help the little mind to remember.

LITTLE CRIB-CURTAINS

Will give Mamma Twelve Sleepy-time Stories to tell when the Babies go to cribs and cradles. In short, BABYLAND the whole year will be the happiest, sweetest sort of a home kindergarten.

BEAUTIFUL AND NOVEL NEW COVER. ONLY FIFTY CENTS A YEAR.

ADDRESS ALL ORDERS TO

D. LOTHROP & CO., Publishers, FRANKLIN AND HAWLEY STS.,

BOSTON, MASS

WE WILL SEND

Ayres' Orthoepist (postpaid) and the Educationa Weekly

For the remainder of 1885.

FOR 50 CENTS.

WE WILL SEND

Ayres' Verbalist (postpaid)

and THE EDUCATIONAL WEEKLY, for the remainder of 1885,

FOR 50 CENTS.

WE WILL SEND

Williams' Composition and Practical English (postpaid) and the Educational Weekly

For the remainder of 1885.

FOR 60 CENTS.

WE WILL SEND

Ayres' Verbalist and Ayres' Orthoepist (postpaid) and the Educational Weekly

For the remainder of 1885,

POR 80 CENTS.

ADDRESS,

EDUCATIONAL WEEKLY,

GRIP PRINTING CO.,

Toronto.

Journal of our time. Clean, perfect, grand! Over 600 brilliant contributors. \$4.50 vearly; 6 mo., \$3.00; bound vol. (6 mo.) \$3.00. Buy it at your newsdealer's -Sample copy, to cents. The following splendid TEACHERS! Vearly price, if ordered before April 1, 2885, \$2.50; between April 2 and July 2, \$2.75; between July 2 and Dec. 31, \$3.00 Subscribe at once!

GRIP (*2.00) One Year and THE EDUCATIONAL WEEKLY (\$2.00) One Year, to one address for Three Dollars. THE SUPPLEMENT (\$2.00) One Year and THE EDUCATIONAL WEEKLY (\$2.00) One Year, to one address for Three

> ADDRESS: EDUCATIONAL WEEKLY, GRIP OFFICE, TORONTO.

THE CENTURY

FOR 1885-6.

The remarkable interest in the War Papers and in the many timely articles and strong serial features published recently in THE CENTURY has given that magazine a regular circulation of

MORE THAN 200,000 COPIES MONTHLY.

Among the features for the coming volume, which begins with the November number, are:

THE WAR PAPERS BY GENERAL GRANT AND OTHERS.

These will be continued (most of them illustrated) until the chief events of the Civil War have been described by leading participants on both sides. General Grant's papers include descriptions of the battles of Chattanooga and the Wilderness. General McClellan will write of Antietam, General D. C. Buell of Shiloh, Generals Pope, Longstreet and others of the Second Bull Run, etc., etc. Naval combats, including the fight between the "Kearsarge" and the "Alabama," by officers of both ships, will be described.

The "Recollections of a Private" and special war papers of an anecdotal or humorous character will be features of the year.

SERIAL STORIES BY W. D. HOWELLS, MARY HALLOCK FCOTE AND GEORGE W. CABLE.

Mr. Howells's serial will be in lighter vein than "The Rise of Silas Lapham." Mrs. Foote's is a story of Mining Life, and Mr. Cable's a novelette of the Acadians of Louisiana. Mr. Cable will also contribute a series of papers on Slave Songs and Dances, including negro serpent worship, etc.

SPECIAL FEATURES

Include "A Tricycle Pilgrimage to Rome," illustrated by Pennell; Historical Papers by Edward Eggleston, and others; Papers on Persia, by S. G. W. Benjamin, lately U.S. Minister, with numerous illustrations; Astronomical Articles, practical and popular, on "Sidereal Astronomy;" Papers on Christian Unity, by representatives of various religious denominations; Papers on Manual Education, by various experts, etc., etc.

SHORT STORIES

By Frank R. Stockton, Mrs. Helen Jackson (H. H.), Mrs. Mary Hallock Foote, Joel Chandler Harris, H. H. Boyesen, T. A. Janvier, Julian Hawthorne, Richard M. Johnston, and others; and poems by leading poets. The Departments,-Open Letters," "Bric-a-Brac," etc., will be fully sustained,

THE ILLUSTRATIONS

Will be kept up to the standard which has made THE CENTURY engravings famous the world over.

PRICES. A SPECIAL OFFER.

Regular subscription price, \$4.00 a year. To enable new readers to get all the War Papers, with contributions from Generals Grant, Beauregard, McClellan, J. E. Johnston, Lew Wallace, Admiral Porter, and other, we will send the 12 back numbers, November, 1884, to October, 1885, with a year's subscription beginning with November, 1885, for \$6.00 for the subole. A subscription, with the 12 numbers bound in two handsome volumes, \$7.50 for the whole. Back numbers only supplied at these prices with sub-

A free specimen copy (back number) will be sent on request. Mention this paper.

All dealers and postmasters take subscriptions and supply numbers according to our special offer, or remittance may

THE CENTURY CO., NEW YORK.

The Educational Weekly.

TORONTO, NOVEMBER 10, 1885.

THE loss to the educational interests of this Province through the death of the late Principal Buchan, of Upper Canada College, is one that will be long felt, and one too, that will affect educational progress more seriously than will be readily recognized. We regret that we were not at our post at the time of his death to pay our sad tribute to his ability and to his worth. We had not the honor of an intimate acquaintance with him, but his character and his educational views were well known to us, and we regret that their influence has been lessened by his premature death-destroyed they can never be! The resolutions by which the Provincial Teachers' Association, the Senate of the University of Toronto, and the masters of Upper Canada, have expressed their respect for the memory of their late coadjutor, their sorrow for his early loss, and their sympathy with Mrs. Buchan and her family, are perfect manifestations of the esteem in which Mr. Buchan was held by the educational public. But the finest tribute of all is that which has come from his pupils, signed by all those who were under his influence during four years of principalship: - "We shall never "cease to look back on the time spent under " Mr. Buchan as the best of our school days. " He always treated us with consideration, "and manifested a kindly interest in us. He "strove not only by precept, but more by "example, to make us love and put in prac-"tice all that was true and noble and manly. "His method of teaching was one well cal-" culated to foster a taste for study where it "already existed, and to beget one where it "did not exist. With the low aim of simply "preparing pupils for examinations he had " nothing to do. His object was to send forth "men with every part of their nature well "developed, men who should be a credit to "their masters, their college and their coun-Such words express the truest reward which an educator should seek to win. Prizes, honors, scholarships-what are they to the building-up of character, to the development of all the latent faculties of the mind, one half of which our ordinary system of education never reaches, to the substitution of noble ideals for low ones, to the transforming of selfish motives into liberal and unselfish ones? We know that Principal Buchan retained a prize system in his own institution, because he was too wisely cautious a man to run counter to descended prejudices, and traditions which, if not noble, have value because of their associations. But had he lived and had the educational policy of the Province assured the permanent existence of

Canada the Rugby of Ontario-a school where character should be the first thing aimed at, then conduct, then scholarship; and where scholarship should be considered, not the knowledge of many facts, but a power of the mind to think and act for

In the columns of a western contemporary we found the following :- " The students of "the Toronto University-or at least a portion "of them-do not, it seems, like the idea of "young ladies attending the university, and "when the seven who matriculated first ap-"peared at a lecture they were hooted and "jeered at by the greater number of the stu-"dents. One of the young ladies was too " nervous to stand the abuse and has declined "to attend any further lectures, but the other "six are properly enough bound not to be "thrown out of their just rights by a crowd " of rowdy hoodlums, who have not the com-"mon decency of coal-heavers, but who by "the accident of birth, are able to wear tight "pants and a cut-away coat. It is simply "disgraceful that such conduct should be "tolerated." We have enquired both of officers of the university and of students in attendance at the college, what justification, if any, there is in fact, for this severe criticism of alleged disgraceful conduct on the part of the students, and we have been assured that there is no foundation for it whatever. We shall pursue our enquiries further, and if we find the statements to be in any way justifiable weshall unhesitatingly say so. We announce this not from any desire to find fault with the character or tone of the conduct that obtains in University College, for we should be the first to defend our own Alma Mater from unjust attack; nor from any desire to defend co-education in University College, for we have never advocated it except as a temporary expedient, and believe that it is the duty of the legislature to provide for the higher education of women in a different manner. But the good name of University College is not to be trifled with, and if there be any young men in attendance there who so far forget gentlemanly manners, not to say principles of right, as to act as above described, then public disapprobation of their conduct cannot be too emphatically expressed. We sympathize as much as any with that exuberant spirit of youth which leads to the jokes, the pranks, and the fun, of college life. But there are certain limits which must not be transgressed. When the general public is convened to meet professors, lecturers, senators, and students, on formal occasions, as at convocation or commencement, or as at the open meetings of the Literary the college, he would have made of Upper | Society, then the tin horns as well as the asin-

ine mouths of those who bray them, should be banished the public presence. No more lamentable spectacle has been seen since the foundation of the university than that at the last college convocation when the venerable president of the college, in presence of a vast host of ladies and gentlemen, invited guests, had to arise and rebuke the uproar by which the proceedings of the meeting were being interrupted. The matter rests with the students themselves. If the more sensible of them desire to free their reputation from the reproach of rowdyism, they can do so. Students, like other people, are governed by the public opinion of their fellows.

WE invite those who think that the teacher of the public school should be required to use the Bible as a text-book in his classes, and to teach biblical doctrine directly to his pupils, to ponder upon the following: It will be remembered that the Venerable Archdeacon Farrar, when in Toronto lately, preached a sermon to young men in the schoolhouse of St. James' Cathedral. An esteemed educational contemporary, that takes a deep interest in religious instruction in public schools. and if we mistake not, desires to promote it. has published a full report of that sermon. The inference is, that such teaching as the sermon contains is, in the opinion of our contemporary, suitable to the schoolroom. Now in the columns of another contemporary, also an advocate of religious instruction in the public schools, one of the most prominent clergymen of Toronto condemns the preaching of Dr. Farrar as "gross error under sweet and fascinating verbiage," labels Dr. Farrar himself as one of "the apostles of modern doubt and incipient scepticism," and states that "intelligent and devoted Christians listened with a feeling of pain" to the very sermon which our contemporary, firstmentioned, has thought best to publish. We do not in the least hold our contemporary responsible for the doctrinal teaching of the sermon, but we can scarcely be wrong in thinking that the editer would not have published it if his opinion of its character had been the same as that of the Toronto divine who calls the author of it an "apostle of incipient scepticism." With the disagreements of these good people we have nothing to do, but we cannot help wondering if Archdeacon Farrar should have the good fortune o become a Canadian school teacher when the School Act is amended so as to make religious instruction compulsory, how he would continue to satisfy his own conscience and have his teachings quoted with approval in educational journals, and at the same meet the views of such people "as listened with pain" to his preaching in Toronto.

Contemporary Thought.

THE alternative — that religious bodies should possess schools and colleges of their own, supported by Government funds—is the thin edge of a wedge, which, if driven in to its logical extent, would necessitate Government aid to every religious and, in leed, irreligious body, from the Ritualists to the Agnostics. The chief difficulty to a proper understanding of the respective spheres of religious and secular education seems to be that to the word "religious" has been given a meaning which belongs properly to the word "moral." The secular teacher has ethical functions to discharge as well as purely pedagogic functions. He will teach his pupils the value of right and wrong, and point out to them the true principles of conduct generally.—

The Week.

I AM of the opinion that too much in quantity is sought to be taught in (many of) the public schools; the result of this being, not that the children study too much, but that they don't study anything. What the average public school boy and girl needs is more genuine mental exercise, an earlier and judiciously trained development, and not "more frequent holidays and vacations" than now given. But the parents must not throw everything on the teachers; at the risk of "nervous exhaustion," they must do something themselves towards keeping the children properly at work. They must also see that their offspring have regular habits of life, for here is undoubtedly where most of the trouble lies. It is not mental work at school which hurts: it is irregular, perhaps vicious, habits of living, and improper or excessive pleasure seeking, which do the damage, and concerning which the statisticians are silent .- "H," in N. Y. Nation.

THE Globe endeavors to awaken public sympathy in Dr. Wilson's scheme, by the following most extraordinary plea: "It has to be borne in remembrance that to many of our young men, the sons of farmers, of artisans, or others in humble life, the giving up of the years from 16 or 17 to 20 or 21, to unproductive study is itself a demand involving very large sacrifice." What does it mean? Is it that the young man suffers a loss during these four years which private individuals or the state should make up for him? How utterly and unspeakably absurd it is to speak in this connection of " giving up" and "unproductive study" and "large sacrifice." Is not the young man to be inestimably benefited by the education itself? When the state provides this benefit for him free, must it also coax him to come and take it, and then coddle him into good humor when he does come? We have heard of paternal gavernment, but surely this would be grand-paternal. - The 'Varsity, on University Scholarships.

It is interesting, in the history of the university, to recall the applications of eminent men such as Huxley and Tyndall, for vacant professorships, years ago, before their names had become famous. We lately came across a copy of the testimonials presented by John Tyndall, Ph.D., with his application for the professorship of Natural Philosophy in the University of Toronto. It is dated Oct. 6th, 1851, just thirty-four years ago. The testimonials are fourteen in number, from the foremost

scientists of the day, among which are the following names: Edmund Recquerel, E. du Bois-Reymond, Edward Sabine, R. W. Bunsen, A. De la Rive, H. W. Dove, J. D. Forbes, J. P. Joule, Plucher, P. Riess, (Sir) William Thomson. The list closes with the following statement: "I am permitted to state that Dr. Faraday and the Astronomer Royal are repared to respond to any personal reference made to them respecting my qualifications for the professorship in question." One is tempted to cavil at fate that the condidature of so eminent a man should be unsuccessful; the only consolation is that if Professor Tyndall had come to Toronto he would not have stayed here after his reputation had become established. -The 'V'arsity.

