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## ALI SCHIOOL SUPPLIES.

## OFFICIAL CALENDAR

-OF THE-
E DUCATIONAL DEPARTMENT

## EXAMINATIONS 1893.

## October:

2. Notice by Trustees of cities, towns, incorporated villages and township Boards to Muni" cipal clerk to hold Trustee elections on same day as mumicipal elections, due. [P. S. Act, sec
103 (1).]
Night Schools open (Session 1893-4).
3. School of Pedagogy opens.
(1) The examination in History will be in Canadian History alone. No questions will be set in British History. The Inspector shall see, however, that the subject is tanght orally, and shall report any crse of negligence to the Board
of Trustees.
(2) Physiology and Temperance are compulsory, and shall take rank with the other sub-
jects for the Entrance Examination. jects for the Entrance Examination. The new text-book in this subject may not be ready be-
fore the first of October. and this fay taken into account in the construction of the examination rapers for 1894.
(3) The work in Drawing is limited to Drawing Book No. 5, and in Writing, to Writing
(4) The Public School Leaving Examination or some modification thereof, will be substitu-
ted for the present High School Entrance Exted for the present High school Entrance Ex-changes in the Public School Leaving Examinadopting this course.
II. Public School Leaving Examination -The changes with respect to the Leaving Exation are as follows:
(1) The subjects of the Fifth Form may be taught in any school, irrespective of the numtiffate which they may hold, Pupils may

Write at the Leaving Examination without (2) The examinations will be condur the Board of Examiners having conducted by Entrance Examination, and will be paid for at the same rate per candidate.
(3) Physiology and Temperance are compulsory, and the examination in this subject will include the ground covered by the new text-
(4) The subjects of Euclid and Algebra will be included in a small text-book which will be the basis of the examination and will be ready
about ist October. about 1st October.
(5) Agriculture, Botany, and Physics are optional subjects: the course in cach to be determined by the teacher, subject to the approval of the Inspector.
(6) The High School Reader will be used for Reading and Literature. The Public School Arithmetic will be enlarged to admit of greater practice in Commercial work, but no change cises will be required for the fifth tional exertext books in the other subjects will be those authorized for Public Schools.
(7) Candidates who obtain PublicSchool Leav ing certificates shall be entitled to admission into the classes in Form II. of a High School in
all the subjects of that examination and the all the subjects of that examination, and the
Commercial course for the Primary should. if possible, be completed before they enter the High School. Candidates who fail at the Leavthe marks for each subject, will be admitted to a High School.
(1) The course preseribed for Examination.amination with prescribed for the Primary Ex taught in any Public School, subject to the approval of the Trustees and the Inspector.
12) The amount of school work prescribed for the Commercial course has been reduced and the details of the course modificd, especially in Drawing. The examination of all candidates School and the High School teachers in charge of such subjects, but a written examination will be required, in addition, on papers prepared by the Department. For 1894. any four of the books of the High School Drawing coursc will be accepted, in the case of caudidates for the books of the new course, and any two brooks in the case of other pupils. The work done in book-keeping in the blank books hitherto used will also be accepted tor 1894.
(3) The whole of Euclid Book I. is now pres cribed and will form the subject for examina tion in 1894.
Minor details of the proposed changes will be tion is respectully directed which your atten

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## Editonial Notes.

## IMPORTANT ANNOUNCEMENT

With this issue the Educational JourNaL passes out of the hands of The Grip Printing and Publishing Co., and becomes the property of Prof. J. E. Wells, who has so long and ably edited it. We regret taking leave of our numerous subscribers, but decided to dispose of the paper in order to devote more time to the engraving department of our business.

We bespeak for Prof. Wells a continuance of the patronage with which we have been so long favored, and we have every reason to believe that the paper, under his entire control, will be much more in touch with the teaching profersion of Canada than it could possibly be under any other auspices.

All the payments due on subscriptions or advertising will be made to Prof. Wells, who takes over the Educational Journal business in its entirety.

The Grip Printing \& Publishing Co.
In reference to the above announcement the subscriber begs leave to say that while very sorry that circumstances compel the severance of the very pleasant relations which have subsisted for the last six years between the Grip Printing and Publishing Company and himself in his capacity of Editor of the Educational Journal, he is very glad that the same circumstances do not compel him to discontinue the equally pleasant relations which have existed for so many years between him and the readers of the Journal. Not only has he been identified with the edi-
torial management of the paper during the whole of its existence in its present form, but he was, as many of the readers of the Journal know, connected in the same capacity with one of the papers out of whose union the Educational Journal was formed. Under these circumstances his interest in the Journal and its readers is naturally very deep, so that when it became a question of ceasing his connection with it and them, or of assuming the heavy responsibilities of ownership and management, he could not bring himself to accept the former alternative, however he might shrink from the latter. The fact is that his heart is in the work to which no inconsiderable portion of his life has now been given. While deeply conscious of the imperfections which have attended his best efforts, the many kind assurances which he has from time to time received that the paper has been helpful to teachers and is prized by them as an invaluable aid in their grand work have been and are a source of great gratification, and cause him to desire most earnestly to continue the work, and to make the paper, so far as in him lies, still better adapted to their needs. In view of his experience, both in teaching and in journalism, it is, perhaps, not presumption on his part to hope that he may be of further service to them and to the cause of education.

Earnestly soliciting the kind co-operation, not only of all present subscribers and friends of the Journal, but of all teachers and others interested in the work of education into whose hands it may fall, and pledging himself to put forth his best efforts to make the paper more and more valuable as their friend and helper, he begs leave to subscribe himself,

> Respectfully, theirs for service,
J. E. Wells.

The new office of the Educational Journal will be located at No. $11 \frac{1}{2}$ Richmond Street West, Toronto. Will our correspondents, exchanges, etc., kindly bear in mind the change, and direct all communications and all other matter intended for the paper to the Educational Journal at that address.

The Journal will of course be continued regularly to all present subscribers. The terms will in all respects, be the same as hitherto. If those who have not paid in advance for the current year will kindly do so promptly, they will confer a special favor, and greatly aid the proprietor in carrying the burden whtch he bas assumed, in their interests, he ventures to hope, as well as in his own. It is also very respectfully and earnestly requested that those who may be in arrears will remit at their earliest ron-
venience without waiting for bills to be sent. A glance at the labels will show each one how he stands. Let us start fair, please, under the new arrangement.

Secretaries of Teachers' Institutes will confer a special favor by notifying us as early as possible of forthcoming meetings of their respective associations, in order that we may arrange to have the Journal properly represented at each.

May we not rely upon our many friends to aid us in an earnest effort to increase the circulation of the Educational Journal. If you find it a good thing you will be doing a service to others by calling their attention to it, that they may likewise have the benefit. We shall always be glad to send sample copies to any address which may be given us. Do you not know, kind reader, some teacher who would be helped by the regular visits of the Journal, who for some reason or other, may not yet be a subscriber. Some who are just entering the profession may not yet have made its acquaintance. May you not do a service to him or her, as well as a favor to us by kindly giving us his or her address on a postal card?

While the first and chief aim of the Educational Journal always has been and always shall be, under the present management, to aid the teacher in the practical work of the class-room and in school management, it may not be amiss to call their attention to its value as a medium for the independent discussion of those broader questions which arise, from time to time, in connection with the organization and management of the Public and High School systems. While anxious to do justice to and to aid the Education Department in every way, in improving the status and efficiency of the schools, it is and means to be thoroughly independent in every respect, and always ready for the discussion on their merits and in a proper style and spirit, of all questions of educational policy.

We wish to make it more and more the mouthpiece of the profession, without distinction of persons or parties. Will you help us? We shall always be grateful for suggestions from practical teachers with regard to improvements which they may think desirable in the style and contents of the Journal. We cannot, of course, promise always to adopt such suggestions, but we will give them our best consideration and adopt such as are found desirable and feasible. We want to hear ofteñ from our subscribers. We want to enkindle, if possible, more enthusiasin in the profession. Enthusiasm is a mighty force in the furtherance of a good cause. It would do us all good to have more of it.

## Mathematies.

All communications intended for this department should be sent direct to the editor, C. Clarkson, B. A., Seaforth, Ont.

## HIGH SCHOOL ENTRANCE.

## Arithmetic. 1893

1. A farmer exchanges $3 \frac{3}{5}$ tons of wheat at $64 \frac{1}{2}$ c. a bushel for coal at $\$ 6.75$ per ton. How many lbs. of coal does he get?
2. Nathan Curd sells you 752 lbs . of cheese at $11 \frac{3}{4} \mathrm{c}$. per lb ., and receives the following goods: (Make out the account in your own name with place and date of this examiuation.)

11 yds. Silk (a) \$2.25.
400 lbs . Sugar at 4 fe.
12 lbs. Raisins at 11 c .
96 lbs . Nails at 3 g c c.
56 yds. Grey Cotton@93s.
11 yds. White Cotton@10c.
3 prs. Gloves (a)75c.
3. A school room is 30 ft . long, 24 ft . wide and 10 ft . high above the wainscoting. The trustees pay $\$ 20$ per thousand for a new floor; $\$ 15$ per thousand for a new board ceiling; 10c. per sq. yd. for painting the ceiling ; 4c. per sq. $y d$. for tinting the walls, and $\$ 2$ per day for 6 days' labor. Find the total cost.
4. To drain a swamp in Dereham the Township Council had a ditch dug one mile long, 3 ft . deep, 6 ft . wide at the surface and 4 ft . wide at the bottom. Find total cost at 9 cents per cubic yd.
5. How many miles must be travelled by a team in ploughing lengthwise a piece of land 60 rods long and 40 rods wide, if each furrow is 10 inches wide?
6. Bought a horse for $\$ 160$ and gave in payment my note dated August 15th, 1892, with interest at $7 \frac{1}{2}$ per cent. per annum until paid. On Jan. 8th, 1893, I sold the horse for $\$ 200$ cash and paid my note. What was my net gain?
7. A grocer receives $\$ 9.60$ for a bill of goods weighed on seales that gave only $15 \frac{1}{4}$ onnces to the Ib. How many cents' worth did he cheat his customer?
8. The outfit of a livery stable is worth $\$ 3000$. One-seventh the value of the horses is equal to one-fifth the value of vehicles, harness, etc. Find the value of the horses.

$$
\begin{gathered}
\text { solutions bY C. H. C. } \\
\text { 1. } \quad 3 \frac{3}{3} \text { tons wheat }=120 \text { bush. } \\
120 \times 64 \frac{1}{2}=\$ 77.40
\end{gathered}
$$

$\frac{7740 \times 2000}{675}=22933 \frac{1}{3}$ pounds of coal.
2. 752 lbs . of Cheese@ $11 \mathbf{i}$

Amt. of bill $=\$ 57.65$
Balance in favor of Nathan Curd $=\$ 30.71$
3. Cost of floor $=\frac{720 \times 20}{1000}=\$ 14.40$
". ceiling $=\frac{720 \times 15}{1000}=\$ 10.80$
" painting $=\frac{720}{9} \times 10=\$ 8.00$
" tinting $=60 \times 4=\$ 2.40$
." labor $=6 \times 2=\$ 12.00$
Total cost $=\$ 47.60$
4. Average width of ditch $=5 \mathrm{ft}$.

$$
\therefore \text { cost }=\frac{3 \times 5 \times 5280 \times 9}{27} \underline{-}^{-2}=\$ 24
$$

5. $\quad 40 \times 5 \frac{1}{2} \times 36$ or $792=$ No. of times the
team travels the leugth of the field.
$\therefore$ distrace travelled $=\frac{792 \times 60}{320}=148 \frac{1}{2}$ miles.
6. Aug 15 th, ' 92 to Jan. 8 th, ${ }^{9} 93=146$ days. Int. on $\$ 160$ for 146 days at $7 \frac{1}{2} \%=\$ 4.80$
$\therefore$ Amt. $=\$ 164.80$ and net gain $=\$ 35.20$
7. When he pretends to sell 16 oz . he gains $\frac{3}{4} \mathrm{oz}$.
$\begin{array}{llcl}" & " & 1 & " \\ " & " & \$ 9.60 & \text { worth }{ }^{\frac{3}{64} \mathrm{oz} .}\end{array}$
groods he gains $\frac{8}{64} \times 9.60=45 \mathrm{c}$.
8. $\frac{1}{7}$ value of horses $=\frac{1}{5}$ value of vehicles, etc.
$\therefore 5 \quad$ " $\quad=7$
But 7 value of horses +5 value of vehicles, etc. $=\$ 21000$
$\therefore 12$ times value of horses $=\$ 21000$
$\therefore$ value $=\$ 1750$

## SOLUTIONS OF PROBLEMS.

SENT BY CORRESPONDENTS.
No. 54. -In a given square to describe an equilateral triangle. See Jounnal (May No. p. 20.)