IT seems to us strange that the question of making the public schools free should be under discussion in a civilized country. Yet it is a fact that just now England is deliberating whether it is best to free her schools from the obnoxious rate-bill tax. It is urged that it is demoralizing and pauperizing for a parent to receive free tuition for his children. and that it is unjust to those who have no children of their own. It is very evident that if attendance at school is compulsory, admission to school should be free. The London School Board has been trying the difficult problem of compelling attendance and charging for tuition, and it doesn't work well at all. It is found that the conditions at home, and the character of the parents must be changed before rate bills can be collected. Drunkenness, improvidence, and vice demoralize London poor, and it is often impossible to collect the fees. The board says that the parent must send his children to school, and also must pay for their tuition. The child goes, but the parent doesn't pay. Even the small amount of 1d. per week cannot be collected. The only possible way out of the difficulty is to make the schools absolutely free to all, and then enforce attendance. Make the schools so good that all, even the rich, will be glad to avail themselves of their advantages, and tax everybody for their support. A public school should be the very best school possible to organize and sustain in a country. There should be no excuse for private schools where public schools are supported by universal taxation .- N. Y. School Journal.

THE Board of Governors of the Industrial School Association, of which Mr. W. H. Howland is president, have decided to proceed with the erection of a main building for the educational and industrial training of two hundred boys, and a cottage to accommodate forty boys, on their grounds at Mimico, which are the gift of the Ontario Government. The main building will be devoted to the daily occupations of the lads, and will contain schoolrooms, work-rooms, dining-room, etc., while the cottages, which will be under the charge of matrons, will serve as homes to which they will retire in the evening, and where they will be under the beneficent influences of judicious home training. The buildings in contemplation will cost \$26,000, of which \$15,000 has already been This includes \$6,000 given by a subscribed. benevolent Toronto lady for the erection of a cottage. We know of no association whose objects more strongly commend themselves to the benevolent and patriotic feelings of our wealthy citizens

than this one. Not only will the neglected and forsaken children it takes charge of be prevented from becoming a burden to the country as criminals in our gaols, but they will be made to contribute to its prosperity, by being taught some useful employment. A good deal of the success of this institution, however, will depend upon the person the association can secure to act as superintendent. He should be skilled in the management of children as a successful teacher, and at the same time be able to exercise intelligent supervision over their manual employments, and above all, he should be thoroughly in sympathy with the association in the aims it has in view.—The Week.

THE death of Lord Shaftesbury leaves a blank in the educational world. He has identified himself so closely with the interests of ragged schools and the educational welfare of the outcasts of London that his name will long be remembered as one of the most unselfish men of the nineteenth century. It should be remembered, however, that he accomplished a mighty work in connection with the factory and mine legislation more than forty years ago. What Wilberforce and his friends had done for the negro, Lord Ashley (as the Times has well pointed out) resolved to do for the white slave of the factory and the mine. The story of our factory legislation, which began in 1833, and closed twenty years later, is in one sense distressing indeed, for it is a horrible tale of human suffering and depravation below, of human indifference and hardheartedness above; but in another sense it is of good omen, for in the end the conscience of England prevailed. and the most crying wrongs were righted as far as legislation could right them. Relief was secured, first to children, and then to women working in factories, collieries and mines. In spite of the most strenuous opposition from the manufacturing interest and of cold encouragement from the Government, Lord Ashley, as the Earl of Shaftesbury was then called, won the fight. In 1833 the first position was gained; in 1843 Lord Ashley's powerful appeal for education forchildren of the manufacturing districts was supported by the House; in 1844 the Ten Hours Bill became law, and at various times during the next nine years those modifications were introduced into it which form the law that exists to this day. This we may fairly call the great work of Lard Shaftesbury's life. But it was accompanied and followed by a score of other efforts, nearly all equally successful, to raise the condition, especially the moral condition, of the poorest of the poor. The great Education Act of 1870, with its far-reaching results, has somewhat obscured the work of the ragged schools; but the good which these have done since 1846 has been enormous. It was no exaggeration when, at the ragged school gathering which celebrated Lord Shaftesbury's eightieth birthday, Lord Aberdeen said, "In London alone, at least 300,000 of the youth of both sexes have been rescued from the ranks of the criminal and dangerous classes and made good and useful citizens, loyal and faithful subjects of Her Majesty." The list of Lord Shaftesbury's good works might be greatly extended, for his energy was boundless. The reformatories, the shoeblack brigade, and many other institutions for watching over the children of the very poor owe much to his unwearied and self-denying efforts.-The Schoolmaster, London.

Notes and Comments.

AMONG our contributors this week are Mr. J. C. Harstone, M.A., Headmaster, High School, Seaforth, and Mr. John Bradshaw, Principal of Sutton Public School.

THE series of papers entitled "Modern Instances," has been unavoidably held over. We nope to renew their publication next week. We think they will excite considerable interest.

WE are forced for want of space to hold over some very interesting reports of conventions and institutes. Many very interesting items of educational intelligence are held over for the same reason.

WE shall be obliged if public school inspectors will send us copies of their promotion examination papers. Unfortunately a few that we have received were lost whilst some office changes were being made.

WE are making arrangements for the publication of practical papers bearing on the work done in the more elementary classes of public schools. These papers will be by some of our most progressive educationists.

We have in preparation a series of papers illustrating the work required for the First 'C" examination, which will be of great service to candidates preparing for the examination who may be unable to attend a high school or collegiate institute. The papers will commence shortly.

We invite expression of opinion on Mr. Harstone's plans for remodelling our Examining Boards. The principle involved in the proposed change of the Central Examining Committee has been advocated before, but Mr. Harstone's proposition puts the matter in a tangible form which can easily be discussed. One thing is certain. The present plan does not meet with favor. Let us have the opinions of others on the matter.

THE very hands: 1e gift of \$2,000 by Vice-Chancellor Mulock to University College is but a natural and casual product of that gentleman's well-known liberality in the interests of higher education. Mr. Mulock's devotion to University College and the University of Toronto has been long proverbial, and it should provoke more than it does the friendly emulation of other wealthy graduates. For some reason or other our Provincia! University and College have never aroused much public sympathy. While enough of wealthy citizens in Montreal have been found to establish in the University of McGill College eight professorships with endowments ranging from twenty to forty thousand dollars each, to endow scholarship foundations to the amount of \$32,000, to establish a general endowment fund of \$90,-000, to endow the Faculty of Medicine with \$100,000, and to make contributions for many other purposes to almost \$50,000 more -all this, in addition to the original gift by the Honorable James McGill, of \$120,000, and the erection of the William Molson Hall and the Redpath Museum by the gentlemen whose names are thereby commemoratedwhile all this has been done in Montreal, where the English-speaking people are a minority of the population, the gifts of the people of Toronto to the educational institution which should be their chief pride and glory, amount in all, if we mistake not, to less than \$10,000. We wish Mr. Mulock's gift had been devoted to a purpose more in consonance with modern educational opinion than the foundation of a scholarship for competition by examination. But his liberality and kindness are not to be thought the less of on that account. All honor to him; and as the poet said of good Abou Ben Adhem, "May his tribe increase"!

In the reports of the teachers' associations which the EDUCATIONAL WEEKLY from time to time has reprinted from the local press, commendatory notices have frequently appeared respecting Mr. Tilley, the Inspector of Model Schools. As Mr. Tilley has been from the boyhood of the writer one of his kindest friends, and one to whom he is unspeakably indebted for that direction and valuable assistance without which, at the proper time, a young man's life is almost certain to be misspent, these public expressions of satisfaction with Mr. Tilley's educational labors have been very pleasing to him; but, as editor of the WEEKLY, for reason of this very friendship he has not referred to them in these columns, as he undoubtedly would have done, had they been bestowed upon one a stranger to him. The Chatham Planet, however, has taken the occasion of Mr. Tilley's official visit to that town to make his worth the subject, in its last issue, of a leading editorial, and the editor of the WEEKLY is thus able to do justice, vicariously, to his life-long friend. Amongmany similar remarks of the Planet are the following:-"The teachers of the West "Kent Association were highly pleased with "his addresses, and his visit and talks to "them will result in much good, more "especially to the model students. The "institute meeting would have been of but "little interest without him. As an old "teacher, he has an active and warm sym-"pathy with the members, and he talks "feelingly and almost eloquently, and with-"out any effort or display. His remarks "are especially marked by common sense. "One special feature of commendation is his "freedom from hard and fast methods, and "his recognition of the fact that mere "school work, no matter how well it is at-"tenued to, is but a very small and com-"paratively unimportant part of a proper "education. Intelligence and character go I " and their assistants."

"far beyond it. Mr. Tilley's efforts are not "only to make the position of the teacher better and improve his methods, but "mainly directed in tue interests of the public, he having a warm sympathy for the parents and children. His aim, apparently, is to inaugurate a common sense principle of education, and as educational matters have been run for years, there is ample scope for working this almost nevel but much needed improvement."

SOME time ago we spoke plainly concerning the need of the professional training of the teachers of every grade, and we expressed the opinion, which we now re-iterate. that no class of teachers require it more than those who are to engage in high school work. We speak from experience. We know what it is to be untrained and unprepared for the great work of teaching. We entered the profession when instruction in pedagogical art and science was unattainable. We have gained what knowledge we have of these at the expense of boys and girls placed under our tuition. We have seen, too, many young men and women commence their life's work in a high school, and we well know how possible, how easy, failure is. We do not say that a professional education will ensure success from the start, but we emphatically say that it will greatly increase the chances of success. The present provisions for the professional education of high school masters may not be as ample or as wisely planned as they might be. We pass no opinion upon that subject. Experience will teach us all. Our own opinion is, that a chair of pedagogy should be established at once in the Provincial University, and that all high school masters, first-class teachers, of the highest grade, and inspectors, should be required to satisfy the university authorities in regard to their knowledge of pedagogy before receiving their certificates; and that the practical organization of a high school, and the conduct of its classes, should be learned by observation in the training institutes afterwards. But that is only a matter of detail, though an important one. Possessing these views, it is with great satisfaction that we have learned of the following resolution of the Ottawa and Carleton Teachers' Association-carried at its late meeting without a dissenting voice:-" Moved by Mr. A. Smirle, Inspector for "the County of Carleton, and seconded by " Mr. J. MacMillan, Principal of Ottawa Col-" legiate Institute, that whereas the non-pro-" fessional training of public school teachers " is now largely in the hands of the high "school masters of the Province and their " assistants, be it therefore resolved that "this Association fully approves of the "Honorable the Minister of Education in " prescribing a compulsory course of pro-" fessional training for such head masters

Literature and Science.

NOVEMBER.

A. STEVENSON.

SUMMER is fled, its fervid joys are over,
The winter days draw on;
No more we hear the bees among the clover,
The birds are gone.

The blue and golden autumn flowers are dying,
Dead leaves are falling fast;

Through the bare limbs the dreary winds are sighing

A requiem for the past.

Oh, gladsome past, thy joys we all remember, Thy smiles and happy fears; But now, alas, has come life's sad November, A time for tears.

For spring shall soon restore the birds and flowers, Green fields and sunny streams.

What power can bring again those vanished hours, And youth's fond dreams!

-The 'Varsity.

SONNET.

J. O. MILLER.

This year the whisper of the dying leaves
Comes with a sadder murmuring than last;
The wind has not, so soon, with bitter blast,
Hurried from tapering limb the tint that weaves
Bright glories with the greyness of the trunk.
But, lasting long, the leaves are paler than
If quickened to decay; and sad and wan
And sickly-hued the sight, and serely shrunk.
Yet murmur not for beauties, forest leaves,
Which, to possess, is death and quick decay,
The barren glories of the fading year.
Our chiefest pleasure is that still the ray
Of stranger sunlight, shadowing you, deceives
Us to the hope that springtime lingers here.
—The' Varsity.

THE RIGHT HONORABLE FOHN BRIGHT.

REV. S. G. SMITH, D.D.

No figure in the English life and politics of the current century is more interesting than that of John Bright. Sprung from the loins of obscurity, and with little systematic culture, he represents the achievements of the common people, as faithfully as do Abraham Lincoln or Charles H. Spurgeon. He is a sturdy plant of Saxon growth, and his career should, perhaps, teach us that developed individual greatness is not the result of American institutions, as we sometimes boast, but is rather a manifestation of the fiery strength of Gothic blood.

I do not think that Mr. Bright belongs to the first rank among statesmen. To compare him with his own earlier associates, he has not the breadth of vision which belonged to Sir Robert Peel, nor the masterful patience and clear-eyed sagacity of Richard Cobden, his closest friend. In varied accomplishments, and wide-ranging achievement, Mr. Gladstone is far his superior, and in versatility of gifts, audacity of action, and power over the motives of men, he cannot for a moment share the honors of that exceptional genius, Lord Beaconsfield. Yet, John Bright has far more courage than the one, and far more conscience than the other. But a statesman must not only know what principles are wise and good, but also when they may be practically applied, and how they are to be transferred from the domain of sound speculation into the actual realm of law. This quality of mind which may be called political perspective is one of the rarest and most valuable of gifts. D'Israeli had a sense of touch delicate as a woman's, and always knew just when to write a book, and just how to introduce a bill. John Bright knew what was the right thing in theory, but he did not know how best to win victories. For example, he knew that war is a crime against God and man, but he did not know that when the English people were in a fury of passion over the Crimean war, they were in the worst possible condition to receive this truth. And so sentiments which he uttered in forms of beautiful and touching eloquence not only failed of the effect which he desired, but also lost him his sent in Parliament. This desirable quality war conspicuous in W. H. Seward, and conspicuously absent in Charles Sumner; nor is it to be confounded with mere political trickery, or desertion of principles. The finest fidelity to principle sometimes calls for silence. Abraham Lincoln will hardly be called a trickster, yet he had the · isdom of a political seer. When clergymen were thronging him with interviews, and Radicals were denouncing him as a traitor because he did not free the slave, he wisely waited, and sadly held his peace. But when diplomacy had done its work with other nations, and he was sure of a united North behind him, he struck the blow his aching heart had urged him to for weary months, and slavery was dead forever. Our Master is the highest possible illustration. He was at once the wisest in speculation, and the most alert in practical affairs; and thinkers and teachers in every department, may linger long over the profound meaning of his words: "I have many things to say unto you, but ye cannot bear them now."