Solution.-Case I. Suppose the vertex of the triangle falls on the middle point of the side of the square.


From centre $E$ describe an arc with radius equal to a side of the square, cutting AB and DC in $F$ and $G$.

Join EF, FG, GE, and EFG is equilateral.
Case II. Suppose the vertex of the triangle is at the corner of the square.


At the point A draw AE and AF each making an angle of $15^{\circ}=\frac{1}{8} 11 g h t$ angle, with the sides of the square, and hence making EAF $=60^{\circ}=$ $\frac{2}{3}$ right angle.

Join EF ; AEF is equilateral
For $\mathrm{AE}=\mathrm{AF}$, Euc. I. 26 , hence angle $\mathrm{AFE}=$ angle AEF, and each must be equal to $60^{\circ}$

Case II. algebraically. Let $\mathrm{AB}=a, \mathrm{BE}=x$, then $\mathrm{AE}^{2}=a^{2}+x^{2}$, and $\mathrm{EF}^{2}=2(a-x)^{2}$; $\therefore a^{2}+x^{2}=2(a-x)^{2}$ and from this equation $x=$ $\ddot{2} \dot{a} \pm a \sqrt{ } 3$. The plus sign gives a value greater than $a$ and is therefore an impossible case. To construct the other root, produce $B C$ to $G$, making $\mathrm{CG}=a$ (the figure is easily drawn). Join DG. DB, and on DB make DH $=$ DA ; join GH. Then $\mathrm{GH}=a \sqrt{ } 3$. On GB take $\mathrm{GE}=\mathrm{GH}$, and BE must $=2 a-a \sqrt{ } 3$, and E is one vertex of the required triangle. Join AE and with centre $A$ and radius $A E$, find $F$, etc. The rejected root will be found to determine points in the sides of the square produced.

There may be other cases which we have not noticed. The proposer asks for a general formula for similar problems; will some of our frieuds endeavor to find it?

In reply to our request for solutions of Nos. 67 to 75 irelusive, the following ladies and gentlemer; generously responded:-
W. H. Elliot, Binbrook; Edgar Hollingshead, Kettleby; E. Mosgrove, Kirkfield; E. O. Platt, Blessington ; Morley Shurtleff, Battersea; Adela Boyd, Carthage; J. H. Lemon, `pronmore; J. F. Lanigan, Phelpston; W.

Braithwaite, Toronto; Thos. P. King, Lodi ; and W. A. Ferguson, Chatsworth. We have made a selection of the solutions furnished.

No. 67.-P. S. Arith., p. 112, No. 40, by W. B., Toronto.-L. C. M. of 20,24 and $30=120$ and it is evident that required No. must be such a multiple of 120 that when 15 is added to it will contain exactly 25 . Hence $360+15=375$ aus.
No. 68.-Pub. Sch. Arith., p. 146, No. 26, by T. F. L.. Phelpston.

50 yds. Calico at $13 \mathrm{c}=\$ 6.50$
Selling price $=\$ 7.62$
At 13 c . it would be $\$ 1.12$ less.
18c. $-13 \mathrm{c} .=5 \mathrm{c}$. less on each yard
$112 \div 5=222$ yds. at 18 c .
Remainder $=27 \frac{3}{3}$ yds. at 13 c .
No. 69.-P. S. A. p. 146, No. 27 , by E. Mosgrove, Kirkfield.
S. P. is $\frac{6}{5}$ of cost or 60 c .
$\therefore$ C. P. is $\frac{5}{6}$ of $\frac{60}{1}=50 \mathrm{c}$. per lb.
1st cost 54 , average cost $50 \therefore$ loss 4 c .
2 nd cost 45 average cost $50 \because$ gain 5 c .
$\therefore 5$ of former to 4 of latter.
$\therefore \frac{18 \times 5}{4}=\frac{90}{4}=22 \frac{1}{2}$ lbs. at 54 c . per lb.
No. 70.-P. S. A. page 169 , No. 20 , by E. M. Kirkfield.

| Date. | AMOUNT. | TO RUN. |  | $\left\lvert\, \begin{gathered} \text { Int on Aint. } \\ =\text { Int. on } \\ \text { I day. } \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: |
| Sept. 10 | \$63 52 | 100 | 100 | \$6325 00 |
| Sept. 18 | 1963 | 75 | 83 | 162929 |
| Sept. 20 | 88 | 60 | 70 | 6160 |
| Oct. 13 | 12900 | 90 | 123 | 1586700 |
| Oct. 26 | 7830 | 90 | 86 | 673380 |
| Nov. 11 | 11223 | 90 | 152 | 1705896 |
| Nov. 15 | 990 | 30 | 93 | 95040 |
| \$413 19 |  |  |  | \$48626 05 |

Sept. 10 th +118 days $=$ Jin'y 6 th
No. 71. -H. Sch. Arith., p. 203, No. 104, by W. A. Ferguson, Chatsworth.


Required area $=8 \times O S \times S M$
Let $x=$ PM or MN
Then $\mathbf{A M}=\mathbf{P M} \div{ }^{\prime}{ }^{2}=\mathbf{M N} \div \sqrt{ }{ }^{2}$
Then $\mathrm{AD}=x+\frac{2 x}{\sqrt{ } 2}=x\left(1+\sqrt{2}^{2}\right)=40 \mathfrak{\mathrm { d }}$.

$$
x=\frac{40}{1+\sqrt{ } 2}
$$

$$
\operatorname{and} S M=\frac{20}{1+} \frac{\sqrt{12}}{}
$$

$\mathrm{OA}=40 \div \sqrt{ } 2$
$\mathrm{SA}=x \div 2=20 \div(1+\sqrt{ } / 2)$
$\therefore \mathrm{OS}=\frac{40}{\sqrt{ } 2}-\frac{20}{1+\frac{\sqrt{ } 2}{2}}=20$

No. 72.-H. Sch. Arith., p. 208, No. 166. At what distance from the top must a cone 14 inches high be cut, parallel to the base, that the volumes of the two parts may be equal ? By the Editor (no solution to this received).

Whole cone : small cone $=2: 1$
i.e., $14^{3}: x^{3}=2: 1$, where $x$ is the required distance from the top. [All regular solids have their contents proportional to the cubes of their like dimensions, i.e., diameters, heiqhts, edges, etc.]

Hence $2 x^{3}=14^{3}=2^{3}+7^{3}$
$\therefore x^{3}=4 \times 7^{3} ; x=73 / 4=7 \times 1.587401=$ 11.111807 inches.

No. 73.-H. Sch. Arith., p. 208, No. 167, by W. A. Ferguson.
$4(\text { diam. })^{2} \times \frac{22}{7}=$ area of end of cylinder.
$\therefore$ diam. $\times \frac{1}{4}$ (diam.) $\times 2 \frac{2 \pi}{q^{2}}=$ volume
or $\frac{1}{4}$ (diam. $)^{3}=3$ gallons

$$
=\frac{t}{2 \overline{5}} \times 3 \times 1728 \mathrm{cub} . \mathrm{in} .
$$

$\therefore$ diam. $=$ cube root of $\frac{14}{11} \times{ }_{2}^{4} \times 3 \times 1728$

$$
\begin{aligned}
& =\frac{5 \times 7 \times 23 \times 12^{3} \times 3}{11 \times 5^{3}} \\
& =\frac{24}{5} 3 / \frac{105}{11} \text { inches }
\end{aligned}
$$

Note by the Editor.-This solution assumes that 1 gal. equals $\frac{4}{25}$ of a cub. ft. or 276.48 cubic inches, whereas a gallon contains 277.274 cub. in. so that the answer in the H. Sch. Arith. is not precisely accurate. However a cubic ft. of water is usually taken to weigh 1000 ounces, which gives the multiplier $\frac{4}{25}$.
No. 74.-H. Sch. Arith., p. 230, No. 13, by E. Mosgrove.
$25000 \times 8 \%=\$ 2000$ income.
If $7 \%$ comes from 100
$8 \% \quad ، \quad 1 \frac{90}{9} \times 8=800=114 \%$ S. P.
of B. C. Stock.
114娄- $\frac{1}{2}$ Com. $=1131 \frac{1}{4}$ rec'd for Bk. Com. Stock.
Buying price of Bk. Toronto Stock is $205+\frac{1}{2}$ $=205 \frac{1}{2}$.
$\therefore \frac{25000}{1} \times \frac{113_{11}^{14}}{100} \times \frac{100}{205 \frac{1}{2}}$ denotes amt. of
Bk. Tor. Stock owned.

$$
\therefore \frac{25000}{1} \times \frac{113_{14}^{11}}{100} \times \frac{100}{205 \frac{1}{2}} \times \frac{12}{10}=\$ 1661.11
$$

income.
$\therefore 2000-1661.11=\$ 338.89$ less.
No. 75.-By the Editor. (No solution sent in.)
Let P stand for the P. W. of the mortgage, then $P(1.025)^{20}=5000(1.06)^{10}$
$\mathrm{Or}, \mathrm{P} \times 1.63861644=5000 \times 1.7908477$.
Hence $\mathbf{P}=$ etc.
No. 76.-By W. A. Ferguson.-
A pays $5 \mathrm{~s} ., 2 \mathrm{~d} .+$ ticket
B pays $9 \mathrm{~s} ., 10 \mathrm{~d} .+$ ticket
Both pay $15 \mathrm{~s} .+2$ tickets $=19 \mathrm{~s} ., 2 \mathrm{~d} .+1$ ticket.
$\therefore 1$ ticket $=4 \mathrm{~s} .2 \mathrm{~d}$.
i.c., Buying a ticket $=$ paying 4 s .2 d . for baggage.

Total cost of carrying baggage $=19 \mathrm{~s} .2 \mathrm{~d} .+$ $4 \mathrm{~s} .2 \mathrm{~d} .=23 \mathrm{~s} .4 \mathrm{~d}$.

23s. 4 d . carries 560 lbs . ( 5 cwt .)
$\begin{array}{cl}1 & \because \quad \frac{560 \times 3}{70} \\ \text { 4s. } 2 \mathrm{~d} . & \quad \\ \frac{25}{6} \times \frac{560 \times 3}{70}=100 \text { lbs. Ans. }\end{array}$
Remark.-We have still on hand solutions to Nos. 78, 79, 80, 81 and 82 , also solutions of the Junior Leaving Algebra by H. M. Lititle, Owen Suund, which will appear as our space permits.

Nos. 77, 66, 48, 47 and one or two other problems have not been solved. Will not some of our working mathematicians give them another trial ? We invite, also, solutions of the examination papers for 1893.

## PROBLEMS FOR SOLU'IION.

E. O. P. would like to see solutions for the following :-
No. 88. -Extract the square root of
$a^{2}+b^{2}+\sqrt{-\left(3 a^{4}-2 a^{2} b^{2}-b^{4}\right)}$
No. 89.-Find H. C. F. of $a_{3}+b^{3}+c^{3}-3 a b c$ and $a(a+2 b)+b(b+2 c)+c(c+2 a)$.

No. 90.-L. C. M. of $x^{3}-3 x^{2}+3 x-1, x^{3}-x^{2}$ $-x+1, x^{4}-2 x^{3}+2 x-1$, and $x^{4}-2 x^{3}+2 x^{2}-2 x$ +1 .

## Question Drawer.

X.--(1) For the "Silver Question" see Editorial pages.
(2) In the usual meaning, one who is appointed to carry into effect the provisions of a will, Executor and Executrix are pronounced with the accent on the second syllable (ex-ec-utor). When Executor is used in the sense of Executer or Executioner it has the accent on the first syllable (ex-e-cu-tor). If the feminine form were ever used with this meaning it would we presume, have the same change in pronunciation.
J. K. J.--Following is the form of report used in the Provincial Model School. Toronto With some slight modifications it might be adapted, we should think, to any school :

Report of........, a pupil in the.
Division, for the four weeks ending.
189
Misdemeanors....
Imperfect lesso
Times late.
Home Exercises neglected
Greatest number of credit mar
obtainable.
Greatest number of credit marks
obtained.
Standing in Section by this pupil
Standing in Section lor this month..

Teacher's Remarks

## (Signed).

Tcucher.
Parents (or Guardians) will please sign this Report and return it without delay. If this report is unsatisfactory, a personal interview should be had with the teacher.
Short home lessons are assigned, and parents are respectfully requested to appoint a special hour and a particular place for this work.
S. B.-For Literature Selections for Entrance see last number of the Journal.
S. M. C.-We are unable to give you any reliable information with regard to "The Silent City." Perhaps some reader may be able to do so.
J. H.-There is, so far as we are aware, no book published which deals with the different methods of teaching modern languages. Such a book would be very useful.

I'. F. C.-We are unable to give a complete account of the emblems of the different Provinces of the Dominion in this number, but will try to do so in next issue. We are sorry that your card has been overlooked.

A B. McG.-The Canadian part of the authorized P'ublic School History is, we have no doubt, quite comprehensive enongh for next year's Entrance Examination. We know no better outline of Canadian liot ory.
S. M.-We have submitted your question"Will pupils who have taken the work in Draw ing Books Nos. 5 and 6, for the Entrance Examination this year, be required to repeat the work in No. 6 for the Public School Leaving next year ?", to the Education Department, and have received the following reply from the Deputy Minister:-"I am directed by the Minister of Education to state in reply to your letter of the 22nd instant, that if Book No. 6 of the Drawing Course prescribed for Form V. of the Public School is duly submitted it will doubtless be accepted by the examiners although completed in a previous year.

SEEiNG much, suffering much and studying much, are the three pillars of learning.--Disreali.
There is no power in the school-room equal to that of simple, unostentatious goodness. A heart full of charity, sympathy and kindness, is a far better endowment for a teacher than a head that is a cold, accurate, logical machine.Payne.

Jusr praise is a debt. To a noble nature there is no stimulus like honest commendation A kind word at the right moment might have saved many a soul from despair. In reviewing my professional life I regret that I did not more my professional life I regret that ind a not more dinate teachers. -P Payne.

## Literary Notes.

The World's Fair number of the Cosmopolitan is a boon to to the thousands who are unable to visit the Fair in person. In it the Columbian Exposition is described by ex-President Harrison, Walter Besant. Julian Hawthorne, and many others, each author dealing. with a particular phase and their articles are embellished with nearly one hundred illustrations. Among other articles in the number we note a story, "Is He Living or is He Dead," by Mark 'twain. and "A Traveller from Altruria," by W. D. and a
Our Boys is the title of an attractive little paper which comes to us from the Victoria Industrial School at Mimico. The first number contains a portrait an l biographical sketch of W. H. Howland, that good friend of the boys, who is Chairman of the Board of Management. Our Boys is well adapted to increase the interest of those who see it, in the grand work and objects of this school. It must be popular with the boys. One of the most interesting, and the boys. One of the most interesting, and we should suppose nseful features of the paper is the column of brief personal records of the
present position and employment of former pupils of the school. The letters from former pupils are likewise very interesting.
The Cyclopedic Review of Curient History for the second quarter of 1893 is now ready. It is a most useful compendium of the prominent events of the last three months. Under the general titles of "Leading Topics." "International Affairs." "Affairs in Europe," "Affairs in Asia," "Affairs in Africa," "Science, Literature, and Miscellany," it details the world's most recent happenings with minuteness, perspicucity, and fidelity, telling all that really needs to be known about any one subject, and referring to all surjects of consequence in a most intelligent and practical way. A work like this is a necessity in these busy, bustling times of ours, and this work seems to be the best of its species While there are similar publications, the Cyclopedic Review holds an original and exclusive position. Its peculiar merits entitle it to general recognition. (Garretson, Cox \& Co., Publishers, Buffalo, N. Y. $\$ 1.50$ per year single copies 40 cents).
Electilicity at the World's Fair, by Mr. Charles M. Lungren, opens the October number of The Popular Science Monthly. Frederick A. Fernald describes the exhibits relating to the daily life and labors of the home, under the title "Household Arts at the World's Fair." An account of the system of caring for the insane recently adopted by the State of New York is given by Dr Andrew Macfarlane, together with some suggestions for improved care of curable patients, under the title "The Duty of the State to the Insane." Dr. Nicholas Borodine contributes an interesting account of "The Ural Cos sacks and their Fisheries," with illustrations Another fully illustrated article, by Herbert L. Clarke, describes "A Characteristic Southwes tern Plant (iroup," embracing those monarchs of the American desort, the agaves (century plants), cacti, and yuccas. Illustrations are used also by John C. Branner in describing "The Lip and Ear Ornaments of the Botocudes. In "Criminal Festivals." M. Guillaume Ferrero tells how murder, cannibalism, etc, persist in tribal observances long after their general practice has been given up. Prof. James McK. Cattell writes on "The Progress of Psychology." tell writes on "The Problem of Colored Audition" is treated by M. Alfred Binet. "Some Characteristics of North western Indians" and a "Sketch of Werner von Siemens" complete the body of the magazine. In the Editor's Table among the subjects considered are pernicious charities. New York: D. Appleton \& Company. Fifty cents a number, \$5 a year.

The Map and School Supply Company have made quite a few new additions to their mapand globe publications. Their new series of school maps are meeting with quite a demand. Among the many new features is a map with a key to the different possessions at bottom, for teachers' use. The whole series is beautifully lithographed and remarkably cheap.

## The Educational Journal

A JOURNAL DEVOTED TO IITERATURE, SCIENCE, ART, AND THE ADVANCEMENT OF THE TEACHING<br>J. E. Wells, M.a., Editor and Proprietor.

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## The Educational Journal,

No. $11 \frac{1}{2}$ Richmond Street West, TORONTO.

## Editorials.

## TORONTO, OCTOBER 1, 1893.

## A WORD ABOUT OURSELVES.

ON the first page of this issue will be found an announcement which will not, we hope, be without interest to our readers. Let us add here one word to what we have said in that connection. We are happy to be able to retain the services of the same able associates, whose work in their own special departments of the paper its patrons cannot, we are sure, fail to appreciate. Charles Clarkson, B.A., formerly principal of the Toronto Model School, now principal of the Seaforth Collegiate Institue, will continue to conduct the Mathemetical Department. He needs no testimonial from us. All readers of the Journal know how ably and faithfully he has devoted himself to this department. Many years of experience enable him to understand and know better than ever what teachers of Mathematics need and how to give it to them.

The English Department will continue in the efficient hands of Mr. Fred. H. Sykes, B A., whose work in this column, as well as his brilliant success as a student of English in its highest branches, at Johns Hopkins University, has attracted attention. We are glad to have the assurance of Mr. Sykes' hearty co-operation, and have no doubt that our English page will be worth much more than the price of the paper to earnest teachers and students of English.
Another special feature of the paper which must, we are sure, be highly prized,
is the Primary Department. This will be continued by Rhoda Lee, who has done so excellent work in the past. There are few contributors to educational periodicals whose practical papers are more extensively quoted and reproduced in our United States exchanges, than are those of Rhoda Lee. This simply proves that the editors of our American exchanges know a good thing when they sce it. All other departments of the Journal will be kept up to the mark.

## THE SILVER QUESTION.

ASUBSCRIBERasks us a question which has been asked by thousands of intelligent and welleducated peopleduring the last year, viz., "What is the Silver Question ?" In attempting to make our answer clear and as full as our space-limits will permit, we cannot do better than quote at some length from an article in a late number of the Outlook, a very able and reliable paper published in New York.
"Money serves two purposes: it is a medium of exchange and it is a standard of value.

It is a medium of exchange. At first men exchange their properties without any medium. School-boys 'swap' jack-knives. Because this method is always jack-knives. ent and often impracticable, money is invented. This money may be wampum, beads, silver, gold, paper-anything which the community agree to give and take in exchange for their properties. In this country money as a medium of exchange consists of gold, silver, and promises to pay gold or silver. Exchange is further facilitated by promises to pay money-checks, promissory notes, and other forms of credit.
But this medium of exchange must have some fixed value. Theoretically that value might be given simply by a general agreement of the community determining its value. As we agree that a given number of inches shall constitute a foot, or a given number of cubic inches a quart, so we might agree that paper notes of a given number should be printed by the Government, and these paper notes should constitute our medium of exchange. This is what the United States did do during the Civil War. But experience is supposed to have proved-in our judgment it has proved-that mankind is not yet wise enough to know how much of such money should be printed, nor could we have any adequate assurance that the limit agreed upon would be adhered to. The length of a foot is measured mathematically, and remains always the same; but the value of a gold, a silver, or a paper dollar-that is, its power to buy bread or clothes or fueldepends largely upon what estimate people put upon the probable future power of that dollar to buy bread or clothes or fuel; it is, therefore, necessarily more or less variable in value. For this reason experience has demonstrated that this medium of exchange should not depend wholly upon the agreement of the community to use it as money, but should have cost some commensurate labor to produce it, and should
have some value independently of its use as a medium of exchange. This something which it has cost some labor to produce, and which the community generally agree to accept in exchange for the various products of their labor, becomes, as a result of this agreement, a standard of value. Exactly as all silk is measured by the yard, that is, by what the people have agreed shall be called a yard, so all values are measured by coin, that is, by what the people have agreed shall be regarded as coin.
The whole commercial world has agreed to regard silver, or gold, or both, as cointhat is, as a standard of value, by which to estimate all other values, and especially by which to limit the amount of money which can be used as a medium of exchange. The monometallist believes in using either silver or gold exclusively as a standard. Generally the monometallist of to-day is a gold monometallist. He has no objection to using silver also as money, that is, a medium of exchange, but he desires to measure its value by gold - that is, by the amount of coined gold which at any time people in the community are willing to give for it. The bimetallist believes in using gold and silver interchangeably as a standard. That is, he believes in measuring all other products of industry by the amount of either coined gold or coined silver which at any given time people in the community are willing to give for them. The monometallist generally thinks that a double standard is impossible in the nature of things; that, whatever Government may say or do, the people will always either measure the value of silver by gold or the value of gold by silver. The bimetallist thinks that a double standard is entirely practicable; that a simple agreement by the community to coin both gold and silver, and to use the coin interchangeably as a medium of exchange, will keep the coined metals of equivalent value for all purposes of exchange.

Substantially all the civilized nations of the earth to-day have adopted gold monometallism; that is, they have adopted gold as the standard by which to measure all other values; they use silver only as a medium of exchange, not as a standard of value. But an increasing majority of the scholars, both in this country and in Europe, including most of the younger men, are bimetalists; that is, they believe that it is both practicable and wise to use gold and silver interchangeably as a standard of value.

In this country, in the current debates, students of this subject are divided into four parties.