But though John Bright does not belong to the first rank among statesmen, he may, I think, well lay claim to a high seat in the world's parliament of great men. For statesmanship is not the only, nor perhaps the highest, mission, among men. The world has uses for its martyrs. They are the forerunners of history. To some men, both by opportunity and by temperament, it is given to be the voice of one crying in the wilderness—to utter that voice, and die. The blood of

the righteous slain, forever cries from the ground, and demands retribution. Words which fall upon the deaf ears of the generation to which they are spoken, often come to after ages, like the music of sweet bells from distant mountain peaks. So I think it will be seen that John Bright has been the political prophet of two generations, though he may have failed in practical leadership. And it may be that whatever failure there has been, has lent itself to this other mission, for God never gives one man too much tachieve.

John Bright, born at Greenbank, England, November 16, 1811, was the second son of Jacob Bright, a Derbyshire weaver by trade, and a Quaker in religion. The energy and character of this man may be seen in the fact that from the position of a common laborer, at one dollar and a half a week, he rose to become the owner of one of the most valuable mills in Rochdale. His thorough honesty won him credit among his fellowmen. His business sagacity and his powers of endurance did the rest. Mr. Bright was also fortunate in his mother. She was a beautiful woman, of a profound religious nature, refined in tastes, fond of books, and given to charity. That Quaker home, with its plain sare, hard work, evident, yet often unspoken devotion, and its library of a few great books, was a good place for a boy. John was giver some education, but should have had more; although his keen-eyed, hard-handed father thought it was quite enough. He did not distinguish himself at the schools which he attended, either at Littlewood or Newton, yet he read a great deal of poetry and history. He was better at football and cricket than he was at Latin or algebra. At fifteen he left school to take a position in his father's cotton mill, his most matured tastes being a liking for fresh air, and a fondness for dogs.

The second quarter of the present century was full of political agitation and unrest. The common people awoke to consciousness of wrongs, and sought out measures of redress. It was the breaking up of the fountains of the great deep. It was the struggle against the oppression of the Church in its enforced rates, the fight against the landed monopoly entrenched in the corn laws, and the demand for the abolition of rotten boroughs and the establishment of wider suffrage that engaged the attention of the people. These conflicts were the real university in which John Bright received his education. Gifted by nature with superb powers of oratory, placed by birth in the midst of the people, he early became an extraordinary political force, and has held his place for more than forty years. In the year 1840, a remarkable excitement raged in Rochdale with reference to voting a Church rate. A public meeting being called, the

church was found far too small, and the meeting was held in the churchyard. About four thousand people were gathered. Dr. Malesworth, the rector, and his friends, took their places on one tombstone, and John Bright and his friends, who opposed the rate, stood on another. The meeting was opened, the schedule of expenses was read, explanations followed, and a motion was offered that a church rate be made, when John Bright, then but twenty-nine years old, stood forth and uttered a terrible philippic against the proposal, which completely swept the vast audience, and the rate was defeated by a large majority. His vigorous directness of Saxon style was formed even then, as may be seen by the following extract from that speech: "The churchwardens have continued to distrain and to oppress the ratepayers. They entered the house of an inhabitant of Scotland, poor James Breasley, who was then on his death-bed. The claim upon the poor weaver was fourpence; they seized a looking-glass, but this would not cover the costs, and their ruthless hands then seized his family Bible and sold it for an iliegal rate, and a fortnight ago, during the poll in the vestry, the widow of that man came and tendered her vote against the rate. I pointed her out as she came to the polling tables to those who stood around, and said, 'That is the woman from whose husband you took a Bible, when he was on his deathbed.' A young man, the son of a clergyman, stood by and heard this. He replied, 'Yes, and I would have sold the bed from under him.' That young man is now present. I will not further expose him, but if he dare, he may come forward and deny it." It is with words like these, as with a hot iron, that John Bright has burned his convictions, for forty years, into the cold and proud hearts of the English rulers.

But the work with which Mr. Bright's name is most frequently associated in the minds of English workingmen is the repeal of the corn laws. For generations English farmers had the benefit of a tariff upon imported grains. As the population increased, and the artisan class multiplied, the amount of wheat raised in England was far too small to feed the people. The tariff gave the farmers absolute power over the price of bread. When manufactures were not prosperous, starvation threatened the operatives. With the reaction that followed the great war period, which practically closed at the battle of Waterloo, the distress of the country was grievous. Hence arose the Anti-Corn Law League, with headquarters at Manchester, which fostered agitation throughout the country. Of this movement, Cobden was the brain and nerve, and John Bright was its heart and blood. In the great public meetings which were held all over the kingdom, from 1838 to 1846, these two were the con-

spicuous orators. Cobden generally spoke first, gi ing the facts and more solid arguments. Bright followed with skilful illustrations and metaphor, and that weird power of the true orator which moves the passions of men. To these two, more than to all others, is due the victory which came in 1846, when Sir Robert Peel was compelled to introduce as a Government measure, the repeal of the tariff, which he had resisted for years. The revolution was such as it would be if Samuel J. Randall should propose the repeal of the tariff laws of the United States. As an illustration of Mr. Bright's style at this period, I give the following extract from a speech delivered at Covent Garden Theatre: "The principles of free trade are so simple, that the mind of no unbiased man who hears them will have any hesitation in receiving them as true. Everything about him, and around him, everything which he reads in history, everything which he sees in the arrangement of the universe, everything which he has in his own judgment, everything which prompts him in his heart, tells him that these principles of free trade should direct the world, and not that impious, that mischievous, that imbecile system of monopoly, which we are here taking so much trouble to overthrow. We ask that the world should be our workshop and the wide world our market. We ask that this wide earth which the Creator of all things has spread as a table for His children should be free to us to live in and enjoy. . . A writer, who was at once a monarch

and a poet, in the voice of praise with which he often addressed his Maker, said, in the words which are familiar, doubtless, to you all, when gazing upon the beauty of the earth and the abundance with which God had filled it: 'Thou visitest the earth and waterest it. Thou greatly enrichest it with the river of God, which is full of water. Thou preparest them corn, which thou hast so provided for it. Thou crownest the year with thy goodness, and thy paths drop fatness.' And not in this passage only, but in many other parts of the sacred Scriptures, you have full liberty to believe that the earth was given for your enjoyment, and for the comfort of all the creatures whom Heaven has placed upon its surface."

It was natural enough that Mr. Bright should be interested in favor of free trade, for his personal interest as a cotton weaver combined with his sympathies as a man, engaged his services. Belonging to the artisan class, and abundantly gifted by nature, it was fitting that he should fight the battle of his people. It was owing to the popularity which he had achieved on the platform, that he was brought forward as a candidate for a seat in the House of Commons to represent Durham. In England a man may live in one section and represent another, it being supposed, perhaps, curiously enough, that the people know whom they wish to represent them. The election took place in April, 1843; Lord Dungannon was the opposing candidate, and the issue v as free trade. By a small majority, Lord Dungannon was declared elected, but it was discovered that the result had been reached by bribery, and in a second election, held in July following, Mr. Bright received a majority of 78. In 1846 Mr. Bright was requested to become a candidate to represent Manchester, and consenting, he was elected without opposition.

John Bright is a Quaker. To him belongs, in as conspicuous a degree as to any man of his generation, the word, integrity, in its proper meaning of vololeness. Whatever he is, he is that, through and through. Being a Quaker, he is opposed to war, being opposed to war, and in Parliament, he has persisted in speaking against every appeal to arms. When the Crimean War came, and all England was in a tumult in defence of." British interests" in the East, John Bright, like a stern prophet of Israel, was lifting up his voice in season and out of season, to denounce that crime. The pathos and dignity of his words were increased by the listlessness of the ears upon which they fell. Some of his speeches on this question are models of eloquence. Take the following:

"I do not suppose that your troops are to be beaten in actual conflict with the foe, or that they will be driven into the sea; but I am certain that many homes in England in which there now exists a fond hope that the distant one may return-many such homes may be desolate when the next mail shall arrive. The angel of death has been abroad throughout the land. You may almost hear the beating of his wings. There is no one, as when the first-born were slain of old, to sprinkle with blood the lintel and the two side posts of our doors that he may spare and pass on. He takes his victims from the castle of the noble, the mansion of the wealthy, and the cottage of the poor and lowly, and it is on behalf of all these classes, that I make this solemn appeal." In his personal development, he had by this time passed through all preliminary stages, and henceforth had a right to be regarded as the most effective political orator in England. But what man, in what country or age, was ever forgiven for opposing a popular war? A general election was held in 1856, and Lord Palmerston swept the country. Among others, John Bright was defeated. But he had too strong a hold upon the English Liberals to make a permanent retirement possible, and in the following year he was returned for the great town of Birmingham, which he has represented ever since.—The Chautauguan for October.

(To be continued.)

Educational Opinion.

OUR EXAMINING BOARDS.

SINCE entering the teaching profession I have given considerable attention to the constitution of the various Boards of Examiners as at present constituted, and in the case of two of these boards I believe that changes might be made with advantage to all concerned.

First then, the Board of Examiners for entrance work is composed of the Inspector, the Headmaster of the High School, Chairman of High School Board, Chairman of Public School Board, and Chairman of Separate School Board—practically, in nine cases out of ten, of the two first named. Why keep the three last mentioned on the board when thry very seldom take even enough interest in the examination to be present while the examination is in progress, and more seldom still take any of the candidates' papers to examine?

I would propose that the board be composed of the inspector or inspectors for the county, and the high school headmaster or headmasters of the county. That the board be a county one, and that they have power to hold examinations at such points within the county as shall be most convenient for candidates, and that their examination be final. Very much can be said in favor of such a board.

First: Being a County Board, the work throughout the whole county would be uniform, and the board could do much by holding exeminations in small groups of townships to stir up pupils to come up for this examination. And it is a well-known fact that many a candidate who, before the passing of an examination, had every intention of stopping just where he was, has been stirred up by his success to do higher and better work. So in many cases I feel certain that the holding of these Entrance Examinations in many centres in the county. would lead to quite an increase in the number who come out to the high schools. Secondly: It would do away with all rivalry between the high schools over the number passed at any examination, and it would do away with the cry which we hear at the present time, that it is easier to enter one high school in the county than another. It would make no difference at what particular school the candidate wrote, and such being the case, he or she would write at the most convenient point. Thirdly: It would not be possible for a teacher whose pupils were unsuccessful, to lay the blame at the door of a headmaster or an inspector with whom he was at loggerheads. Fortunately, such cases are few. But we have occasionally a case where the headmaster and the public school principal are doing all they can I

against each other; and again where the inspector and some teacher of his inspectorate do not work together as they should. With a board constituted as I have stated, there would be no ground for any charge to be laid against a particular member of it, as no one member would have the power which he now has. This change in the board would not affect towns not united with the county for municipal purposes; but in this case I think it would be only just to them, if they were willing, to have them included for the purposes of this examination. Fourthly: Logically, those who prepare the papers should exercise some control over the valuing of the answers sent in by the candidates who write upon the papers, but practically, if the work can be thoroughly done without being supervised specially by them, then there is no necessity for such supervision.

I propose then to do away with the supervision of the examining by the Central Board in Toronto, and to make the result arrived at by the County Board, in every case, final. When each pupil counted for so much annual cash, it was to the interest of the school financially (though very much against it educationally) to have the entrance papers examined in such a way as to get as many as possible through, and I am led to believe that real supervision of the entrance work was exercised by the Central Board in Toronto. Under the new regulations each pupil is to be of a small arnual cash value to the school, so that, if the boards remain the same, there may in a very few cases be occasion to cut off a candidate or two. But with a County Board there would be no such danger. All the schools in the county would be served alike. Frequently, under the present regulations, the final return is not received until some time after school has opened, and before the candidate can be officially notified that he has passed the examination and can present himself at the high school, a commencement has been made and he comes late, losing the first lessons in branches altogether new to him. But if the county report were final, he would know early, and would be prepared to be in his place at the opening. I could never see the force in recommending candidates to the favorable consideration of the Central Board. The examination is a test of fitness to go on with fifth class work, and if a candidate happens to fail by a few marks on any subject, and is over the allowance on the whole examination, then the only person who is in a fit position to say whether the candidate can reasonably be expected to go on to higher work, is the inspector for the county. So much then for the entrance Board of Examiners.

A word or two upon the Board of Examiners of non-professional, second and third

class papers. I have yet to find the high school or collegiate institute teacher who is satisfied with the result of this examination. Many a teacher has said to me that he was as satisfied as he expected to be, leading me to believe that he had given up all expectation of seeing the results of this examination either certain or accurate. I have no reason myself to complain of the number of successful candidates who have passed through my hands each year since 1878, but I think I am safe in stating that in all of these years from '78 to '85, some of the best candidates have been unsuccessful, and some of the poorest have been successful. Then again when the list appears, it is never complete, and no teacher now looks upon it as complete, and after appeals and other corrections have been made, the number of successful candidates has been increased from ten to twenty per cent., and I suppose, in certain cases, even twenty-five per cent. I believe that only those actively engaged in teaching should be examiners. I care not how well up a person may be upon a subject, he is not in a fit position to give a fair value to all the answers that he may receive in answer to certain questions, until he has taught the subject for years. I would propose then that the board for this class of work be composed as follows: - For the eastern division of the Province twenty-one (21) headmasters and twelve (12) inspectors, chosen from the west; the headmasters to retire, seven each year; their places to be filled by others; the inspectors to retire, four each year; and that no headmaster or inspector be selected twice, until all the high schools and counties have had representatives on the board; a similar board to be appointed for the west; the Central Committee in Toronto to have as large a representation of their own members upon these boards as they see fit to place upon them.