First: Gold monometallists, who believe in using gold exclusively as a standard of value, and silver, if at all, only as a means of exchange. Second: Silver monometallists, who think that silver would be a fairer and juster measure or standard of value than gold. Third: International bimetallists, who believe in using gold and
silver interchangeably as silver interchangeably as a standard of value, but who do not think that it is prudent to attempt to do this without the concurrent action of other nations. Fourth : National bimetallists, who believe that this
country alone is large enough to establish bimetallism, and that it is both right and expedient for us to set the example for other nations to follow. Perhaps we ought to add to this list-Fifth : Greenbackers, who believe that a simple agreement on the part of the people of the United States to print a definitely limited amount of paper money, increasing its amount with the increase of population and business, would suffice to constitute such paper money a standard of value, without any gold or silver."
The silver difficulty in the United States is, in the opinion of most disinterested persons, due mainly to the fact that there are rich silver mines in five or six of the Western States. Through the influence largely of Senators and Representatives from these States, Congress was induced a few years ago to enact what is known as the Sherman Silver Bill. By the provisions of this Bill the Treasurer of the United States is required to purchase a very large quantity $-4,500,000$ ounces-of silver every month. This silver is not coined by the Government, but simply stored in the Treasury vaults. Silver certificates, that is Government bills redeemable in silver, are issued to the value of the amount so deposited. This process has been going on for years, until an immense quantity of silver has accumulated and is lying useless in the vaults. The object of the law was, of course, to provide a market for the producers of silver; and to keep up its price. In the latter object it has failed. So much silver is produced in the United States and other parts of the world that the metal has steadily fallen in price, until at present the amount contained in a coined American dollar, which was originally worth, we suppose, very nearly a dollar, is now worth only something like sixty cents. Of course, so long as every one is willing to take this coin as a dollar and no one is compelled to accept it as such, there is no cause of complaint. But seeing the abundance of silver in the hands of the Government, people both in the United States and•in England and else where, who have loaned or invested money in the United States, or who may have in their possession large or small amounts of the Government or State-bank bills or promissory notes, become afraid that through the pressure of those interested in the silver business, Congress may some day pass a law making silver a legal tender; that is, compelling all creditors whether of the Government or of private citizens to accept payment of the amount due them wholly or partly in silver. The result was that many British and other foreigners having debts of any kind due them in the United States claimed payment in gold, which they thus took out of the country. In like manner creditors in
the States drew gold or its equivalent in payment, and instead of depositing it in the banks as usual, so that it might be used, began to hoard it until the danger should have passed. Hence the great drainage of gold proved too much for the resources of many of the banks. These were consequently obliged to close their doors. Hence the great panic. Other consequences followed. Capitalists and companies carrying on large concerns could not get currency from the banks to pay their men and other expenses, because everyone was keeping all the money he could get, instead of putting it into the banks.

The cause of all the trouble, be it remembered, was simply that people at home and abroad to whom money was owing, were afraid they might have to accept payment in silver or its equivalent, instead of in gold.

To relieve the stringency President Cleveland summoned Congress in special session, to repeal the Sherman Act, so that the Government might stop purchasing silver. The House of Representatives has already voted to repeal the Act, and the Senate will, no doubt, do so soon. The situation is already much improved. Gold is again coming into the country, and banks and manufacturers are resuming operations.
The history is a very remarkable and interesting one. We do not suppose that everybody will accept the version we have given as correct at every point. The whole question is well worth much study. To get a tolerably clear idea of the whole affair in all its bearings, which cannot, of course, be conveyed in a single article, is almost a commercial education in itself.

## USE AND ABUSE OF METHODS.

MUCH has been written and said during the last few years on the subject of "Methods" for the teacher. For a time the columns of many of our Educational exchanges were, to a large extent, filled with descriptions and illustrations of all kinds of methods and devices for the use of the teacher. These related both to class-room instruction and to school management and discipline. As a matter of course the tendency to extremes which is so characteristic of human nature, especially in this new American world, shewed itself. All kinds of new and startling devices were invented and paraded, some of them useful, some fanciful and grotesque; some wise, many otherwise.
The result was in some cases mischievous. Many teachers of sound judgment, even though young and inexperienced, would study carefully and choose wisely, and so doing were enabled to garner a good many bushels of wheat from the mountains of chaff. Others, too indolent or immature to discriminate, would probably attempt wholesale imitation of whatever might be recommended by some one,
and, either through defect in the method described or their own incompetency, the experiment would end in failure and disgust. Then a reaction came and with it an outcry against the publication of methods and the attempts to follow them. Hence some of the leading eduçational papers have practically given up the publication of methods and are devoting their space to essays on educational topics, articles scientific, literary, biographical, etc.
The case seems to be one to which the thread-bare saying that the fact that a thing is liable to abuse is no argument against its proper use provided that use is beneficial, is specially applicable. We question whether as much harm is done by injudicious attempts to apply new methods as some suppose. The teacher who is content with mere literal and mechanical imitation, will not accomplish much by the use of the best method, but even he may do better with the method than without it. So, too, if his good sense and judgment do not save him from wasting time in experimenting with the many childish and absurd devices which are from time to time put forward, they will hardly save him from some equally wasteful procedure when he has no such device to fall back upon. The number of those who cannot learn by experience soon to distinguish between the useful and the worthless in methods must be very small.

For our own part, we have no doubt that many of the most serious defects in many of our schools arise from dry, mechanical, unphilosophical, methods in the class-room. We, therefore, believe that one of the most useful functions of the educational paper is to put before its readers descriptions and illustrations of successful methods of teaching in use at the present day. We, consequently, propose to continue to devote a considerable portion of our space to the very best methods of dealing with the various subjects on the school curricul, which we can procure from any quarter. To this end the pages of our numerous exchanges are carefully scanned every week in order that the very best things of the kind they afford may be made available. But above all we are glad to have original articles of a practical kind from Canadian teachers. Excellent articles of this kind from this source have not, we are sure, been wanting in the past. We hope to have many more of them in the future. Nothing would be more gratifying to us than to have experienced and successful teachers use our columns for the purpose of recording experiences and making suggestions for the benefit of their brothers and sisters in the profession.

We hope that no one of our readers who has to do with the subject of English Grammer in any of its grades missed the admirable lesson on the Preposition by Mrs. Grattan in our last number. In our opinion it is one of the best illustrations of rational inductive teaching we have seen. We venture to say that in no school in which such a method is intelligently and patiently pursued will Grammar continue to be the dry, hard, hateful subject it is so commonly thought to be. We have more similar material on hand.

English.
All articles and communications intended for this EDUCATIONAL JOURNAL, 201-203 Yonge Street, Toronto.

## ENTRANCE LITERATURE. <br> IIf.-LOSS OF THE BIRKENHEAD.*

(SIR francis doyle)
By a. MacMechan, Ph. D
I.-The Facts of the Case.

To understand this piece of verse, we must pick out the historic kernel of fact from the poetic invention. In order to do so, the following extract is made from the annual register of 1852, pp. 470 to 471 ; and another version of the same incident is printed in this place. The poem itself does not bring out the essential facts with sufficient emphasis :
'-The Birkenhead was ordered to take out detachments to reinforce the several regiments serving at the Cape. She sailed from Queenstown on the 7 th of January and arrived at Simon's Bay on the 23rd of February." The troops on board were details of the 12th Lancers, the 2nd, the 6th, the 12th, the 43rd, the 45th, the 60th Rifles, the 73rd, the 74th and the 91st Regiments; in all, 488 officers and men, twenty women and children, and 130 of a crew. "The Birkenhead sailed on the 25th, about 6 a.m., for Algoa Bay. At 8 p.m. the ship's course was duly pricked off on the chart, within False Bay, and the man at the helm received directions how to steer. A leadsman was on the paddlebox, and look-out men were placed ; the night was fine, starlight and calm, but a long swell setting in on shore; the land was distinctly visible on the port bow. About ten minutes before $2 \mathrm{a} . \mathrm{m}$. the leadsman got soundings in twelve or thirteen fathoms, the ship then going at eight knots; before he could get another cast of the lead the ship struck on a precipitous rock, with two fathoms under the bow and eleven under the stern.
The Master-Commander of the ship, Mr. Salmond, rushed on deck, ordered the small bower anchor to be let go, the quarter boats to be lowered, and to lie off alongside the ship; the paddle-box boats to be got off, and a turn astern to be given to the engines. This last seems to have been a fatal measure, for as the ship backed from the rock the water rushed into the large orifice made by the concussion, and the ship striking again, the whole of the plates of the foremost bilge were "buckled up" and the partition bulkheads torn asunder. The consequence was, that in a very few minutes the forward compartments and engine rooms were filled with water, and a great number of the unfortunate soldiers were drowned in their berths. In the meantime Mr. Salmond and his officers and the commanders of the military officers and the commanders of the military
were doing their duty on deck with heroic composure.
"No more than three boats which were deeply laden with seventy-eight persons were all that were actually available for 630 persons. In ten minutes after the first concussion, and while the engines were still turning astern, the ship, as stated, struck again under the engine-room, bilging the side several feet, and tearing open the bottom. Instantly the ship broke in two abaft the main mast; the bow-sprit sprang up into the air towards the foretopmast; the funnel went over the side, and the fore part of the ship sank instantly; the stern part, now crowded with men, floated a few minutes longer and then sank, leaving the maintopmast and topsail yard only visible above the water. To this awful moment the resolution and coolness of all hands were remarkable -'far exceeding,' says Captain Wright, 'anything that I thought could be effected by the best discipline; everyone did as he was directed, and there was not a murmur or a plunge until the vessel made her final plunge. All the officers received their orders and had them carried out, as if the men were embarking instead of going to the bottom. There was only this difference, that I never saw any embarkation conducted with so little noise and confusion.'

## The Birkenhead.

Amid the loud ebriety of war,
With shouts of "la Republique" and "la Gloire,'
*From Lessons in English Literature, Copp, Clark, Co.,
Toronto, (Copyright.)

The Vengeur's crew, 'twas said, with flying flag And broadside blazing level with the wave, Went down erect, defiant to their grave
eneath the sea. 'Twas but a Frenchman's brag,
Yet Europe rang with it for many a year.
Now we recount no fable; Europe hear!
And when they tell thee England is a fen Corrupt, a kingdom tottering to decay,
Her nerveless burghers lying an easy prey
For the first comer ; tell how the other day A crew of half a thousand Englishmen A crew of half a thousand Englishmen
Not with the cheer of battle in the throat,
Or cannon-glare and din to stir their blood,
But, roused from dreams of home to find their boat
Fast sinking, mustered on the deck they stood, Biding God's pleasure and their chief's com mand.
Calm was the sea, but not less calm that band Close ranged upon the poop, with bated breath But flinching not, though eye to eye with Death!
Heroes! Who were those heroes? Veterans steeled
To face the King of Terrors mid the scaith
Of many an hurricane and trenched field?
Far other: weavers from the stocking-frame ;
Boys from the plough; cornets with beardless chin,
But steeped in honor and in discipline.
Weep, Britain, for the Cape whose ill-starred name
Long since divorced from Hope suggests but shame,
Disaster, and thy captains held at bay
By naked hordes; but as thou weepest, thank Heaven for those undegenerate sons who sank Aboard the Birkenhead in Simon's Bay!

Sir Henry Fule, 1820-1889.
In Lyra Heroica, p. 262 f. London: 1892.

## II.-Notes and Comments.

"1. 1.-Right on our flank. At one side: "flank" is correct enough in the mouth of a soldier, speaking of a sunset at sea. The statement that the sun set on their "flank," and not ahead or astern, helps to show that the ship was sailing north or south. In the Ancient was sailing north or south. In the Ancient vessel by the verse-
"The sun came up upon the left
Out of the sea came he!
Out of the sea came he!
And he shone bright and on the right Went down into the sea."
That is, the ship was sailing due south.

1. 2.-Dark repose. The writer wants to make us understand that it is night and dark night at the time of the disaster. "In the first line he puts the word "crimson" and in the second the word "dark" to suggest the brilliance of the sunset, and the rapid fall of night, immediately after, as if we actually saw it. Any accident seems more terrible at night. "Deep" calls up the idea of danger if the ship struck. "Repose" suggests the deep calm of the sea, in which the steady roll of the swell was like the heaving of the breast of the sleeper.
2. 3.-When like the wild. Tennyson has the same idea better put in The Princess-

## "Then rose a cry as of a city sack'd."

As late as the Peninsular War, at the beginning of this century, English soldiers were allowed to plunder captu ed; cities, and insult helpless women. "Sacking" a town is no longer a law ful act of war.

1. 5. "This line explains why the cry of women rose. "Stout" ship means strong.
1. 7.-Her timbers thrilled. These two lines insist on the violence of the shock on grounding, The Birkenhead was at the time of the disaster going closer in shore than she should, in order to bring the soldiers sooner to Zululand, where they were needed badly in one of England's "little wars." The night was calm and clear, and she was. going at full speed when she struck. The whole frame of the vessel trembled violently, as the nerves of the body do when we are badly hurt, or frightened, or greatly excited.
2. 9.-like base cowards. Planks drifting away from the wreck can hardly be compared to bad soldiers who show the white feather in the crisis
of a battle. "Ever," continually. "Leave
their ranks," run away; "break their ranks" would be stronger. What the writer has in mind is the fighting line breaking up at the charge; "the rush of steel," that is, a hand to hand struggle with spear and sword.
3. 14--white sea brink. The long swell of the sea on reaching the shallow water would form a foaming line of breakers along the beach.
4. 16.-She was about to sink. According to the Annual Register the Birkenhead went down in twenty minutes.
5. 17.--" Out with those boats." Such an appeal was made, but not precisely in these terms. As the ship broke in two and the afterpart sank the commander of the Birkenhead cried, "All who can swim jump overboard and make for the boats," but in the words of Capt. Wright one of the survivors, "We begged the men not to do as the commander had said, as the boats with the women would be swamped. Not more than three made the attempt." The verse sounds unpleasantly inflated and unreal.
6. 22.         - On land and sea. "Colors," the two flags that are the distinctive badge of each regiment. They bear the regimental emblems, device, and the names of battles through which they passed. The soldier's devotion to the flag is proverbial. We had our own good name as English soldiers to keep from disgrace, and the fame of our regiments to keep unsullied. As a matter of fact details of different regiments, such as the 91st, were there.
l. 26.-gave the word. The regular army phrase for "ordered," "gave the order."
l. 27.-F'ormed us in line, Also a technical phrase. The men were made to take their places on the after deck, as if on parade.
1. $29 .-B y \ldots$ seek. Much condensed. No one thought of seeking escape by a disgraceful exercise of strength; that is, the men might have taken forcible possession of the boats, and left the women and children to drown.
2. 30.-Our post to quit. That is, the very opposite is strongly emphasized. We were trained not to quit our post ; we were taught not to injure helpless women and children.
3. 33.-The oars ply. The boats are rowed to the shore, only two miles away, and come back for fresh loads from the ship.
4. 35.-Still. But yet. "Steadfast," firm in mind, unhesitating.
5. 36.-What follows, why recall? Why recount the events of the sinking of the ship and drowning of the men? It is enough to know that they died like brave men. There is here a fine touch-to do one's duty and talk little about it is surely noble spirit.
6. 37.-bloody surf. Because many soldiers "and sailors were torn by sharks. See line 14 . "Purple tide" refers to the same thing. Out of 648 persons 184 reached the shore.
7. 38.-They sleep as well. From the similar appearance of the sleeping and the dead, we often speak of death as sleep. The softer phrase partly makes the thought of death less terrible. The term is sanctioned by Christian usuage; it implies the hope of awakening to renewed life:-

## "Duncan is in his grave,

After life's fitful fever he sleeps well."
"And when he had said this, he fell asleep,"
Carrying the idea of death as a sleep still further, we think of the dead being comfortable or the reverse, as if the corpses could feel. The churchyard is quiet; our friends will rest well there. The ocean is stormy, unresting ; they cannot be at peace there.

1. 40.-wild grave. Not quiet and peaceful like the conventional churchyard "And the sea gave up the dead that were in it."-Rev. $x x$., 13.
2. 41.-like stars. We must remember that a soldier is supposed to be speaking, and the reference is probably to military decorations, many of which are actually in the form of stars. Their wounds shall be their glory.
3. 42.-Joint-heirs with Christ. See Romans viii., 17. The men who died for the weak and helpless are to inherit the glory of the risen Christ, and inherit it along with him ("jointheirs"'); for they have done as he did.
"Inasmuch as ye did it unto one of the least of these my brethren, ye did it unto me."
4. 43.-not in vain. Their lives were not sacrificed needlessly. for the women and children were saved; and the world is richer by another example of men who knew how to die.

## III.-Questions and Exercises.

The questions in the poem are in a great measure covered by the preceding notes and comments In addition to these the pupil should form clear pictures in his mind embracing the details of each scene in the catastrophe: (1) The Birkenhead before the shock (2) The scene immediately after she strikes; as regards ( $a$ ) the steamer itself; (b) the soldiers and crew ; (c) the sea about them ; ( $d$ ) the cry of the cowards; (3) The restoration of discipline and manning the boats; (4) The sinking of the ship. The writing of a prose paragraph on each division would help to a clear conception of the different scenes. Too great care cannot be taken to enforce the cowardice of the one who was "no officer of ours," and "such loose babblers," and the heroism of the men "formed in line to die."

## IV.-Hints on Teaching.

This is a poor piece of verse. The narrative is not vivid or strong. There are few of those splendid phrases that take hold of us, and once heard are never forgotten. In some places, there is a distinct drop in the style, as-

## She was about to sink," was clear

The ten lines following are false in feeling. No hero talks in this strain about his deeds. Men Who faced death, like the troops on the Birkenhead, never by any chance brag about it, or reach a state of mind in which they give utterance, in any form, to the idea, "Our English hearts beat true," for this is praising themselves. Fine sentiments, about themselves, and their own actions, do not occur to really brave men ; courage and self respect go together. The redeeming points of the poem-and these the teacher must emphasize with whatever power he has-are the nobility of the theme, and the warm glow of enthusiasm the writer feels for this sublime act of self-devotion. The heroic conduct of the soldiers could be compared with that of the sailors on board the ill-fated Victoria during the recent naval disaster.
The poem should not be taught in a minute fashion. It would be idle to spend time in examining the diction closely; for close study will only reveal more and more defects in composition, and it is not wise to make young minds critical, or teach them the art of fault-finding The poem should be studied as a whole. It should certainly not be committed to memory ; it does not deserve it; but the circumstances and details of the disaster should be impressed on the minds of the class. Nor should the class be burdened with any facts regarding the life or personality of the author: they are second in importance to understanding the facts in the case. The note in the reader will be sufficient to satisfy any curiosity concerning the author. It is impossible to teach this lesson in literature without encroaching on the domain of ethics and of history. Two things must be kept before the minds of the pupils: First, that the tale is in all respects true. Children like to know this, and are much more impressed by a tale that can be vouched for than by one they know to be fictitious. Second, that though war is an evil, it is sometimes necessary; and that a military life is the only one that develops the sort of character which obeys orders unhesitatingly, Whatever the consequences may be. The same blind obedience to orders gave us the charge of the Light Brigade and " many an unsung Thermopylæ.'

Subscriber.-St. Anne in the "Canadian Boat Song" is on the western arm of the Ottawa just where it joins the st. Lawrence. Will some reader who knows the locality in which Moore lived at St. Anne please tell us of the "green isle" and the "rapids" referred to in the poem? The Reef of Norman's Woe lies off the coast of Massachusetts, near Gloucester.
E. R.-Your suggestion is thoughtful and will be acted upon.

Subscriber T.-In next issue will appear a brief treatment of nouns used absolutely.

There is no vice that doth cover a man with shame as to be discovered in a lie.-Bacon.

## Examination Papers.

EDUCATION DEPARTMENT, ONTARIO.ANNUAL EXAMINATIONS, 1893.

## PUBLIC SCHOOL LEAVING

GEOGRAPHY

## Examiners : $\left\{\begin{array}{l}\text { A. B. Davidson, B. A }\end{array}\right.$

1. Explain fully the following statements:-
(a) "The whole of the land is slowly making its way seaward.'
(b) "Air from an area of high pressure flows into an area of low pressure.
(c) The form of the surface of the land modifies its climate.
2. State clearly and fully the causes of Tides and Ocean Currents.
3. What determines the size, current, and windings, of the St. Lawrence River, and why is there no delta at its mouth?
4. Describe the provinces of Manitoba and Nova Scotia under the following headings: $(a)$ Climate, (b) Industries, (c) Commercial Facilities, and draw an outline of each of these provinces with its water system.
5. Name the four most important dependencies of Great Britain, stating the chief exports of each to Britain and the chief ports of depar ture and entry.
6. Describe one eastern and two western routes from London, England, to Hong Kong and state which you would prefer and why.
7. Write geographical notes on Alexandria, Calcutta, Manchester, Marseilles, Hamburg, Vancouver and Aden.
Values-1.-15;2.-14;3.-15; 4.-14;5.-14; 6.-14;7.-14.

## HISTORY.

## Examiners : $\left\{\begin{array}{l}\text { A. B. Davidson, B. A. } \\ \text { John Dealness }\end{array}\right.$

1. Shew the connection of the "Black Death," 1348, the Statute of Laborers, and the Peasant Revolt of 1381.
2. Give the historical origin of the following terms: Lollard, Puritan, Non-Conformist, Methodist, and Chartist.
3. State the special importance of each of the following battles in regard to its bearing upon the Peninsular war, and give a brief account of any two: Trafalgar, Waterloo, Corunna, and "Battle of the Nile."
4. With reference to England, Wales, ireland, and Scotland, state the meaning of the terms-(a) Disestablishments of the Church, and (b) Home Rule-and write a brief sketch of the history of these two political movements.
5. Give an account of the "Royal Government" which supplanted the government of the "Fur Companies" in Canada.
6. Describe the different forms of Government of Canada from the British Capture of Quebec (1760) to the meeting of the first Parliament of Canada (1792), and narrate concisely the circumstances which led to the establishthe circumstances
7. Enumerate the causes in Lower and Upper Canada which led to the Rebellion of 1837.
8. Explain what is meant by (a) The National Policy, (b) Reciprocity Treaty, (c) Free Trade, (d) Imperial Federation.

Values $-1 .-10 ; 2 .-15 ; 3 .-10 ; 4 .-15 ; 5 .-10 ; 6 .-15 ; 7 .-$
$15 ; 8 .-10$.

## ENGLISH POETICAL LITERATURE.

## Examiners : $\left\{\begin{array}{l}\text { John Dearness. } \\ \text { Clarke Moses. }\end{array}\right.$

A.

1. (To Bassanio) It must not be, there is no power in Venice
Can alter a decree established:
'Twill be recorded for a precedent ;
And niany an error, by the same example,
Will rush into the state. It cannot be.
(a) How was Bassanio's desire accomplished without the establishment of the dangerous precedent?
(b) What distinguishes the Drama as a kind of poetry from all the other kinds quoted in this paper?
2. Much have I travell'd in the realms of gold. And many goodly states and kingdoms seen; Round many western islands have I been
Which bards in fealty to Apolla hold
Oft of one wide expanse had I been told
That deep-brow'd Homer ruled as his demesne;
Yet did I never breathe its pure serene
Till I heard Chapman speak out loud and bold.
Write explanatory notes (a) on the italicized parts and (b) on the usual form and purpose of the Sonnet.
3. Joy of the desolate, Light of the straying, Hope, when all others die, fadeless and pure,
Here speaks the Comforter, in God's name saying,-
" Earth has no sorrow that Heaven cannot cure."
(a) Divide each line of the stanza into feet and mark the accented syllable in each foot.
(b) Explain the force of each of the following words in its relation to the context: Joy, Light, Hope, others, here, Comforter.
(c) What are the characteristics of a Hymn?