I would make the work of this board final, subject to no appeal, and in order to secure perfect accuracy, I would have the following regulations carried out :- 1st. In every case, the number upon the back of the paper to be certified to by a member of the board other than the one who examined it, in order that no errors in addition may creep in. 2nd. If a paper is a few marks below the minimum, a re-examination by another member. 3rd. After a certain number of candidates' papers have been completely examined, that their marks be entered and the successful and unsuccessful ones marked. 4th. That in all cases where a candidate is behind upon the total (the subjects having been dealt with before) the papers be re-examined. 5th. That this work of posting and re-examining be kept up until the close of the examination, and that the board be not dismissed until the whole work of re-examination has been comI teel certain that until some such changes as these are carried out, this Teachers' Examination will not give that retisfaction throughout the country that it should.

I. C. Harstone

"THE TYRANT EXAMINATION."

AN OBSTACLE TO GOOD TEACHING.

I BELIEVE that more bad teaching is directly traceable to what some one has called, "the tyrant examination," that to any other source.

Examinations written and oral are a necessity. Else, how shall we know whether a pupil has grasped a subject or any part of it? But the object of the written examination should be "to tempt the candidate to no special preparation and effort, but to be such as a scholar of fair ability, and proper diligence may at the end of his school course come to with a quiet mind, and without a painful preparatory effort, tending to relaxation and torpor as soon as the effort is over; that the instruction in the highest class may not degenerate into a preparation for the examination; that the pupil may have the requisite time to come steadily and without over-hurrying to the fulness of the measure of his powers and character: that he may be securely and thoroughly formed, instead of being bewildered by a mass of information, hastily thrown together."

It is not my present purpose to find fault so much with the character of the promotion and departmental examinations, as with the prominence given to results. They are necessarily imperfect tests of teaching power, and yet the teacher's life, or death, is made to depend upon them. His true work is to develop mind, and he gets credit only for bringing his class to a certain uniform standing, within easy reach of some, and requiring long and patient toil from others. His clever pupils get glory at little cost, but his dull ones disgrace themselves and their teacher through no fault of theirs, but because nature made them so. When success depends on results at written examinations alone, if these results, valuable as they may be in themselves, are made the end and highest aim of education, we must expect teaching to degenerate into cram.

It is easier to coach than to teach. The coach requires only a knowledge of his subject; the teacher must know both the subject and the mind to be developed. The former "cuts and dries" his facts and stuffs them into his pupils at the greatest possible speed, treating all to like doses. The latter regards the individuality of his pupils, leads them to think for themselves, and assimilate knowledge, to the end that their education may be "the generation of power." The one is a quack with his pocket full of pills, the other a regular physician. The quack can

doctor more people in a day than the physician can in a week, but the quack's patients seldom report themselves to the world after they leave his hands. So the coach's pupils seldom are heard of after they pass the highest examination in their course.

The frequency of examinations and the multiplicity of subjects make cramming a necessity. As a rule the teacher has but a short time to stay, and must make the most of his time. Hence the large number of schools in which the passing material is worked up to the utmost tension. Improved methods, that the student learns in his professional course, are thus crowded out, and parrot teaching takes its place.

Children ape language more readily than they grasp ideas. The fact that there are nine square feet in a square yard is easier told than taught. Where the possession of the fact by the pupil is the one thing needful, the teacher wastes time by drawing a diagram or using the yard measure. But the pupil who is told has gained some knowledge; the pupil who is led to discover for himself, has had more of his faculties exercised; the fact has become, as it were, a part of himself, and he has gained power.

Now I admit that many examiners endeavor to test this power, with some degree of success. (Sometimes efforts in this direction, by those who know their subject better than their pupils, result in quirks, quibbles, and conundrums.) But on the whole the candidate in possession of the most facts carries of the palm at the written examination, and while such results are the measure of the teacher's success, it necessarily follows that we will have more telling than teaching, more burdening the memory than developing the faculties. A prominent educator says: "Mental and spiritual death is the inevitable result of making per cents the end and aim of school teaching."-"Unconsciously the demon of selfishness dominates every action which has its end in a high average. Dull, weak-minded children, whose only hope of temporal salvation lies in careful, patient, persistent, loving culture, are driven to the wall because their per cents are low, and the glory of the school is jeopardized."

Then, fellow-teachers, let us resist the rule of this "tyrant examination." Let us teach with a higher aim than to pass our pupils, from grade to grade. Our pupils will pass all the same when the proper time comes, but there will be r hot-house prodigies. Our success will be less apparent but more real.

JOHN BRADSHAW.

CORPORAL PUNISHMENT.

A DELICATE boy, eight years of age, in Sittingbourne, England, died a few days after having received a whipping at school. The symptoms which preceded death were those of meningitis and convulsions, and the post-

mortem examination verified the presence of this disease. Dr. T. Smith, the surgeon who attended the child, could see no clear connection between the fatal disease and the whipping, but allowed that the shock of the punishment night possibly by had some effect in determining the course of the illness. The jury found a verdict accordingly, but severely censured the schoolmaster for cruelty. There is not a city in this country where the teacher would not have been summarily dismissed, probably tried for manslaughter, and possibly convicted.—N. Y. School Journal.

HISTORY OF CORPORAL PUN-ISHMENT.

F. LOUIS SOLDAN.

An interesting sketch under this name is published in the July number of the Revue Pédagogique. Among other things it contains a summary of the leading laws of several German states on the subject (1862-84), of which the following points may be mentioned:

Causes for which Corporal Punishment may Possibly be Inflicted.—Insubordination, obstinacy, habitual lying, incorrigible laziness, cruelty toward animals or toward the weak, and other indications of low feeling; misconduct; cutting trees, in case of a second offence; theft of a certain importance, etc.

Age and Sex.—In the case of girls, corporal punishment should be resorted to in exceptional cases only, and then be managed with great care. As a general thing, children of both sexes are exempt from corporal punishment as long as they are not eight or nine years of age. In Baden the latter applies also to children of weak constitutions.

Marks Left.—Decision of the Prussian Supreme Court: "Bruises or discoloration of the skin of the shild are, in themselves, no evidence of a transgression of the limits of allowable punishment."

Abolishment of Corporal Punishment in France.—In France the Gordian knot of the use and abuse of the rod has been cut with one stroke by the Regulation of July, 1882: "It is absolutely prohibited to inflict corporal punishment of any kind."—N. E. Journal of Education.

A DISCOURAGING characteristic of our age is the precocious proclivity of young children to evil. Our daily newspapers are now constantly reporting instances of mere boys and girls committing acts that furnish conclusive evidence of a degree of maturity in evil propensities which ordinarily are looked for only in adults hardened in moral depravity. United States dailies, especially, are often replete with accounts of children defying parental authority which they ought not to think of questioning, and setting themselves up as their own masters and rulers. The evil is largely traceable to the neglect, on the part of parents, of the serious responsibilities which rest directly upon them.—Critic, Halifax.

TORONTO:

THURSDAY, NOVEMBER 19, 1885.

CORRECTNESS IN WRITING.

Our esteemed contributor "Outis" is intent upon remedying some common abuses of our good English speech; others of our correspondents are not slow to find that even so observant a critic as "Outis" undoubtedly is, is almost certain to fall, now and again, into some violation of principles, essential to clearness or correctness, such as he has exposed in others.

There are some who deprecate the critical examination of errors in the phraseology of well-known writers—witness the reviewer of Mr. Christie's Hodgson's Errors, quoted in the WEEKLY of Oct. 1. We are not of these. We think, rather, that the composition of every writer would be improved, if he added to a close scrutiny of the writings of others, a more critical examination of his own sentences; and applied to the correction of his own composition, the knowledge derived from his study of the errors of others.

It is a mistake to suppose that every great master of English-that Macaulay, or Matthew Arnold, or Ruskin, or Froude. or Sir Arthur Helps-is perfectly free from solecism or false syntax. Many writers of great fame, and of undoubted genius, and mental power, and influence upon their contemporaries, time and time again, are sinners against Lennie and Goold Brown. But even these men, we doubt not, would willingly be perfect in form, as well as be inimitable in style, and their lapses are simply evidences that, in writing, scarcely too much care can be taken. We know, as a matter of fact, that a powerful and trenchant writer who has been more than once quoted in these pages by our contributors as a master of style and a writer of the purest English, desires always to have his "copy" read by some candid and critical friend, so that no lapsus or mannerism shall meet the public eye. The pains taken by great authors to secure accuracy of expression should put to shame those who think that that which leaves their pen at the first is as good as it need be.

It must not be forgotten, too, when an attempt is made to justify a faulty construction by adducing as an authority for its use a similarly ill-constructed sentence

from Addison, or Johnson, or Thackeray, or some other, that these writers have won their fame more for what they have said than for their manner of saying it. Again, that even in manner their excellence does not subsist in the orderly use of the principles of rhetoric and the rules of grammar, so much as in an indefinable grace of expression, as peculiar to each writer as the smile of his face, or the expression of his eye, and therefore truly inimitable and beyond the pale of text-books and grammarians. There is only one Addison in the universe, one Thackeray, one Matthew Arnold. There can never be a second of any of these.

Leaving out of consideration, then, as vain and foolish, all alleged methods of acquiring style in composition, which, as we have said, is peculiar and original to one's self, there still remains a great deal, an infinite amount, of work to be done, if one wishes to become a correct writer. And we know of nothing to take the place of examining such examples of inelegance and malconstruction as "Outis" is collecting and criticising for us. But the lesson to be learned is missed unless we watch our own writing and discover in it (as we surely shall if we look closely enough) the errors, and correct them, with which it abounds.

And now we have a practical application of all this to make-one which concerns ourselves and our readers. As "Outis" has not excluded our own shortcomings from his criticism, and as our correspondents have not excluded his from theirs, we may indeed say that we all stand in need of some counsel. That which we wish to give to our contributors and correspondents is this: Remember that the printers' rule is "to follow copy." We say kindly, but frankly, that if the printers always followed the copy that is sent in to us, some contributors and correspondents would scarcely recognize their own compositions when they saw them in print! There are some who, used to writing for the press, send in perfect copy, and have the satisfaction of seeing it perfectly reproduced. But it is always a matter of astonishment to us, to see how many there are, of even excellent scholars, who suppose that the style of composition which they are accustomed to use in letters, or upon the blackboard, is quite suitable for printers' copy. We fancy that some of our contributors have often !

corrected their pupils—loudly rated them, perhaps soundly boxed their ears—for writing and punctuating as they themselves have done in their own compositions, trusting to the compositors and proof-readers to make all right.

If one has never been in a large printing establishment, one can have no idea of the many transformations an author's contribution has to undergo from the time he sends his manuscript in to the editor till it re-appears in his hand as part of a printed paper. And all these transformations have to be made quickly, by men over-pressed with work, with whom each hour, and almost each minute, is devoted to a duty which will admit of no post-ponement. The wonder is that the copy, good as it may be, turns out as respectably as it does.

The faults which printers and editors find with manuscripts, are not connected principally with illegibility of writingalthough writing is rarely as plain as it should be-but rather these: improper or insufficient "paragraphing"; a wrong use of capitals (three writers out of every five, who are not used to write for the press, violate continually every recognized rule for the use of capitals, excepting that for the use of "I"); a misuse of punctuation marks (the only punctuation mark whose use seems to be thoroughly understood is the note of interrogation (?); dashes, periods, colons, semicolons, are all used interchangeably; commas are thrown in anywhere); a misuse of italics, of quotation marks, of indentations in poetry, of numerals and letters used for reference, and so on. Again, much trouble is caused by want of care in the insertion of quotations, and of the "credits," as they are called, or ascriptions of source or author. ity. Titles, too, and, in correspondence, the form of the subscription, are frequently not carefully written. One of the commonest sources of error, error for which no compositor or proof-reader can be held accountable, is the illegible writing of proper names. Unless these are written so that every letter is distinct, they are very likely to appear wrongly spelled in print.

No fixed rules can be laid down in the above matters for the direction of writers; but anyone can learn for himself what good usage is by watching the modes adopted in well edited papers. These modes may vary somewhat, but they do

not vary sufficiently to create any difficulty in the mind of one who is anxious to write, in these respects, correctly.

The rule with editors is (when other things are equal) to use such copy as they can most easily prepare. We have a number of manuscripts, excellent in themselves, which must await publication till we find time to prepare them. Some, perhaps, may never be prepared. An editor's time for such work is limited. Let not all our contributors think, however, that their copy in our hands is held over for such a reason. We simply say that we have a good deal held over for lack of time to prepare it for the printer.

BOOK REVIEW.

Elementary Algebra for Schools. By H. S. Hall, B.A., formerly Scholar of Christ's College, Cambridge, and S. R. Knight, B.A., formerly Scholar of Trinity College, Cambridge. London: Macmillan & Company. 1885. Toronto: Rowsell & Hutchinson. Price, \$1.10.

This excellent treatise has for its aim to help the pupil over the difficulties which are inseparable from the early stages of a study which tries his patience and ability more than most other subjects. On the one hand there is the danger that first lessons in algebra will degenerate into a mere archanical manipulation of symbols, on the other has I that the learner will become hopelessly entangled in the intricacies of the science. One of the merits of the present volume is that it fully exemplifies the practical application of elementary principles before further steps are taken. The more difficult operations, such as factoring, are introduced at a later stage than is usual in books for beginners, and the order throughout is somewhat improved. Factoring and Cyclic Operations are more fully discussed after Quadratic Equations have been dealt with. The examples are well graded and unusually numerous. The book will be found fully complete up to the end of Surds: the remaining chapters are intended to furnish an easy first course of Ratio, Proportion, Variation and Progression. A "Higher Algebra," as a sequel to the present work, is in course of preparation by the same authors.

Elements of Geometry and Trigonometry. From the works of A. M. Legendre. By Chas. Davies, L.L. D., and J. Howard Van Amringe, A.M., Ph.D., professor of mathematics in Columbia College. New York and Chicago: A. S. Barnes & Company, 1885. 503 pp. \$1.85.