## B.

RUGBY CHAPEL
1 Coldly, sadly descends
2 The autumn evening. The field
3 Strewn with its dank yellow drifts, Silent.-
8 The lights come out in the street,
9 In the school-room windows-but cold,
10 Solemn, unlighted, austere,
11 Through the gathering darkness,
12 Arise the chapel walls.
14 There thou dost lie, in the gloom
15 Of the autumn evening. But ah!
16 That word, gloom, to my mind
17 Brings thee back in the light
18 Of the radiant vigor again.
40 Somewhere, surely, afar
41 In the sounding labor-house vast 42 Of being, is practis'd that strength,
43 Zealous, beneficent, firm!
44 Yes, in some far-shining sphere,
45 Conscious or not of the past,
46 Still thou performest the word
47 Of the Spirit in whom thou dost live-
48 Prompt, unwearied, as here!
49 Still thou upraisest with zeal
50 The humble good from the ground,
51 Sternly repressest the bad!
60 Most men eddy about
61 Here and there-eat and drink,
66 Achieving nothing ; and then they die-
67 Perish-and no one asks
68 Who or what they have been.
73 There are some, whom a thirst
74 Ardent, unquenchable, fires,
75 Not with the crowd to be spent
76 Not without aim to go round
77 In an eddy of purposeless dust
78 Effort unmeaning and vain.
79 Ah yes ! some of us strive
80 Not without action to die fruitless.
84 We, we have chosen our path-
85 Path to a clear-purpos'd goal,
86 Path of advance !-but it leads
87 A long, steep journey.
102 Friends, who set forth at our side,
103 Falter, are lost in the storm.
104 We, we only are left :-
105 With frowning foreheads, with lips
106 Sternly compress'd, we strain on,
107 On-and at nightfall at last
108 Come to the end of our way.
124 But thou would'st not alone
125 Be saved, my father ! alone
126 Conquer and come to thy goal
127 Leaving the rest in the wild.
128 We were weary, and we
129 Fearful, and we in our march
130 Fain to drop down and to die.
131 Still thou turnedst, and still
132 Beckonedst the trembler, and still
133 Grvest the weary thy hand.

134 If, in the paths of the world,
135 Stones might have wounded thy feet,
$1 \$ 6$ Toil or dejection have tried
137 Thy spirit, of that we saw
138 Nothing - to us thou wast still
139 Cheerful, and helpful, and firm!
140 Therefore to thee it was given
141 Many to save with thyself;
171 See! In the rocks of the world
172 Marches the host of mankind,
173 A feeble, wavering line.
188 Then, in such hour of need
189 Of your fainting, dispirited race,
190 Ye, like angels, appear,
191 Radiant with ardor divine.
192 Beacons of hope, ye appear!
193 Languor is not in your heart,
194 Weakness is not in your word,
195 Weariness not on your brow.
196 Ye alight in our van! at your voice,
197 Panic, despair, flee away.
198 Ye move through the ranks, recall
199 The stragglers, refresh the out-worn,
200 Praise, re-inspire the brave.
201 Order, courage, return;
202 Eyes re-kindling, and prayers,
203 Follow your steps as ye go.
204 Ye fill up the gaps in our files,
205 Strengthen the wavering line,
206 Stablish, continue our march
207 On to the bound of the waste,
208 On, to the City of God.
4. State, illustrating by quotations, what seem to you to be the comvictions of the author in regard to his father's life beyond the grave.
5. Expand as fully as you can the contrast conveyed by the lines "The eddy of purposeless dust" (1.77) and "path of advance to a clear purpos'd gaol " (l. 85).
6. What duties to our fellow-men does the poet inculcate through his father's example?
7. Write a free paraphrase of lines 196 to 208.
8. Show the suitableness of the title-Rugby Chapel.
9. Point out the appropriateness of the introduction, lines 1-15.

## C.

10 Sweet Highland girl, a very shower Of beauty is thy earthly dower!
Twice seven consenting years have shed Their utmost bounty on thy head.
Show the force of dower and the poetic elements of the 3rd line and the 4th as far as bounty.
11. And these gray rocks, .... lawn
.....trees, ....fall of water, .....silent lake
.... little bay, .... quiet road,....
And thou the spirit of them all ;
Thee neither know I nor thy peers ;
And yet my eyes are filled with tears.
(a) Explain "spirit of them all" and "thy peers."
(b) Account for the emotion expressed in the last line.
12. Thou dost not need.... shamefacedness Thou wear'st freedom of mountaineer ; Glad face..... soft smiles...., seemliness Complete swaying thy courtesies. With no restraint, but such as springs From quick and eager visitings Of thoughts that lie beyond the reach Of thy few words of English speech : A bondage sweetly brook'd, a strife That gives thy gestures grace and life!
Write in your own words the substance of the last six lines, making especially clear the force of 'eager visitings of thoughts,' 'bondage sweetly brooked,' 'strife,' 'grace and life.'
13. O happy pleasure ! here to dwell Beside thee in some heathy dell;

In spots like these it is we prize Our memory, feel that she hath eyes; Then why should I be loth to stir?

Nor am I loth, though pleas'd at heart, Sweet Highland girl ! from thee to part.
(a) Explain 'she hath eyes' and 'though.'
(b) Harmonize the apparent contradiction
(c) State the sources and describe the nature of the poet's pleasure as set forth in the poem.
14. In what respects are the poems-Rugby Chapel and To a Hightand Girl-similar; in what, unlike?
Values $-1 .-6,6 ; 2 .-14,6 ; 3 .-3,12,6 ; 4 .-10 ; 5 .-8 ; 6 .-$
$10 ; 7 .-10 ; 8 .-5 ; 9 .-5 ; 10 .-2,4 ; 11-4,5 ; 12 .-10 ; 13 .-4,5$, 6; 14 . -10 .

## For Friday fitempoon.

## A CHILD'S LAOGHTER.

All the bells of heaven may ring,
All the birds of heaven may sing,
All the wells on earth may spring,
All the winds on earth may bring
All sweet sounds together;
Sweeter far than all things heard,
Hand of harper, tune of bird
Sound of woods at sundawn stirred,
Welling water's winsome word,
Wind in warm wan weather.
One thing yet there is that none,
Hearing ere its chime be done,
Knows not well the sweetest one
Heard of men beneath the sun,
Hoped in heaven hereafter
Soft and strong and loud and light,
Very sound of very light,
Heard from morning's rosiest height,
When the soul of all delight
Fills a child's clear laughter.
Golden bells of welcome rolled
Never forth such notes, nor told,
Hours so bly the in tones so bold,
As the radiant mouth of gold
Here that rings forth heaven.
If the golden-crested wren
Were a nightingale-why, then,
Something seen and heard of men
Might be half as sweet as when
Laughs a child of seven.

- Swinburne.

THE OLD WOMAN WHO SWEEPS.
(a dutch childsong.)
I.

A queer old woman dropped down from the moon,
With a herring-skin dress and clam-shell shoon; She dropped down by the Zuyder Zee,
And a long, strong broom in her hand had she.
The old woman solemnly shook her head;
"I'll sweep-I'll sweep!" was all she said.

## II.

Then the neighbors all came around in a row ;
"Old woman! old woman! we can't live so!'
You have swept the clouds all out of the sky-
No rain comes down, the fields are dry!"
The old woman solemnly shook her head;
'I'll sweep-I'll sweep !' was all she said.
III.

Then the neighbors came, and they yelled and they cried
"Old woman! old woman! your broom put aside!
You have swept the wind away from the millThe corn is not ground, the wheels stand still !"
The old woman solemnly shook her head;
"I'll sweep-I'll sweep!" was all she said.

## IV.

Then the neighbors came, and shrieked in a breath:
"Old woman! old woman! you'll starve us to death!
You have swept the fish all out of the sea-
No herring, nor sprat, nor salmon catch we!'
The old woman solemnly shook her head;
"I'll sweep-I'll sweep!" was all she said.

## V.

Then the neighbors came, and brooms had they,
Man, woman, and child had brooms that day.
Big brooms and little, and short and long-
They swept and they swept, and their brooms were strong.
The old woman solemnly shook her head
"I'll sweep-I'll sweep!" was all she said.

## VI.

They swept the old woman out from the land; Over the dikes and over the sand,
From Haarlem lake and the Zuyder Zee,
They swept, till they swept her out to sea.
"The old woman solemnly shook her head
"I'll sweep -I'll sweep !' was all she said.
VII.

And now the rain comes down to the ground ; And the wind comes up and the wheels gc round;
And the fish come swimming up to the shore, And there the old woman is seen no more. The old woman solemnly shook her head
" I'll sweep-I'll sweep!" was all she said.

## VIII.

But the seamen sail from the harbor's mouth ;
They sail to the north, and they sail to th south;
And when they come back to land they say
They met the old woman still sweeping away.
The old woman solemnly shook her head
" I'll sweep-I'll sweep!" was all she said.

## IX.

She sweeps the waves up mountains high
She sweep the clouds down out of the sky And she warns the ship with uplifted handNo wonder the skipper puts back to land.
The old woman solemnly shook her head;
I'll sweep-I'll sweep !' was all she said.
-September St. Nicholas.

## Book Notiees, ete.

Any book here reviewed sent post-paid on receipt o price. Address The Grip Printing \& Publishing Co.,

The Gospel of Matthew in Greek. Alexander Kerr and Herbert Cushing Tolman. Charle H. Kerr \& Co., 175 Dearborn St., Chicago

Price, paper, 50 cents ; cloth, $\$ 1.00$.
This valuable book is one of the Unity Literary series, the aim of which is to emphasize above all else the individuality of the separate writers of the New Testament. This is done in the volume before us by indicating by bold type in the text those words which Matthew alone of the New Testament writers employs; by estimating the frequency of occurrence of every word in Matthew ; by designating those words which are found in no other writer ; by noting prominent examples of Hebraism in his Gospel etc. The book contains also a vocabulary, historical and geographical indexes, an index of proper names, etc. It will be useful to the private reader of Scripture as well as to the student and teacher.

Lessons in Literature for Entrance Examinations, 1894. By A. W. Burt, B.A.; Gertrude Lawler, M.A.; E. J. McIntyre, B.A.; A. M MacMechan, B.A., Ph. D.; Nellie Spence, BA.; A. Stevenson, B.A.; F. H. Sykes M.A.; W. J. Sykes, B.A. Edited by F. H

Sykes, M.A. Toronto, The Copp, Clark
Company, Limited, 1893. Price 25 cents.
So long as teachers of literature have not at their disposal much time, considerable money and extensive libraries, such excellent books of annotations as the present one will continue to occupy a place on the shelves of the most intel ligent and conscientious among them. The editor of this little book has called to his assistance some half-dozen of our most enlightened and successful teachers of English, and the re sult will be found to be an exceedingly suggestive and useful book. The introduction to each lesson, intended apparently for the teacher, will interest him in the beauties or warn him of the difficulties connected with the lesson and render it clearer to his understanding. The explanatory notes are on well selected points and are at once full and to the point. The questions and exercises are particularly well framed, and will perhaps be found the most helpful division of the notes. The biographical notes are as full as is desirable, written in a clear and interesting style, andwhat is mostrare in school books-accompanied by really presentable portraits of the authors

A kind heart is a fountain of gladness, making everything in its vicinity freshen into smiles.-Irving.

## Speeial Papers.

## *A QUESTION IN WHICH THE PROFESSION IS DEEPLY INTERESTED. <br> By A. Weidenhammer.

No doubt there are many questions in which our profession is deeply interested, but the one in which my interest is at present particularly centred is the all-important question of " Better Renumeration of our Serrices." Although always an advocate of this cause, yet I was never so impressed with the necessity of some joint action on our part as a profession, as I am at present. Was induced to bring the subject before the Association by several cases which came under my notice during the fall term of the past year. A young friend of mine had been re-engaged for the coming year at a salary of $\$ 400$, but owing to other circumstances be was prevented from keeping his engagements. The S. B. advertised for a teacher, requesting applicants to state the salary expected, and received applications asking salaries ranging from $\$ 225$ to $\$ 500$, and one of the trustees told me that a second year University undergraduate had applied, for $\$ 240$ a year. In another section a Joung man had been paid $\$ 375$, and the Board got the offer of another young man's services mor $\$ 300$, and, of course, engaged the cheaper man. A number of cases occurred where teachers accepted positions at salaries varying from $\$ 100$ to $\$ 200$ less than what had been paid their predecessors. Now, although a small difference may be permissible, $\$ 100$ or $\$ 200$ is too much, and 1 think it is high time that we as teachers did something to put a stop to cases of this kind. I could enumerate many more cases, but these will suffice to convince you that there is need of a reform in our ranks as well as in our profession.
From the foregoing I have drawn the following conclusions: (1) Teachers are themselves to blame for the small pay they are getting. (2) There is a lack of pride in our profession Which is noticed by the School Boards, and benoe they under-estimate the services of their teachers.
J. "We should be proud of our profession," J. G. Fitch, in his "Lectures on Teaching," says. "Teaching is the noblest of all professions, but is the sorriest of trades, and nobody bis hope to succeed in it who does not throw bis whele heart into it. There is no calling bore delightful to those who like it, and none Which seems such poor drudgery to those who enter upon it reluctantly, or merely as a means of getting a living. He who takes his work as a dose is likely to find it nauseous." On this illustrate could preach an excellent sermon, illustrating the evils of our profession and showing the causes why we are so poorly paid.
How Teaching, the noblest of all professions !" ther many teachers really think so?. Are there not many who think their work drudgery, Who are glad when four o'clock comes, and Particularly glad when it is four o'clock on plishy afternoon, not because they have accomplished something good through the day or the Week, but because they will get a rest from With drudgery. Can we hnpe to impress people
Theortance of our work if we are not ourselves importance of our work if we are not We are not proud of it.
When I say we should be proud of our calling and seek to impress people with its importance Wh not mean that we should always and everyWhere impose our opinions on people. We shall not always be "talking shop," else we consider ourselves ridiculous and people will much us cranks and pedants. I do not so crank object to the former term, as it takes a guard ourselves against the latter. Of this class Charles Lamb says: "We are never at because in the presence of a school-master,
mow he is not at his ease in ours

[^1]He is so used to teaching that he wants to be teaching you." There are many ways in which this inclination to pedantry may be overcome, and we should do our utmost not to fall a prey to it. By devoting some of our leisure hours to employment different in nature from school work we can avoid this evil.

All writers on education, from Muleaster to the present day, have pointed out the importance of the teacher's work. Dr. McIellan, in his work on Applied Psychology, says of his ideal teacher: "To make some human hearts a little wiser, manfuller, more blessed, less accursed, is a work for a God." Yet we find our services more poorly rewarded than those of most other classes. Even farm laborers are in some respects better paid. Bank clerks, clerks in stores, bookkeepers, insurance men, etc., are paid from twenty-five per cent. to one hundred per cent. better than the best teachers. Why is this? Our answer has already been given. It is, to some extent at least, the fault of the teachers themselves.

I claim that our work is the most important work in this world. Who takes the child from the hands of the mother, and teaches it the first rudiments of an elementary education? The Public School teacher. Who lays the foundation of all trades and professions and of all higher education? The Public School teacher. Who completes the school education of fully eighty per cent. of hamanity (for that percentage never enters any higher school than a public school)? Again we answer, the Public School teacher. Yet, look at our pay. In this country, according to our inspector's latest report, the average salary of masters is $\$ 425$, and of mistressès $\$ 330.60$, while that of assistants is far below $\$ 300$; aud we are said to lead the province with regard to salaries. I know scores of young men who are getting fifty per cent. more in other callings, and who despise our profession for this very reason. Speaking with a leading business man a few days ago, in the course of our conversation he remarked, "You teachers are terribly underpaid. A good dry goods' clerk gets from $\$ 600$ to $\$ 800$ a year, and a teacher ought to get twice that." I told him I was exceedingly sorry that he was not a member of my School Board, because if he were I would at once apply for double my present salary.

I shall now try to point out a few reasons why we are so poorly paid:

1. The profession is over-crowded, and particularly with third-class teachers. This may not be the case in our county, but it is nevertheless true for the province. If one of our schools is advertised there are always twenty outside applications to one from our own county.
2. Teachers of this class do not value their services highly enough. In Landon's School Management we read the following: "If the teacher would perform his work not only with profit to the scholars, but with happiness and satisfaction to himself, it is necessary that he should take a high view of his duty." Herbert Spencer, in his work on " Education, Intellectual, Moral, and Physical," says : "I'he mistress of a dame school can hear spelling lessons, any hedge sehoolmaster can drill boys in the multiplication table; but to teach spelling rightly by using the powers of the letters instead of their names, or to instruct in numerical combinations by experimental synthesis, a modicum of understanding is necessary; and to pursue a like rational course throughout the entire range of studies, asks an amount of judgment, of invention, of intellectual sympathy, of analytical faculty, which we shall never see applied to it while the tutorial office is held in such small esteem." If a young man has creditably passed the Model School he should think more of his abilities than to offer his services to a School Board for $\$ 300$ because Mr. A. has offered his for $\$ 325$. Such cases have happened time and again. Many teachers of this class offer to teach at starvation salaries for fear of being left without a school. I remember a case where a graduate from the Model School
offered to teach for $\$ 100$ less than the employed teacher was getting. Fortunately the members of the School Board were men of good common sense, and retained the services of their teacher at an increased salary. But it is easy to see what would have happened if they had lacked this common sense. It would be more honorable for such young men to do the chores on a farm for their board than to lower the already meagre salaries paid in our profession. Such conduct is unprofessional in the highest degree. In all other professions, as law, medicine, etc., they have fixed charges, and anyone deviating from these only slightly is looked down upon and often severely censured ar even boycotted by his brethren. Why could we not do the same? By such underbidding not only is the salary lowered but the public opinion of the importance of our work is lowered, and an irreparable injury is done to the profession. How often do we hear the remark on our streets, "He or she is only a teacher?" If young teachers at the Model School agreed among themselves not to take a school for less than a certain sum, much of this underbidding would be avoided.
3. Many young people use our profession as a stepping-stone to something that pays better: -something more honorable we often hear them say-but for the true teacher there is nothing more honorable. That such a thing is possible is a standing injury to the profession. How many men can we point out who are now making more money in other callings, but who were once found in our ranks? Many of these, no doubt, did successful work as teachers, but of others this can not conscientiously be said Some merely want to earn a few hundred dollars to go into business, or to prepare themselves for another profession. Such as these will underbid another man by $\$ 10, \$ 15$, or $\$ 25$, or even more, if they can only get a school and gain their object. Again, the majority of female teachers, and many male teachers too, do not enter the profession with the intention of staying in it. In the words of Mr. Fiteh quoted before, they find their work a drudgery. They take it as a dose, and find it nauseous. 'I'o these I would say, and I hope they will pardon me for saying it, the sooner they leave the profession the better for themselves, the better for teachers who are drawn to the work because they hke it, and oh! how much better for the rising generation of children, because they are not to be taught to look upon honest toil as a drudgery. Professor Wayland says: "No profession affords greater opportunities of usefulness, no labor is fraught with more momentous results, or to the true worker affords greater satisfaction when successfully performed, than that of the teacher." But he adds very truth fully: "Almost everything, however, depends upon the spirit in which the work is carried on. If you think your work a drudgery you are not likely to succeed in it."
4. The granting of permits and extension of certificates is another evil that should be avoided. Very often we find teachers employed on extended certificates while legally qualified teachers are out of employment. Great discretion should be exercised by our inspectors in this matter, and no certificate should be extended and no permit granted unless a School Board fails after a certain time to secure a qualified teacher. The excuse is sometimes given that School Boards regret to lose the services of a certain teacher, and therefore make a special request to have his or her certificate extended. Would it not be more satisfactory for this teacher to put a substitute into his position and qualify himself by getting a higher certificate. I have also noticed that those who asked for an extension left the profession as soon as the extended term had expired. They had no intention of remaining and qualifying themselves to continue the work. They had simply been given a chance to keep some legally qualified teacher out of employment. It is needless to say that this chance should not have been given them.
i shall briefly point out what I consider might lead to an improvement in our financial condition.

In order to keep out those who make the teaching profession a stepping-stone to something that pays better we should so raise the standard as to remove all inducements to do this. No one thinks of practising law for a year or two in order to get money enough to go into teaching, neither will a young man practice medicine a number of years and then go into preaching. Why is this? The entrauce to these professious is carefully guarded, and the road is so costly that only those who have the money can reach the desired goal. At present the age limit is seventeen for females and eighteen for males. Let this be made twenty-one. All candidates for a professional third-class certificate should be compelled to hold at least a junior leaving or non-professional second-class certificate.

The Model School is the proper place to sift all candidates for the profession, and no certificate should be granted to any student whom the principal does not strongly recommend. The students are under his personal observation during the term, and he has had ample opportunity to learn who is and who is not going to make a teacher. No candidate should be encouraged to continue his course of training if, after some time, the principal is convinced that he will be a failure, and by no means should he be given the privilege of experimenting on the young for a period of three years, only to be told at the Normal School that he was not intended for a teacher. The education of the rising generation is of too great importance to allow much useless experimenting.

The Model School term is too short. It should be lengthened to one year. The time is too limited at present for a student to prepare himself thoroughly, and very often those who would make good teachers fail in the written work at the final examination, while others who have done poorly on the practical work of teaching, but have obtained higher marks at the written examination, are passed as teachers. To remedy this evil the term should be lengthened in order to give the former class a better chance, and the standard of the practical work should be raised, to cut off the latter, for of the two the former class will undoubtedly make the better teachers. The examiners also need to be stricter in their estimates of the candidates' work. I have been informed of several cases of uncalled-for leniency. Strictress is needed here even more than at the higher examinations.

There are at present too many Model Schools. The number should be limited to one for every two counties, and the number of students for each school should also be limited. As stated before, it is so easy at present for a student to qualify himself for a third-class certificate that it is no wonder our profession is overcrowded, and it is really this class of teachers who are doing the most to lower the salaries. If a record were kept of the changes each year, and of those who left the profession, it would be safe to say that seventy-five per cent. would be third-class teachers. According to the report issued by the Minister of Education, we find that such is actually the case. If the standard were raised, as I pointed out before, and the entrance to the profession made more difficult, the danger of overcrowding would be greatly removed.

We notice in almost every issue of the Toronto daily papers advertisements emavating from unscrupulous School Boards requesting teachers to apply for positions and state the salaries required. Such advertisements are insults to the profession. Is the education of the young of no more value to a community than to be auctioned off to the lowest bidder? If it were to the highest we would not object. This enables teachers, as unscrupulous as the Boards referred to, to underbid faithful and deserving brethren, and to snatch the positions out of their hands. Let us, as teachers, scorn to answer such advertisements. All conscientious

School Boards have a minimunt and a maximum salary, and in advertising for a teacher they will state the former. Faithful teachers have often been paid more than the maximum after a number of years' service. But even where the salary has been stated I have heard of teachers offering to take less if the Board would give them the school. Such as these are unworthy of the profession, and should have their certificates cancelled.

In rural districts there should be a Board of Education for each township. This Board, and this Board only, should have the power to remove teachers. We all know that if a teacher has fallen into the bad graces of two out of the three trustees, his time in that section is limited. It should be part of the duty of this Board to inquire into the nature of all differences between trustees and teachers, and to make no change without satisfactory reasons. This would put au end to more than fifty per cent. of the changing of teachers, for we all know what trifling causes sometimes lead to the dismissal of the best teachers; such as a difference in politics or a difference in religious opinions. Teachers remaning in a section a number of years will be in a position to claim higher salaries.
We should advocate, and the inspectors should recommend the introduction in all schools of the system in .vogue in some town and city schools. Let a teacher on coming into a school engage for a minimum salary. with an annual increase for a number of years of a certain fixed sum, until a maximum is reached, the salary then to remain fixed. In rural sections these limits should be subjected to the approval of the Board of Education.