As the title indicates, the geometrical part of this book is not an amended and improved relition of "Euclid's Elements," but it is in the main an adaptation of the geometry of Legendre to the wants of the American student. The principal changes which have been made are the introduction of general enunciations, which were lacking in the work by the famous French mathematician, and the addition of geometrical problems, and

some applications of algebra to geometry. In this as in other treatises which have departed from Euclid's order and method, what has been gained in brevity and comprehensiveness has been more than lost in logical force and exactness of expression. In these features "Euclid" is superior to any of the works on geometry which have sought to take its place. The tendency in many of the latter is to substitute symbolical reasoning for a clear explanation of the relations that exist amongst the geometrical magnitudes. Consequently the special merits of " Euclid" as a mental discipline are largely lacking. As a training in fulness and exactness of expression, which are important aids in securing clearness and exactness of thought, even such treatises as Hamblin Smith's are inferior to those which follow the text of Euclid more closely. The volume before us devotes considerable attention to the geometry of solids, including the sphere, and some of the conclusions are established by more than usually neat and concise investigations. Besides Geometry the book treats in outline of Plane and Spherical Trigonometry and Mensuration. The appendix contains tables of logarithms, natural sines, etc. It is valuable chiefly as an assistance to those who have not time for the study in detail of a more complete and systematic treatise on each of these subjects, but who nevertheless desire some acquaintance with them for practical purposes.

W.

Easy Selections From Thucydides; by E. H. Moore, M.A. London: Rivingtons & Company. 17S pp.

The editor of these selections is an assistant master of Plymouth College, England, and he is also the author of some elementary books on Greek grammar. His object in preparing this little work has not been to publisha critical chition of his author, but to give lower form boys an easy Greek readerwhich object he has undoubtedly attained. To make these selections interesting, episodes in the Peloponnesian War, complete in themselves, have been chosen. All speeches, and sentences containing real difficulties (and there is no small number of these in Thucydides) have been omitted, but beyond this the editor states that no liberties whatever have been taken with the text. To each section copious notes are attached, and the same notes are purposely repeated to make each section complete in itself. In these notes all the idiomatic constructions, proper names and historical allusions are clearly and concisely explained-in fact, in explaining constructions the editor is superior to ordinary annotators. At the beginning of the book there is a general introduction on the causes which led to the Peloponnesian War, and special introductions before each of the three parts into which the selections are divided. The first part deals with the events which preceded the actual outbreak of the war, the second with the events during the first period, and the third brings us down to the sailing of the Athenian fleet to Sicily, B.C. 415. The notes are printed apart from the text, not as in the Catena Classicorum, on the same page. There are three maps to illustrate the campaigns. A chronological table of events connected with the war is also prefixed to the work. The printing both of the Greek and of the English is clear, distinct, and free from the typo-

graphical errors so often found in our Canadian school texts. The book is an excellent one, and well adapted for young students in Greek. As it is not specified in any of the curriculums it might be profitably used as an exercise book for translation of unseen passages.

Table Talk.

THE publishers of *Harper's Monthly* announce that they have already received from England of crs for 75,000 copies of their Christmas number.

What Cornell University loses in White is to be made up in light, Thomas A. Edison having offered a complete electric lighting plant for the workshops and mechanical laboratory, which has been thankfully accepted by that institution.

"Success in Life," by Canon Farrar, the celebrated English preacher now visiting this country, is nearly ready. It will be got up in the parchinent paper style, and prefaced with a brief biography of Canon Farrar, giving matter new to American readers.

MR. HERBERT SPENCER has lately become entirely unequal to responding to the innumerable letters from strangers not entitled to the privileges of correspondence with him, and has boldly taken the initiative among many bored literary men, by mailing a lithographed excuse to the intruders.

To the current statement that Mr. Walt Whitman's receipts from the sale of his works for the last six months amounted to \$22.06, it should be added, on the authority of a personal literary friend of Mr. Whitman, that his receipts from the same source for the entire year were only about \$28.00.

—Literary World.

The deepest ocean caverns are believed to be as far below the level of the sea, as are the summits of the highest mountain peaks above it. Deepsea soundings have been taken in the Pacific, in which the line reached down 4,575 fathoms, and off the coast of Japan, where a depth of 4,600 fathoms was reached.—Halifax Critic.

BISMARCK has issued a vehement and menacing protest against illegible signatures to official documents, blissfully ignoring his own fearful and wonderful example. He thus rivals Lord Granville, who a few years ago issued a circular calling for improvement in the grammar of official despatches, and in it used expressions and constructions calculated to rouse Lindley Murray from the grave.

A DOZEN years ago an Antwerp tailor bought for a franc a dirty little picture which had belonged to an old doctor then recently deceased. The tailor hung the picture upon the wall, but did not think it worth the cost of cleaning, and nobody found it very attractive. A little while ago, however, an artist happened to see it, and induced the owner to lend it to him to clean. No sooner was the first coat of dirt removed than there was seen in one of the corners the signature, "Pictro Paulo Rubens, 1614." The picture represents Christ blessing the world, and is said to be in excellent preservation. The tailor has already received several good offers for his picture; but he is waiting until a rich American "comes along."-Pall Mall Gazette.

Special Papers.

REPORT ON ALGEBRA.

(Read at Bangor, before the Maine Pedagogical Society.)
(Concluded from last issue.)

II.-METHODS OF TEACHING ALGEBRA.

THE study of algebra is one which may be invested with great interest; on the other hand, if not properly approached, it may prove very dull. One of the first requisiter in teaching algebra, as in teaching every other subject, is a thorough acquaintance on the part of the teacher with the subject. The teacher should so thoroughly acquaint himself with his work that he can bring the whole power of personal enthusiasm to bear in arousing the interest of his pupil. A teacher's success depends far more upon his ability to excite this interest than upon following this or that method. The teacher who has but an imperfect knowledge of the subject he teaches cannot, as a matter of course, arouse in his classes an enthusiasm which he does not himself feel. The live teacher will not be content with one view of his subject, but will seek to know all its sides and all its relations by extended reading bearing either directly or indirectly on his work.

It is of great importance that the pupil be carefully grounded in the first principles. The progress should at first be slow, until the language of algebra is thoroughly com. prehended. The pupil should be taught that the signs and symbols employed are but convenient forms of expression, and should be required to make frequent translations from the language of algebra to the language of common use. This fact, that the letters and signs of algebra are but the convenient representation of words, should early be impreseed on the mind of the pupil, at first by examples of the simplest kind; then, as his mind grasps the idea, by more varied and difficult forms.

RULES AND ENAMPLES.

As the pupil advances he should not be allowed to rely too much on the rules of the book, but should be required to formulate his own rules. Whenever practicable, the first step upon beginning a new subject should be to deduce the rule. Let the class be required to form from examples rules for their own use; let these rules be discussed at the first recitation on the subject, and let the class choose from those presented the one best suited to their purpose. In very many cases they will naturally conclude that they cannot improve upon the form given in the text-book; but, if this course be followed, the pupil will have a clear understanding of the origin of his rule, and consequently will be able to apply it more intelligently.

The progress during the first term should not be too rapid. Under the most favorable circumstances, the principles usually taken up by our text-books, as far as Equations of the First Degree, will be found sufficient to occupy the average pupil for a term of twelve weeks. Numerous auxiliary examples illustrating these principles may be required. It is a good plan to give such examples to be worked at sight, varying their difficulty, according to the ability and attainments of the class.

Reasons should be asked of the pupil at every step. As has been stated, one of the prime objects of the study of algebra is to develop the reasoning faculties. The pupil should, therefore, be taught to give a reason for every operation; why the sign is changed in subtraction; why like signs give plus, and unlike, minus; why a quantity with a negative exponent is equal to the reciprocal of that quantity, with an equal positive exponent—all such points he should be ready to explain at any time, and without assistance.

ARBITRARY SIGNS.

The use of the signs plus and minus needs particular explanation. The pupil should understand that they are arbitrary signs and numerous examples of their use should be given until the pupil perceives that they are used merely for convenience, and to facilitate the graphic representation of the ideas with which he is dealing.

The pupil should be made thoroughly familiar with the substitution of numerical values for letters in a given expression, of letters for letters, and parenthetical expressions for letters. This is a subject that needs attention during the early part of the work, and is one that is often too little understood. In no better way can the meaning of algebraic language be impressed on the mind. The removal of quantities from parentheses, and the reverse process of introducing quantities within parentheses, should receive careful attention. Here, as in all parts of this study, too numerous examples can hardly be given. The reason for the change of sign should be well understood. The particular case of the change of sign, when the first term of the quantity within the parenthesis has the minus sign, frequently presents difficulty.

FACTORING AND FRACTIONS.

The processes of factoring should be well understood because of their frequent employment throughout the study of algebra; the greatest common divisor and least common multiple, from their direct use in the reduction of fractions; and fractions not only because of their frequent recurrence in algebra, but because of their direct bearing on the same subject in arithmetic. Pupils too often leave the grammar school with but an imperfect knowledge of fractions, and it is the province of the high school work in

algebra to make clear what was before imperfectly understood; and it seems to us that there is nothing in the whole course of our common and high schools of more practical value than this work on fractions in algebra. It is well here to supplement the text-book by examples drawn from other sources until the manipulation of fractions is thoroughly understood. This work should. also, serve as a review of the various processes already taught. The reduction should be effected by the application of the rules of factoring and the use of the greatest common divisor and least common multiple. The attention of the pupil should be repeatedly called to the fact that all the operations on fractions in algebra are the same as those already presented in arithmetic, and that the knowledge he is now acquiring will be of value in the practical affairs of life.

EQUATIONS.

If the work through fractions has been faithfully mastered, the pupil is prepared to advance much more rapidly during the remainder of his course. He now comes to the application of what he has thus far learned. In all the work on equations the fact should be kept constantly before the mind that the statement and development of the equation is a logical process. The pupil should be taught to discriminate in the choice of words, and to weigh carefully every step to see that there is no error in his processes or conclusions. To sharpen the powers of observation and form habits of accuracy in reasoning, catch problems may be given from time to time. The following will serve as an example:

The result is manifestly absurd, though the various steps of the process are apparently correct. The pupil should be asked to detect the error. Enquire of him whether it be possible to divide by an absolute zero.

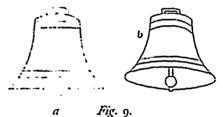
It is hardly necessary to extend these remarks on the method to be pursued in teaching algebra. The method advocated by this report may be summed up in a few words. A complete comprehension of the subject by the teacher, accuracy in reasoning, attention to details, and practice, so far as time permits, by means of dictation examples from sources outside of the textbook. Further than this, methods should yield to the personal enthusiasm of the teacher in directing the work of the class, and to his individuality in devising expedients to surmount obstacles as they present themselves.—From N.E. Journal of Education.

Practical Art.

For the EDUCATIONAL WEBELY.

ELEMENTARY DRAWING .- VII.

BEFORE taking up the perspective of the circle, the children should be required to practise drawing circular curves, embodied in the forms of objects. It would be well, at the same time, to bring in a few straight lines, of no great length. Suitable objects will be found illustrated below. As nothing has been said about the appearance of the circle when viewed from any other position than one perpendicular to its plane, care should be taken that such objects are chosen as may be represented truthfully without showing anything of their third dimension. The treatment of the bell in fig. 9 will show what is meant. In the form marked a, nothing of the inside or top is seen, yet it is sufficiently accurate to be called a truthful representation. In b the inside of the bell is seen, making it appear to be above the level of the eye, while in a the circular rim is just on a level with the eye, and so appears as a straight line. The first form, a, is the better one to use at present, until the appearance of the circle in different positions has been made plain.



It was stated in my last paper that there are very few straight lines in nature, that they are peculiar to manufactured objects. Another peculiarity which these possess is, that they are often symmetrical about a line or point, while in nature, instances of symmetry are comparatively rare.

Nothing is better adapted to train the eye than symmetrical forms, and for this reason they should be used as soon as the children are able to draw them, but they must be simplified as much as possible. Thus, nearly all the forms illustrated in this paper are symmetrical, but none of them will be found difficult to draw.

The children will not be able to advance as rapidly as I am doing in these papers. It is not intended that each paper should contain the matter for one drawing lesson, and no more. On the contrary it will be necessary for the children to practise not only the forms suggested here, but many others similar to them, and to practise them many times over. The teacher must not attempt to push them forward too rapidly. It will be wise to "make haste slowly" and see that they succeed moderately well with every object drawn before another is attempt-

ed. He should be careful in introducing new lines that they do not present insuperable difficulties, but are only one step in advance of what was done at the previous lesson.

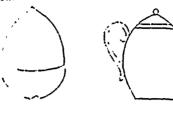
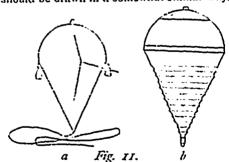


Fig. 10.

The outline of the acorn, a, fig. 10, is almost a perfect oval. This should be drawn before the curved line representing the top of the cup, or the stem. By cutting off the bottom of the oval by a straight line, and adding the curves and straight lines shown in b, it becomes a tea-pot. In drawing these symmetrical forms it will be an advantage to draw first the central straight line, in the proper direction, whether vertical, horizontal or oblique, and arrange the required lines on each side of it, so that the sides are alike. In the forms of the kite and top, fig. 11, the outlines are almost identical, but in the top, parallel horizontal lines are used. will be a good exercise. See that the children make these lines parallel and the same distance apart. Show them, too, that by placing the central line of either of these objects in an oblique direction, it will give the object the appearance of falling down. The curve of both of these forms is a semi-circle. In the kite it may be drawn first, after the central line, then the sides, meeting where the tail is attached, then the details, in any order that may be deemed best. The top should be drawn in a somewhat similar way.



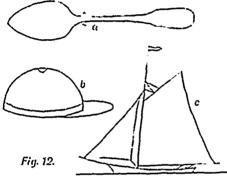
In the cap, fig. 12, we have a semicircle and a portion of two ellipses. Commence with the semicircle, add the curves of the band, and finish with the peak and button.

In the spoon, fig. 12, the bowl is oval and the top of the handle somewhat elliptical. These may be drawn and joined by parallel straight lines, and the lines of the shoulder above the bowl, added afterwards.

For the drawing of the boat, fig. 12, no instruction is needed. The lines may be drawn in almost any order. Perhaps it would be better to commence with the hull, add the mast and bowsprit next and the

sails last. Notice that the lines of the hull and some of the lines of the sails are slightly curved, and that the mast is one-third of the length of the hull, from the bow.