Third-class teachers should be limited to positions as assistants and to schools where the average number of pupils does not exceed thirty for the year. All other schools should be in charge of first or second-class teachers.

Once more, female teachers should demand the same salary as men teachers. If, as they claim, they do the same work as males, why should they be paid less? If they begin to claim higher salaries we may look forward to a time when the services of teachers will receive better remuneration than they do at present.
A. Weidenhammer,

Waterloo Central School.

## WHERE EXAMINATIONS FAIL.

## mdward everett hale.

The visible and certain nuisance of written examinations is an evil which is present before a community as civilized as ours, all the time, excepting the summer vacation of the schools and colleges. It involves an absurdity equal to the absurdities of the decline of chivalry. It waits for some Cervantes, who shall ridicule it so thoroughly as to drive it from the public mind, so that the twentieth century may know of it only as most people know of the squires of chivalry by Sancho Panza, or of knights errant by Don Quixote. But as the schools of the larger towns of Massachusetts open for the autumn, this month is perbaps the best month for bringing forward, with however little courage, a statement of the misery inflicted upon scholars, upon parents, and upon teachers by this rigmarole, if it were only that one should discharge an annual duty, and at the bar of any judge be able to say, "I sounded my little trumpet, but the world was making such a noise that it did not hear." Jules Simon, now better known as a statesman than as a distinguished professor of the University of France. used to say, "When I was young, we prepared students for life; now we prepare them for examinations." The bitter satire of this statement could be repeated by ten thousand teachers in Massachusetts to-day. It must be that a good many of the committeemen and supervisors, who have to do at least with the outside machinery of the thing, will sympathize with the teachers. We shall have half-a-dozen letters, before the weet is over, to explain to us
that, unless there is a system of mechanical examinations in the Boston schools, nobody can tell which school is "up to the mark" and which school is not. Nobody can tell, for instance, whether half-a-dozen Italian boys, eleven years old, who are at work in the Hadcock School, with the difficulties of a new language before them, and with national peculiarities of early training, can answer ou paper, with ink, the same questions which a set of boys of Boston parentage and training, who are in the Dwight School, or in the Dudley School, can answer. It is perfectly true that, withont a fixed examination from printed paper emanating from the central office, nobody can tell this in such a way as pleases the statistical people. But, without any knowledge of one iudividual of either class in the Hancock School, the Dwight School, or the Dudley School, I can tell, without having seen one of the examination papers.

What earthly or heavenly reason can there be for driving all these boys, in these three classes, through such a series of questions, merely for the purpose of giving the statistical answer in a supposed inquiry, where everybody knows the real answer before the enquiry is made, and where the answer is of no importance when it's attained? Do you really want the Hancock School, for instance, to be the exact counter ${ }^{-}$ part of the Dwight School or the Dwight School to be the precise counterpart of the Dudley School? Do you not really want that the genius of the teacher in one, shall show itself is his way, and the genuis of the teacher in $a^{n-}$ other, shall show itself in his way? Are we really trying to turn out fifty thousand clothespins, of precisely the same pattern, in the Bos ton schools, or are we trying to make of each boy and girl the best that can be made, and to encourage as we can the particular genius of each separate child? In some transfer of children from one building to another, last summer. there were examinations of unusual strictness, and the pupils were drilled for days in advarice, by what might be called mock es aminations. A careful and conscientions ${ }^{9}$ teacher, worn out by a day spent in this drill, lamented to a friend, " Oh, it is so hard. They think so much of their writing-for they'll be marked on their writing--that they forget their spelling ; or else they think so much about the speliing that they forget to put in the quotation marks. Aud some of the boys are so thought less and indifferent!" Upon enquiry, it appeared that the average age of these boys, who were "indifferent" to the niceties of quotatio" marks, was eight years and a half! Is it pos sible to conceive of rigmarole more absurd tha ${ }^{n}$ that involved in a system which produces such results ?-Boston Commonwealth.

## Sehool-Room Methods.



Was the teacher following a good method? The method is a very common one. It som times gives apparently satisfactory but reality very superficial and deceptive results.

What Joe needed was not voice training tho much as eye training. When he followed injunction, "Look at the book and say it the did look at the way," he did look at the book, but not a
words, and so gained no power that would enable him to read new matter more fluently.
Train a child to grasp with the eye but one word or syllable at a time, and to speak each one before allowing the eye to pass to the next, and you make that child a drawling reader To read with that continuity of utterance which the expression of coherent thought requires, the eye must run a few words ahead of the voice. To this end the words must be grasped not singly but in groups.
A few devices for eye tràining are here sug gested

1. In that early stage when the child does not readily recognize even single words, a few minutes' daily drill of this kind will help: Beginning near the middle of the top line on a page, a pupil speaks a word, then the one which stands under it and so down the page. The rest of the class will be ready at any point to "go on,
2. The pupils stand with books closed, but in position to be opened quickly, and at a given signal they are opened at random. At another signal almost immediately following the first hey are closed. Each pupil now reports what words the glance enabled him to catch.
3. Disregard the paragraph numbers. In reies speak a few words of the sentence with Which you want John to begin, or briefly state the thought which it contains, and then call apon him. The half minute or more which he ases in finding the place is not wasted, for it brings him the very thing he needs, eye training.
4. Have stories read, the words of which are written in groups according to the sense, as:

## One day

## a little boy

went to the woods
with his big brother.
They wandered about
until they were tired,
and then they rested
beside a sparkl ng brook.
It is said that Lord Macaulay's eye was so well trained in the art of silent reading that his Visual movement in reading a page of ordinary Width was continuous down the page, not back and forth across it. It is not difficult to acquire the power thus to read lines of the length found in newspaper columns.
Defective eye training is the primary canse of drawling.-The Western Teacher.

## Primary Department.

## COLORED CRAYONS.

## RHODA LEE.

Harry had been at school only a few Weeks and felt very proud of the new slate and pencil box he carried back and forth daily. As his mother stood watching him one afternoon, hurrying down the street, passing the other children with indifference and holding his slate with particular care, she wondered what had happened to his treasure. But when she saw the sparkling eyes and the uplifted slate on Which was inscribed a mark of the brightest yellow, she began to understand something of the delight of her little boy. It was only a chalk mark, but it meant a great deal to that child. "Ten marks, mother," he cried, "and teacher said I Would write better some day, but I had done my best this time, and so $I$ did, and that's why I got ten.". Happy teacher, she who is able to inspire and encourage her children so, and who knows the value of so little a thing as a chalk-mark.
It is to be hoped that every teacher of a primary class now-a-days has in her possession a box of colored crayons. The Ways in which we may use them are numberless. What pleases a child more than, after taking great pains with his work, to get his teacher's smile and approval in the shape of a mark that can be taken home
on his slate. An incentive of so little cost to us and yet so precious to the child might surely be used by everyone. And while speaking of marking slates, books, etc., I would suggest that a special mark be given for neatness. This is a quality that should be cultivated from the outset, and that should receive as much attention as possible.
Then on the blackboard how often the colored crayons prove useful. We resort to them in almost every lesson. The new combination in arithmetic, the silent letters in the spelling lesson, the sketch in geography, the object in the development lesson; all these are best impressed by the use of the bright chalks. In music we would feel very much at a loss were we deprived of our colored crayons. They are undoubtedly a great aid in teaching, their helpfulness being realized only by those who have used them.

Still another use. There may be portions of the board so situated as to be of little use in class-work. With the help of the colored chalk the teacher sketches thereon a fort, a ship, or a bee-hive to serve as an honor-roll for the "busy bees" and "good soldiers." The "drones" brighten up and the "bees" work harder than ever as the day comes round in which the names are written in the coveted place. There are those who scoff at these and other simple devices we primary teachers use for the encouragement of well-doing, but they are not among those who understand childnature. We are not going to make a lengthy defence of honor-rolls. We simply say we believe in them, when used in moderation, and judiciously. As to the bright colors, be not sparing with them. Do not let a scrap of blackboard be wasted, but with the aid of stencils or copies get all the tasty decorations you can. Warmth and color always promote cheerfulness, and that is something we must have.

## STORIES FOR REPRODUCTION.

## TRUE POLITENESS.

One bright, frosty morning in November, Fred and Jack Jeffrey started off for school. There was plenty of time to allow them to walk leisurely if they wished, but it was just the morning for a run. "I will" run you a race as far as the school gate," said Jack. "All right," said Fred, "I will beat you." The boys kept pretty even for some time, and were rounding the corner of the street when they met an old man who was walking with the aid of a stout stick. Just as Fred, who was now a little in advance, passed, he accidentally brushed up against the man and knocked the stick out of his hand. Did he run on? No, he stopped, went back, picked up the stick, and with genuine sorrow begged the old man's pardon.

## king midas.

Many years ago there lived in a far-off country a rich king called Midas. He was very fond of money, and spent all his time planning ways and means of getting gold. Of course he was never satisfied, and one day as he was counting his money and grumbling because he had not more, a fairy COIN mu:
came to him and said, "What is your dearest wish, King Midas?" "That everything I touch may be turned into gold," replied the king. Hearing this the fairy looked sad, but said to the miser, "To-morrow at sunrise you will have your wish." He then vanished, leaving the king very happy. Next morning, however, when the king sat duwn to his breakfast, he was not so happy. Everything he touched turned to gold. This did not satisfy his hunger, and going out into his garden he proceeded to gather some fruit. But in his hands the fruit turned to gold, even the flowers as he touched them changed to the yellow metal.

At last King Midas saw the folly of his wish, and with positive loathing at the sight of the useless gold he begged the fairy to remove the spell. He was content to have things as they were.

## LEAVES AND FLOWERS.

Again the gentian dares unfold
Blue fringes closed against the cold ;
Apain in merry solitudes
The glimmering aster lights the woods.
One mass of sunshine glows the beech,
Great oaks in scarlet drapery reach
Across the crimson black-berry vine
Toward purple ash and sombre pine.
The orange-tinted sassafras
With quaintest foliage strews the grass,
Witch-hazel shakes her gold curls out, 'Mid the red maple's flying rout.

## CLASS RECITATON.

"Come little leaves," said the wind one day,
"Come o'er the meadows with me and play.
Put on your dresses of red and gold,
Summer is gone and the days grow cold."
Soon as the leaves heard the wind's loud call,
Down they came fluttering one and all,
O'er the brown fields they danced and flew, Singing the soft little songs they knew.
${ }^{6}$ Cricket, good-by, we've been friends so long, Pretty brook sing us your farewell song ; Say you are sorry to see us go,
Oh, we will miss you, right well we know !
"Dear little lamb in your fleecy fold,
Mother will keep you from harm and cold.
Fondly we've watched you in field and glade, Say will you dream of our loving shade?"

Dancing and whirling the little leaves went; Winter had called them and they were content. Soon fast asleep in their earthy beds,
The snow laid a coverlet over their heads.

## OCTOBER'S PARTY.

October gave a party,
The leaves by hundreds came; The chestnuts, oaks and maples, And leaves of every name.

The chestnuts came in yellow,
The oaks in crimson dressed,
The lovely Misses Maple
In scarlet looked their best.
The sunshine spread a carpet, And everything was grand,
Miss Weather led the dancing, Professor Wind the band.

They balanced to their partners, Then gaily fluttered by,
The scene was like a rainbow
Just fallen from the sky.
And in the dusky hollows,
At hide and-seek they played;
The party closed at sundown And everybody stayed.
Professor Wind played louder.
They flew along the ground,
And there the party ended, With hands all 'round and 'round.

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