When ready to commence teaching the perspective of the circle, the teacher should, provide himself with an iron ring, a wooden hoop, and a circular piece of stiff paper or cardboard. He may ask the children the names of these and will most likely get as answers: hoop, ring, wheel. By means of these he can show the difference between these objects, and that a circle is not the curved line drawn on the black-board by means of the string, as was suggested in last paper, but is the space enclosed by it. Many children and grown-up people, too, have the idea that the circumference is the circle; that is, that a circle is only a part of itself. The piece of paper or cardboard will represent as near as possible a true circle, while the curve on the blackboard is the picture of one.



After the children have become familiar with these forms, the circle, that is the piece of paper or cardboard, may be held so that they view it obliquely, and they be asked to draw on their paper or slates a figure that will represent it in this new position. Most likely they will nearly all draw a circle. In commencing drawing from objects it will be found that there is a tendency, almost universal, to show an object as it is, and not as it appears. The children must be called upon to notice that the circle no longer looks to be round, but that it is much shorter in one direction than in any other; that only one line can be drawn in its new form which will be of the same length as the diameter of the circle. By passing through the centre of the cardboard circle a slender wooden rod, or a wire, keeping it perpendicular to the plane of the circle, it may be shown that this long line, the transverse diameter of the ellipse, is always at right angles to the rod, or axis of the circle.

Ashun A Prading

THE new apparatus in the Ingersoll High School was much admired by the teachers of Oxford while at their convention. But, teachers, step in and see the consignment of apparatus and school equipments soon to arrive for Woodstock High School.—Woodstock Sentinel-Review.

The Public School.

For the EDUCATIONAL WEEKLY.

LITERATURE FOR ENTRANCE INTO HIGH SCHOOLS.

IX. -BOADICEA.

Ontario Readers-New Series. Page 35. SUGGESTIVE NOTES AND QUESTIONS.

"British warrior-queen." Boadicea, Queen of the Iceni (a tribe on the eastern coast of Britain), in the last half of the first century. Her husband Prasutagus at his death, A.D. 61, left his wealth jointly to Nero, Emperor of Rome, and to his two daughters, hoping thus to secure his children from oppression. The Roman soldiers, however, took advantage of the helpless condition of the country and began to plunder. Boadicea was herself scourged and her daughters were insulted. Enraged by these and other affronts Boadicea and her people rose in arms, captured Londinium and Vernlanium, and destroyed about 70,000 Romans. The Roman Governor, Suctonius, raised an army to oppose Boadicea and defeated her in a battle in which 80,000 Britons are said to have perished. Discouraged by her defeat and despairing of the future, Bodicea committed suicide.

- " Warrior-queen." Name other English queens who deserve this epithet.
- "Bleeding from the Roman rods." Explain what is meant. What celebrated personage of Scripture was scourged in this century? Meaning of from?
- "Indignant mien." Difference between indignant and vexed? What words are pronounced like mien? Synonyms of mien?
 - "Sought." Where would she probably look?
 - "Counsel." Meaning of council?
- "Country's gods." Little is known of these, but the most important were called Textates, Taranis, and Hesus.
- "Sage beneath." Notice the effective arrangement of words in this stanza.
- "Spreading oak." The Druids usually performed their sacred rites in oak groves. At certain times of the year the mistletoe was with much solemnity cut from the oak, which was considered sacred and was perhaps worshipped.

"Sat the Druid." The Druids were a class of priests in Keltic nations, whose duty it was to attend to divine worship, perform sacrifices, and expound religious matters. All quarrels came under their jurisdiction and they were judges in cases of crime or dispute. When any person disobeyed them they excluded him from the sacrifices and thus disgraced him so that no one would associate with him. They took no part in warfare and paid no taxes. They taught the transmigration of souls and often offered in sacrifice human beings, generally criminals or prisoners of war. They exercised so great an influence in continually exciting the Britons to rebellion that Claudius, Emperor of Rome, prohibited the practising of their rites. It was not, however, till a much later date that these died out.

"Hoary chief." Age brings dignity and wisdom, and moreover the chief must have been hoary, for all the Druids were well advanced in life, since a

to be served. The chief Druid, too, was chosen because of long experience and great influence. Cresar says: "All these Druids have one chief, who enjoys the highest authority amongst them; when he dies he is succeeded by the member who is most prominent amongst the others; if, however, there are several men equally distinguished the successor is elected by the Druids."

- "Every-grief." Supply the ellipsis.

- "Burning word." Explain.
 "Full." Why repeated?
 "Rage and grief." The cause of these feelings?
- "Princess," Her name?
- "Weep upon." Do eyes z. cep? Why is upon here preferable to over and about?
- " Matchless wrongs." A peculiar use of matchless, which is now generally used to denote excellence.
- "Resentment ties." Meaning of resentment? How can it tie! Distinguish from anger or vexation ties.
- "Terrors of our tongues." Explain.
 "Rome shall perish." Why shall? Which of these words is repeated in this stanza? in next? why?
- "That word." Only one word? Explain.
- "Write in blood." To make it solemn. What blood?
- "Deep in ruin as in guilt." Was the guilt great in eyes of Britons? in yours?
- " For empire." Parse.
- "Empire far renowned." The Roman empire at this time included most of the known world, and extended from Germany to the Sahara and from Spain to Persia.
- " Pride shall kiss the ground." Compare the proverb, Pride shall have a fall.
- "The Gaul is at her gates." Alluding to the continual inroads of the Gauls on the Roman Empire, and even on Rome itself, which they succeeded in capturing under Alaric I., leader of the Visigoths.
- "Other-fame." Alluding to the reputed dislike of the Italians for war, and their love for music and painting.
 - "The progeny." Explain.
 - "Armed with thunder." The noise of cannon.
 - "Clad with wings," Sails.
 - " Wider world." Than what?
- "Thy posterity shall sway." Are the English descended from the Kelts?
- "Casar never knew." Twelve Roman Emperors bore in turn the name Casar.
- "Eagles never flew." The Roman standard was an eagle.
 - "Bard." Difference from foet?
- Pregnant with celestial fire." Compare Gray's Some heart once pregnant with celestial fire.'
- "Awful lyre." Explain. The lyre, an instrument like the harp, was anciently used by hards when singing poetry.
 - "Felt them glow." What?
- "Dying hurled them at the foc." Did Boadicea die in battle?
 - "Ruffians." Pronounce.
- "Vengeance due." Explain meaning. we to hate the Italians?
- "Shame and ruin wait for you." Italy has long apprenticeship, sometimes twenty years, had I suffered much in the way of shame and ruin, but I

she is rapidly gaining strength and influence, being now classed amongst the first-class powers.

For life of Cowper see the Reader.

X.—THE GEYSERS OF ICELAND.

Ontario Readers-Old Series. Page 222. SUGGESTIVE NOTES AND QUESTIONS.

The following extract from a previous number of the EDUCATIONAL WEEKLY contains all the information necessary.]

In teaching this lesson considerable time might be devoted to the consideration of the style. The picturesque introduction, the happy, mischievous portraiture of the quicktempered Strokr, and the calm dignified description of the Great Geyser exemplify the possibility of being interesting and yet not commonplace, elevated and yet not bombastic. There is perhaps no extract in the series that exhibits in a higher degree the agreement of diction and thought that characterizes the work of our best writers. A few notes are here added to interest the

GEYSERS.*

Geyser is a term applied to the eruptive thermal springs that are found in various parts of the earth's surface in evident connection with the volcanic forces at work below. The Geysers in the Yellowstone region are probably the most wonderful of all, but the best known group is in Iceland about 70 miles from Rickiavik. On the slope of a low traphill, a space of ground measuring perhaps half a mile each way is thickly interspersed with boiling or hot springs of various sizes, from jets not greater than an overboiling tea-kettle, up to great caldrons. The chief apertures are two, respectively called the Great Geyser and the Strokr which are little more than a hundred yards apart. The latter is an irregular aperture of from six to eight feet diameter, down which one may in general safely look, when he sees the water noisily working in a narrower passage about 20 feet below. If by throwing in a sufficient quantity of turf, he can temporarily choke this gullet, the water will in a few minutes overcome the resistance, and so to speak, perform an eruption with magnificent effect, bursting up 60 feet into the air.

"The appearance of the Great Geyser is considerably different. On the summit of a mound which rises about 15 feet above the surrounding ground is a circular pool or cup of hot water 72 feet across at its greatest diameter and about 4 feet deep. From the centre descends a pit of 8 feet width and \$3 feet deep, up which a stream of highly heated water is continually but slowly ascending, the surplus finding its

^{*} There is considerable difference of opinion as to the correct spelling and pronunciation of this word. The spelling Georges is probably preferable to Georges in, and the pronunciation by which the x is given its own sound and not that of x seems to be more natural. This difference in spelling and pronunciation is an argument for a more consistent method of spelling.

way out by a small channel in the edge of the cup. Every few hours the water with a rumbling noise rises tumultuously through the pit, and jets for a few feet above the surface of the pool; by and by it subsides and all is quiet again. Once a day, however, or thereabouts this tumult ends in a terrific paroxysm which lasts perhaps a quarter of an hour, and during which the water is thrown in repeated jets from 60 to 80 feet high mingled with such volumes of steam as obscure the country for half a mile round."

The causes of the eruption may be inferred from Dufferin's words: "With regard to the internal machinery by which these waterworks are set in motion, I will only say that the most received theory seems to be that which supposes the existence of a chamber in the heated earth almost but not quite filled with water and communicating with the upper air by means of a pipe, whose lower orifice instead of being in the roof, is at the side of the cavern and below the surface of the subterranean pond. The water, kept by the surrounding furnaces at boiling point, generates of course a continuous supply of steam, for which some vent must be obtained: as it cannot escape by the funnel—the lower mouth of which is under water-it squeezes itself up within the arching roof, until at last compressed beyond all endurance, it strains against the rock and pushing down the intervening waters with its broad strong back, forces them below the level of the funnel, and dispersing part and driving part before it, rushes forth in triumph to the upper air."

THE EARL OF DUFFERIN.

The writer of this extract was born in 1826. and succeeded to the Peerage in 1841. He received his education at the famous Eton School, and at Christ-Church College, Oxford. From 1849 to 1852 he was a Lord in Waiting on the Oueen. He afterwards occupied the position of Under Secretary of State for War. In 1860 he was sent to Syria to settle the difficulties between the natives and Christians. So successful was he in his mission that he was subsequently offered the Governorship of Bombay, but declined it because of the state of his mother's health. In 1868 he became Chancellor of the Duchy of Lancaster, and in 1872 was appointed Governor-General of Canada. Notwithstanding the difficult circumstances in which he was placed by the bitterness of party feelings of Canadian politicians during his administration, he succeeded in making himself perhaps the most popular of our Governors. Since his departure from Canada he has served the English Government as Ambassador at St. Petersburg and Censtantinople so successfully as to merit his appointment as Viceroy of India, a position he now fills with credit to himself and country.

The "Geysers of Iceland" is an extract from "Letters from High Latitudes," an account of a trip in 1856 from Oban, in Scotland, to Iceland, Jan Mayen and Spitzbergen. The voyage was taken in the yacht Foam, lasted from June 2 to middle of September, and extended over a distance of 6,000 miles. One of the characters, "Wilson," described in the letters, has won for itself a place in literature beside "Sam Weller" and "Mickey Free."

Perhaps teachers may be able to use the following:—

ENAMINATION ON "THE GEYSERS,"

- t. Give all the distinct meanings you can for till, down, set, just, even, long, like, last. Pick out other words that have different meanings.
- 2. Feet, cannon, day, see. Give meanings of words pronounced like these but spelled differently. Find other similar words in the extract.
- 3. Expand into a phrase or clause the italicised part of: a different aspect; waving masses; usual underground thunders; wreathed in robes of vapor; after our arrival.
- 4. Contract: which contains these wonderful springs; as he has no basin to protect him; sods that have been chucked in.
- 5. Find synonyms for any four words of the
- 6. Write the account in your own words.
- 7. Give any information about the Geysers that is not furnished by the extract.
- S. From what book is the extract taken? In what yacht was the voyage made?
 - 9. What do you know about Dufferin?

Philerus.

EDUCATIONAL SUICIDE.

THE following ways of committing educational suicide are the most common:

Teaching without a child knowledge of nature. By so doing, the teacher not only kills his own influence, but destroys the future of many committed to his care. There isn't one teacher in a thousand who ever gets right if he commences wrong. Most teachers at the beginning assume that all children are to be treated alike, when exactly the contrary is the truth. They assign the same lessons to all, and require equal work from all. The so-called dull child is blamed for not doing what he cannot do. Something else would suit him, but the very thing he is expected to do, he cannot do. The teacher assumes that this pupil is dull, or lazy, when the fact is, he is trying to do what he has no capacity for, so, in utter ignorance of the grandest law in the universe-the law of human growth-both teacher and pupil stumble along. The teacher kills his own influence over the pupil; in other words, commits educational suicide.

Hearing recitations instead of teaching. Nothing is more certain to kill mental growth than this, and no phrase is more expressive of the means by which it is done than the one—"hearing a recitation." Such

a teacher is frequently heard asking the question, "Have you learned your lesson?" and the direful punishments that have been meted out to unholy delinquents who have failed to do so would make a whole library of Books of Martyrs. But two ideas ever get into the heads of these hearers of recitations. The first one is the book, and the second one is-it is my duty to make my pupils learn it. For why was it written? To them the mind is a corn crib, designed to be filled. They consider a course of study intended to "store the mind with useful knowledge" against time of need. It will be handy to have some day. The idea of developing the mind into power able to grapple and solve the questions and problems of life has never so much as occurred to them. Concerning the real nature and work of education they have no conception. So they daily commit educational suicide by going through with forms and ceremonies from which all spirit and power has departed.

Refusing to take good educational papers, and study standard educational books. It is a fact that many teachers think of nothing educational outside their text-books. If the catalogue of teachers who take no respectable educational paper should be published, it would astonish the world.—N. Y. School Journal.

MR. LINCOLN AND GEOMETRY.

MR. LINCOLN made a lecturing tour through New England before he was a candidate for the Presidency. A gentleman who heard him at Norwich, Conn., happened to be riding with him on the cars next day, and asked how he acquired his wonderful logical power. "I will tell you," said Mr. Lincoln. "It was my terrible discouragement which did that for me. When I was a young man I went into an office to study law. After a little I saw that a lawyer's business was largely to prove things, and I said to myself, 'when is a thing proved?' I could not answer the question. Then I thought, 'what use is it for me to be in a law office if I cannot tell when a thing is proved?' I must first find out what a proof is. So I left the office and went back home. Soon after I fell in with a copy of Euclid. I looked into the book and found that it was all about lines, angles, surfaces and solids, but I could not understand it. I therefore began very carefully to study it, and before spring I had gone through the book and could demonstrate every proposition in it. Then I said to myself, 'now I know when a thing is proved, and may go back to the law." "I see now," said the gentleman, " where you found your logical acumen; you dug it out of geomety." "Yes, I did," plied Mr. Lincoln; often by the light of pitch-pine knots. Nothing but geomety will teach you the power of abstract reasoning." -E2:

Educational Intelligence.

WEST HURON TEACHERS' ASSOCIATION.

THIS association met in the High School, Goderich, on Friday and Saturday, Oct. 23rd and 24th; President Brown in the chair. The president gave an epitome of the papers read at the Ontario Teachers' Association; Mr. Delgatty then read a valuable paper on "Reading." Mr. R. Morrish took up writing, illustrating by blackboard exercises, after which Mr. J. H. McFaul, of Toronto Normal School, illustrating still further the peculiarities of teaching writing. Mr. McFaul then, in an exhaustive manner, illustrated the method of teaching entrance drawing, confining himself to the first book of the series J. R. Miller, I. P. S., read a communication from the Education Department, requesting teachers to interest their pupils in preparing specimens of the various subjects taught in schools, with a view to making a selection to send to Colonial Exhibition to be sent to England next year. Mr. T. McGillicuddy then took up the subject of " Phonography," during which he illustrated some of the absurdities in the present mode of spelling, to the amusement of the teachers assembled. He also exhibited the phonographic alphabet, and was listened to with interest as he described the salient points of phonography. Mr. McFaul followed with an excellent lesson on the drawing course, as found in the second book. He also introduced his own method of building block letters, and laid before the teachers one of the simplest and largest plans for making large and properly proportioned letters. He followed this up by a very instructive example of model drawing, from a large vase used in the schools. He also gave interesting examples in sketching circles. He was heartily applauded on taking his

On Saturday morning an opportunity was afforded the members of inspecting specimens of drawing by pupils attending the Toronto Normal School. All the work shown was that of those who had but one term in drawing, and the sketches were very creditable to teacher and pupils. Following Mr. McFaul's addresses upon model drawing, the exhibition of these specimens made a very good impression upon the spectators. Mr. Murch then read an instructive paper on his method of teaching the "Infinitive Mood," which called forth some lively remarks. Mr. McFaul then explained more fully how to draw objects in perspective, using models as before. He held the closest atention of the gathering, and his work, which was fully described by voice as well as by chalk, was very favorably commented upon. He was again loudly applauded as he laid down the chalk. Mr. McPhee then read an admirable

paper on "Dismissal of Teachers," which was full of humor and sturdy common sense. Some of the points were much applauded. It was resolved to hold the next meeting at Exeter. The committee on nominations and resolutions then presented their report as follows:—President, F. Cressweller; Vice-Pres., George Holman; Sec.-Treas., S. P. Halls; Management Committee, Massers. Kelty, Murch, Gregory, Delgatty, and Miss Halse.—Condensed from Huron Signal.

THE WEST KENT TEACHERS' ASSOCIATION.

This association held its semi-annual convention in Central School, Chatham, on Thursday and Friday, the 29 h and 30th October.

The president, Mr. J. Bracken, occupied the chair.

After prayer by Rev. A. McColl, P.S.I., Chatham, Mr. Birch gave a report of the proceedings of the Provincial Association for the promotion of education. On the suggestion of Mr. Nichols, P.S.I., West Kent, a committee was appointed to report on the advisability of having only one meeting of the general association each year, the other meeting to be held in several localitieslocal meetings. Mr. Clarke, of the Central School, laid down the proposition that elementary number is most important in a school course. Number aids art, business, and moral character. Notation and numeration should be more thoroughly taught and explained. Teachers were driven by public opinion to teach imperfectly, but they should not allow themselves to be ruled by public opinion. Would it not be better to convince the public that they are wrong? Mr. John Morrish gave a lesson to a class in the Holt system of music. All difficulties in the staff notation were made to vanish. Mr Tilley, director of Teachers' Institutes, gave an interesting lesson on fractions, confining his lesson to the introduction of the subject. Mr. Shaw spoke on the necessity of business correspondence and letter-writing being more generally taught in public schools.

On Friday morning Mr. Donovan gave some solutions of equations to illustrate the methods employed by analysts to solve equations of higher powers than quadratics. He held that teachers owed a duty to themselves as well as to their pupils, and that the proceedings of teachers' conventions should be literary as well as professional. Mr. Killacky explained an interesting method in teaching geography by engaging the attention of pupils by tracing the course of navigation to the place where some article of commerce-such as cod-fish-is found, and afterward mapping out the waters passed through and noting places. Historical spots might also be found and the events related to the pupils.

Mr. Ayearst advocated uniform promotion examinations, which met with no positive opposition. A motion was passed approving the adoption of such examinations in West Kent, and a committee appointed to devise ways and means. Dr. Hall read a paper entitled "Remarks on Character," which was replete with practical information and suggestions. The Doctor held that the great end of education should be to make man healthy and useful-health being the first essential to success and enjoyment. Mr. Tilley gave a very interesting address on the relation of the teacher to his work, which was full of practical points exceedingly useful to teachers. Prof. Cringan illustrated the simplicity and advantages of the Sol-fa and, by request, sang several selections from Burns. Mr. Kirk spoke on the advantages of the Phonetic Method, which could be taught to some extent without a change in spelling. He held the consonants required all the attention, leaving the vowels to take care of themselves. Mr. Donovan held that the weight of authority was the other way; that dialects are generally caused by difference in pronouncing the vowel sounds. Prof. Freeland also held that the vowel was sufficiently important to demand attention. Rev. J. M. Hodson, M.A., gave an interesting address on "Atmospheric Movements," assigning causes real or hypothetical for the various movements of the atmosphere and explaining the phenomenon of hail.

On Thursday evening Mr. Tilley delivered a lecture entitled "A Plea for National Education." The evening session was held in Christ Church Sunday School and was presided over by Judge Woods. Votes of thanks were tendered the speaker of the evening, the chairman, and the S. S. management. The Committee on Local Meetings reported in favor of the scheme, but on motion it was laid over to appear on the programme for next meeting.—Condensea from Chatham Weekly Banner.

SOUTH ESSEX TEACHERS' ASSOCIATION:

THE half-yearly meeting of the teachers of this association was held at Essex Centre, on the 26th and 27th October.

The convention opened at to a.m., Monday, the president, Mr. Maxwell, taking the chair. After the ordinary routine business, the president laid before the association, and asked their consideration of, two circulars, one from the Waterloo Teachers' Convention, the other from the secretary of Provincial Association, in regard to copies of the minutes of last meeting of the Provincial Association. The Waterloo Association asked the co-peration of this Association in recommending that all candidates at professional third-class examinations be

charged a fee of twenty-five dollars. The Waterloo Association further recommended that a committee be appointed annually to sit in judgment on any teacher who has attempted to oust a fellox-teacher by any means whatever, and to assist intending applicants in regard to probable salaries in vacancies.

Messrs, Weir, Cook and Brisbin were appointed a committee to consider these recommendations and report thereon. Miss M. Armstrong read a paper on "How to interest the little ones while the teacher is engaged with other classes." The paper was very suggestive, and the methods which it advocated would be very successful when tested in the schoolroom. An animated discussion followed. Mr. Frank Leigh then read a paper on "Spelling Reform." The majority of those present seemed to recognize the anomalies of our orthography, but very few seemed to think that the suggested reform would be an improvement on the present order of things. Mr. Palmer, of Kingsville, showed his method of teaching Notation and Numeration to beginners. The subject called forth a prolonged and animated discussion, during which Mr. Weir very clearly and forcibly showed that it was folly to attempt to teach young pupils numbers as mere abstractions, the proper method being one in which the pupils are led to discover numerical relations by the handling, counting, and grouping of objects. Mr. J. J. Tilley introduced the subject of Geography, by pointing out the wrong method that had hitherto characterized the teaching of that subject, thus rendering it both uninteresting and profitless. He brought out clearly the necessity of impressing on the pupil the way in which the character and occupation of the people, the climate and productions of the country, are determined by its physical outlines. Mr. Simpson, of Leamington, occupied an hour explaining a method of teaching beginners to read by means of a phonetic alphabet of which he is the inventor, and which shows considerable ingenuity and much patient labor. In the evening Mr. Tilley delivered a lecture in the Methodist chu: ch to a large audience.

On Tuesday morning, the committee appointed at a former stage of the proceedings, recommended that the resolution of the Waterloo Association be laid on the table, and that this association take seventy-five copies of the minutes of the Provincial Association. The report of the committee was adopted without dissent. Mr. Smith, of Learnington, read an essay on "Mistakes in Teaching Grammar." The paper was deservedly listened to with the closest attention. The teaching of "Fractions" to beginners was then experimentally illustrated by Mr. Tilley with a class from the public school, which had no previous knowledge of

the subject. Mr. Tilley practically exhibited the advantages of teaching Fractions by means of objects. Mr. Fuller read an essay on "How to Teach Language Lessons," which provoked a considerable amount of discussion. Mr. Weir, B.A., Head Master of Essex Centre High School, gave solutions of the more difficult problems in the 2nd and 1st class Algebra papers, set at the mid-summer examinations. The subject, although usually considered a dry and difficult one, was listened to with rapt attention and interest, even by those who knew comparatively little of the subject. Mr. Weir, by his brief and lucid solutions, won a high place in the opinions of the convention as a skilful teacher .- - Condensed from Essex Centre Argus.

DIRECT REPRESENTATION OF TEACHERS IN PARLIAMENT.

THE elementary teachers of England have chosen three Parliamentary candidates from their body, and these three gentlemen will be supported by the money and interest of some twelve thousand subscribers. Mr. Heller, secretary of the Teachers' Union, appears as an Independent Liberal-Conservative; Mr. George Collins, editor of the Schoolmaster newspaper, and founder of the National Union, is an advanced Radical; and Mr. Clarkson, a National schoolmaster, is a Conservative. The weight of money behind the three candidates will probably secure their return, and even the "Independent Liberal-Conservative" is considered to be safe. At present there is only one man (Mr. Storey) in the House who has any practical acquaintance with the minute work of elementary schools; yet complicated directions for the guidance of teachers are cheerfully framed by philosophic amateurs. -Educational News.

THE SECRETARY OF INSTRUC-TION A MEMBER OF THE BRITISH CABINET.

MR. MUNDELLA had to withdraw from his nosition as vice-president of the Committee on Education of the Privy Council in consequence of the resignation of Gladstone's administration. That the educational branch of the Government, under Mr. Mundella, has attained a higher plane in public esteem, is indicated by the fact that his successor, Mr. E. Stanhope, has received the rank of a member of the British Cabinet. The bill which the Gladstone ministry introduced into the House of Lords, some time ago, to establish the position of a special secretary of all public instruction for Scotland, has met with very decided opposition. The Educational Institute, which is the representative association of a great body of Scotch teachers, has protested against any such separation of | Forest, \$340.

educational interests, and pronounced in favor of a British Secretary of Education, who is to be at the head of both the Scotch and the English schools.—Journal of Education.

ALMONTE High School has a Literary Society.

I AM pleased to say, that as a whole, our schools are in good condition.—Inspector Kodgers, on Collingwood Schools.

At the examination for entrance to the Academy of Halifax, eighty-five candidates were successful.

— Halifax Critic.

THE first of the regular fortnightly meetings of the Simcoe High School Literary and Musical Society has been held.

THE staff of school teachers, Wiarton, has been re-engaged at the same salaries, and a fourth one advertised for at a salary of \$225.—Wiarton Echo.

THE attendance in Manitoba schools in 1871 was 816; in 1875, 1,595; in 1879, 3,614; in 1882, 6,972; and in 1884, 13,641. In the city of Winnipeg it has increased from about 800 in 1881 to over 2,500 in 1884, and has during that period shown an increase every month.—3. anitoba Free Press.

THE University of Pennsylvania has started a "department of physical culture." Dr. J. W. White, who will preside over it, states that his duties will be to examine each student, note wherein he needs physical development, and recommend the proper mode of exercise to induce it. If his back is weak, the rowing machine or boat is advised; if the chest is flat, parallel bars are in order. The ordinary trainer generally picks out for the boat a man who does not need it.— Chicago Herald.

THE report of the superintendent of public schools in Boston discusses the experiment of manual training for boys. Two hundred boys from ten different grammar schools, have been under instruction in carpentry two hours a week since September. They were selected by the masters from among those 14 years of age or older who had the permission of their parents to take the instruction. "The experiment has already gone far enough to prove that work of this kind can be joined to the ordinary grammar school work with good effect," says the superintendent, and he advocates the making of provisions for industrial training for girls as well as for boys.

A MEETING of the Tuckersmith township (County of Huron) school board was held on the 6th Oct. All the members of the board were present with the exception of Mr. Layton. It was moved by Mr. Samuel Wallace, and seconded by Mr. David McCloy, that the following applicants for the several schools be engaged for next year at the following salaries, viz.: school No. 1, Janet Wilson, salary, \$350; No. 2, Andrew Scott, \$450; No. 3, Jas. Ireland, \$400; No. 4, Miss Mary Govenlock, \$300; No. 5, Miss Mary Dick, \$400; No. 7, Miss McKay, \$290; No. S, E. Hicks, \$450, and Miss Barr, assistant, \$275; No. 9, Henry Horton, \$450, and Miss McTavish, assistant, \$250; No. 10, Wm. Doig, \$390; No. 11, Miss Forest, \$340.

Correspondence.

REYNOLDS "EXPERIMENTAL CHEMISTRY."

To the Editor of the EDUCATIONAL WERKLY.

SIR.-I have read two letters in late numbers of the WERKLY, reflecting upon the wisdom of the Education Department in selecting Reynolds' Experimental Chemistry as the model upon which to base the teaching of chemistry in the high schools. It seems to me that "Science Master' is rather hasty in such statements as these: "This book is full of mistakes" - "Reynolds' book would not be recognized by competent chemists." -" Reynolds pays no attention to this received view, and hence a great many equations which he uses to explain reactions are entirely wrong." The gist of "Science Master's" objection seems to be that the value of the book is destroyed because atomic formulæ are used in representing reactions, instead of molecular formulæ. I find on turning to the title-page that the author of the work is not altogether unknown in the chemical world, being, in fact, vice-president of the Chemical Society of London, as well as professor of chemistry in the University of Dublin. Prima facie, therefore, he is hardly likely to be ignorant in regard to the point which "Science Master" raises, and with which, as a matter of fact, every tyro in chemistry is perfectly familiar. But I find, also, that chapter V. of Reynolds' book contains a beautifully clear account of the theory of the constitution of matter, based, in accordance with the general plan of the work, upon experiments which may be easily exhibited before a class. If "Science Master" will refer to Roscoe's Chemistry, page 70, he will find this statment: "If we wish fully to represent the alterations which occur when a chemical change goes on, we must employ molecular formula, but for the sake of simplicity we frequently use atomic formula." But perhaps Roscoe is not a "competent chemist"; or perhaps the motive of simplicity is not one which commends itself to "Science Master." Let him then refer to Tilden's Chemical Philosophy, page 68, where he will find this statment: "2KClO2 = 2KCl+ 302, or more simply, KClO3 = KCl+11/2O2. As a matter of fact he will find instances of such equations as he objects to in all good works on chemistry. They do not deceive anybody, and the notion that any writer on the subject uses them through ignorance is too absurd to be entertained.

I cannot say that I clearly understand Mr Ellis' objections. His first one, that the use of the work is evidently calculated to waste students' time, is a very serious one, if it can be substantiated. I must confess that I have not myself had that idea, and as I respect Mr. Ellis' opinion, I hope he will do his fellow-teachers the service of stating his objection more at large.

The other objection, as to the difficulty of obtaining the apparatus required for a few of the experiments is, I believe, sound as far as it goes, and it is, moreover, recognized by Reynolds himself in his preface. But giving the objection its full weight, (and it might be asked whether any good course in chemistry is not open to the same objection,) it seems to me that the countervailing

advantages of the work are so palpable that the necessity of omitting an experiment here and there is not a vital matter.

Take the work as a whole, I believe it will be admitted by any man who knows from experience the difficulties which beset the scientific presentation of this subject to beginners, that the author has claims upon our gratitude for the elucidation of a method which approaches more nearly to a true scientific method than any hitherto presented. And it must be pointed out that it is not the design of the Department to put this book into the hands of the student. It is expresely stated to be for the guidance of the teacher, and if the obvious intentions of the Department are carried out in the schools, students of elementary chemistry will at length have an opportunity of pursuing the subject in the only way in which it can be of any educational value whatever - they will obtain their knowledge by induction from observed facts-and chemistry, instead of being crammed from a book for examination purposes only, will become, as it should, a valuable instrument for the development of mental power.

Faithfully yours, II. B. Sporron. Collegiate Institute, Barrie, Nov. 7th, 1885

"OUTIS," ON "MODERN INSTAN-CES."

To the Editor of the EDUCATIONAL WEEKLY.

DEAR SIR,—In your issue of last week, there appeared a paper from the pen of "Outis" on what our books call "False Syntax." The subject is an eminently proper one to be discussed in your excellent paper; but, as treated by "Outis," it would tend, in my opinion, to lead learners from proper paths. In the criticism of English style, there is far too much hypercriticism; and from this fault, "Outis" is by no means free. Nor is this his only fault, as I shall endeavor to show by examining his comments on two of the passages criticised.

Extract No. 6 reads as follows: "If the verb in the principal clause is in the subjunctive mood, the verb in the si-clause will be also in the subjunctive."—Arnold's Latin Prose Composition.

"Outis" begins his criticism of this extract by saying, "Our text-books ought to be correct." Surely the statement lacks precision. There are more respects than one in which text-books may be correct; but "Outis" here is dealing with text-books only in one respect. It would be better then to say, "The English of our text-books ought to be correct."

Again, "Outis" says: "We look for better English composition from a man who professes to teach Latin composition."

Here the use of "better" leads to confusion. One cannot tell, until the end of the sentence is reached, whether the meaning is that "a man who professes to teach Latin composition" should write better English than one that does not teach this subject, or that such an one should write better English than that of the extract. Further, a purist like "Outis" should write in this sentence "that" instead of "who," and also "one" instead of "a man," unless, indeed, it is intended to exclude women.

Again: "Bradley is here more careful of the Latin subjunctive than of the English."

Does the expression "the English" here mean his composition, or is the word "subjunctive" to be supplied? This is clearly a case of ambiguity.

"Outis" re-writes the extract and reads "be" instead of "is." This is the only fault found with the English of the extract. This is, however, a hypercriticism. The best usage abundantly sauctions the use of "is" in such cases as this. I much prefer the English of Dean Bradley to that of his critic.

In the comments on extract No. 7, "we" is used when the reference is to "Outis" alone. Such a use of "we" ought not to be found in the composition of good writers of English.

"He criticises the London Queen using the following words." For awkward English one need-not go further; a simple remedy is to insert "for" before "using."

In the extract, the phrase, "cable a thunderbolt," meets with the critic's disapproval. It is surely hypercritical to object to this. It is, true enough, a bold metaphor; but quite allowable.

In this letter, my main object is to protest against such hypercriticism. Hypercriticism is an arbitrary thing, and as such can be only an impediment to sound progress in English study. This study has been too much hampered with what is arbitrary; and it is the duty of educationists to strive to free it from all such hindrances.

Yours truly, TEACHER.

The gold medal offered by the Minister of Education to the Petrolia High School, for the pupil who obtained the highest number of marks at the departmental examinations in July last, was won by Henry Trott, of Oil City, who obtained 1,312 marks out of the possible 1.940. The medal has been forwarded and is said to be a beautiful one.

THE Bealton School House is one of the finest in the county. It was erected about three years ago. The main room is 40 feet square. Behind this is a large class room. A private room for the principal, and a room for the library complete the main floor. The basement is well lighted and dry, and forms an excellent play-room in wet weather. The building is beated by a furnace. The site, which contains about two acres, is well fenced, and in time will form a park of great beauty. The total cost was about \$4,000.—Norfolk Reformer.

THE teachers of the Simcoe Union School are requiring more written work from their pupils than heretofore, on the ground, first, that the ability to express one's own thoughts or reproduce those of another on paper in good literary form is an art that comes only by practice; and secondly, that written work is a better educational test than oral answers, requiring more mental effort, more independent and concentrative thinking. Written tests are accordingly being made in rapid succession, while not only are the answers valued but errors of whatever sort or kind are indicated, and the work after being criticised in the class is handed back for correction. It is a heresy, therefore, to think that the teacher's work is over at four o'clock. In addition, each high school pupil is required to send in, fortnightly, for criticism, an original composition on a given theme. - Norfolk Reformer.

TEACHERS:

Now is the time to subscribe for the EDUCATIONAL WEEKLY. No teacher in Canada can afford to be without it. This term it will be more useful than ever. It will contain practical papers from some of our most successful Canadian Teachers. Note the following:

Articles on the Literature prescribed for Entrance to High Schools.

Practical papers on drawing suitable for Entrance Examinations and Examinations for Third and Second-Class certificates.

Practical articles on the Phonic system of teaching reading.

Useful articles on the teaching of Composition in the Public Schools.

Articles on School government and discipline by a well-known practical teacher.

Among others the following well-known Educators have contributed to our columns since January 1st:—

A. F. AMES, B.A., Collegiate Institute, St. Thomas. REV. W. D. BALLANTYNE, M.A., Pembroke. REV. R. BEATTIE, M.A., B.D., Ph.D., Brantford. MARY DE BELLE, Colpoy's Bay. THOS. BENGOUGH, Shorthand Institute, Toronto. J. H. BROWN, Principal Deaf and Dumb Institute, Wilkensburg, Pa.

P. H. BRYCE, M.A., M.D., Secretary Provincial Board of Health, Toronto.

THOS. CARSCADDEN, M.A., Collegiate Institute, Galt. H. J. CARTER. Kingston.

MISS F. H. CHURCHILL, Boston.

W. CRUIKSHANK, Principal Ontario School of Art, Toronto. R. DOBSON, M.A., High School, Picton.
BARTON EARLE, Collegiate Institute, Peterboro'.

"FLORA FERN," Brantford.

W. H. FRASER, M.A., Upper Canada College, Toronto. GOODWIN GIBSON, M.A., Toronto.
REV. PRINCIPAL GRANT, D.D., LL.D., Queen's College, Kingston.

BESSIE E. HAILMAN, Kindergarten Department, Model School, Toronto.
THOS. HAMMOND, Aylmer.

"HESPERA," Toronto.
J. GEO. HODGINS, M.A., LL.D., Deputy Minister of Education, Toronto.
SARA HOPKINS, Flesherton.

W. HOUSTON, M.A., Parliamentary Librarian, Toronto. J. M. HUNTER, M.A., Collegiate Institute, Barrie.

W. H. HUSTON, M.A., Collegiate Institute, Toronto. PROFESSOR HUTTON, University College, Toronto.

C. C. JAMES, B.A., Collegiate Institute, Cobourg.
THOS. KIRKLAND, M.A., Principal Normal School,
Toronto.

RICHARD LEES, High School, Lindsay.
J. H. LONG, M.A., LL.B., Collegiate Institute, Peterboro'.

LIZZIE P. McCAUSLAND, Aylmer.
A. McMECHAN, B.A., Collegiate Institute, Galt.
A. McMILLAN, Ryerson School, Toronto.
J. A. McPHERSON, LL.D., Bell's Corners.
J. MILLAR, Collegiate Institute, St. Thomas.
J. O. MILLER, University College, Toronto.
J. A. MONROE, M.A., High School, Williamstown.
A. H. MORRISON, Collegiate Institute, Brantford.
THE LATE C. P. MULVANEY, M.A., M.D.
REV. PRESIDENT NELLES, D.D., LL.D., Victoria University, Cobourg.
HON. B. G. NORTHROP, LL.D., Secretary State Board of Education, Clinton, Conn.
THOS. O'HAGAN, M.A., High School, Pembroke.
T. J. PARR, High School, Woodstock.
A. PURSLOW, M.A., LL.D., High School, Port Hope.
A. J. READING, Ontario School of Art, Toronto.
W. J. ROBERTSON, M.A., LL.B., Collegiate Institute, St. Catharines.
W. A. SHERWOOD, O.S.A., Toronto.
C. P. SIMPSON, Leamington.
J. SQUAIR, M.A., Lecturer, University College, Toronto.
J. TURNBULL, B.A., High School, Guelph.
HOMER WATSON, A.R.C.A., Doon.
J. E. WETHERELL, M.A., Collegiate Institute, Strathroy.

The Weekly will be even more vigorous and enterprising than in the past. No expense will be spared in keeping it at the head of Canadian Educational journalism.

Terms: -\$2.00 a year; \$1.00 for six months; 50 cents for three months.

Address—

EDUCATIONAL WEEKLY,

GRAND SPECIAL OFFER.

THE

NEW ARITHMETIC

PUBLISHED BY THE SUPPLEMENT CO. (FORMERLY EATON, GIBSON & CO.), TORONTO.

Compiled by 300 Prominent Educators, including many of the LEADING GANADIAN TEACHERS.

4,000 COPIES SOLD. PRICE, \$1.00.

From "THE JOURNAL OF EDUCATION," Boston:

"The New Authmetic contains a much larger number of eminently practical examples than can be found in ordinary school arithmetics. The book is made upon the best modern plan and graded, with unusual care, into seven departments, to which are added excellent examination exercises."

From A. Mason, Elder's Mills, Out.:

"I am delighted with The New Arithmeric. It for surpasses my expectations."

From Prof. Jas. W. Elliott, Cassville, Pa.:

"The New Arithmetic has my unqualified endorsement. I shall adopt it in my school next term."

From Rev. W. Wetherald, St. Catharines, Ont.:

"The New Arithmetic to hand. Let me congratulate you on the substantial binding, good paper, beautiful typography—superior to any other book of its class I have seen."

From Chas. S. Eggleton, Bogart, Ont.:

"I have received my Arithmetic. It is, in my estimation, the best of six that I own."

From W. J. Robertson, M.A., L.L.B., St. Catharines, Out,:

"THE New ARITHMETIC is admirably printed, and presents a most tasteful appearance; in fact it is, externally, the most creditable text book in Canada."

This book will be very valuable to teachers of every grade of school in drilling pupils in Arithmetic—both mental and written—and in preparing examination papers.

It contains nearly 3000 carefully graded problems.

To any person who will send us ONE DOLLAR, we will send THE NEW ARITHMETIC, post-paid, and in addition we will send THE EDUCATIONAL WEEKLY for THREE MONTHS FREE. Present subscribers taking advantage of this offer, will have THREE MONTHS added to their subscriptions.

To anyone sending in a CLUB OF FIVE for the above, we will send The Educational Weekly for SIX MONTHS FREE.

To anyone sending in a CLUB OF TEN, we will send The Educational Weekly for A YEAR FREE.

ADDRESS-

EDUCATIONAL WEEKLY,

Grip Printing and Publishing Co., Toronto.

PRESENT SUBSCRIBERS!

If you know any teacher who is not already a subscriber to THE EDUCATIONAL WEEKLY, will you kindly mention the above offer to that teacher?

Liddicoatt W H Feb 1986