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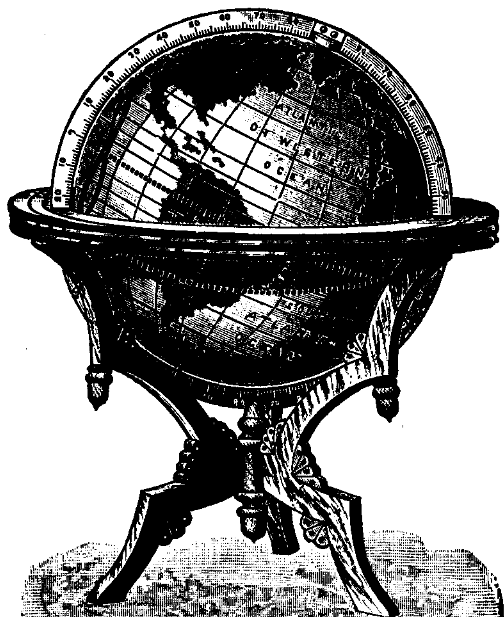

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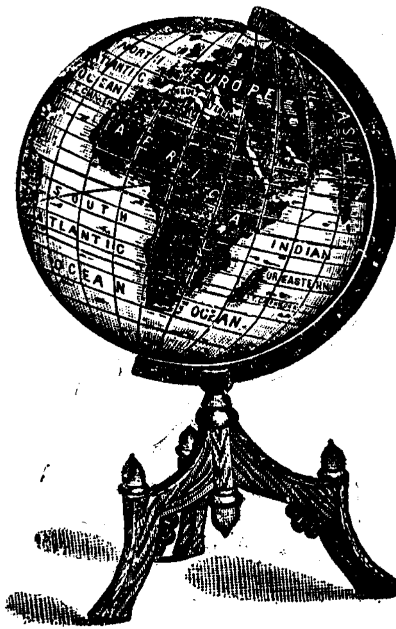

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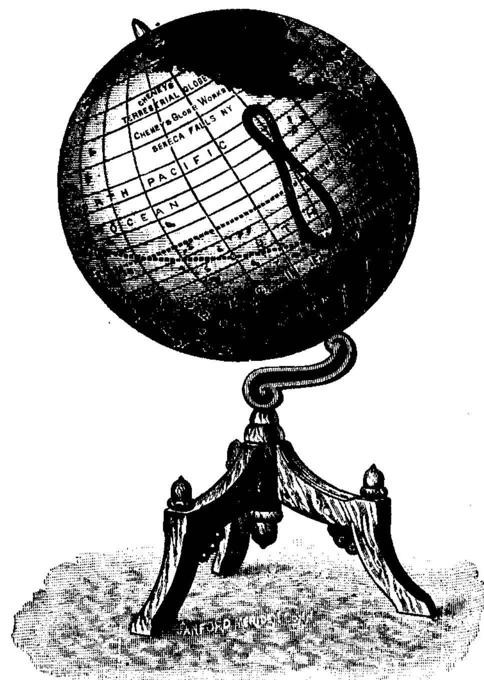

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Editorial Notes.

ANNOUNCEMENT has just been made by the council of the Johns Hopkins University that Mr. F. H. Sykes, M.A., and Mr. A. Stratton, B.A., both of Toronto, have received appointments as fellows in the graduate departments of English and Sanskrit respectively in that University. The fellowships of the Johns Hopkins carry with them an annual salary of $500 for at least one year, without entailing duties upon the holders, and are never more than twenty in number. They represent the highest honors the University confers, and as the Johns Hopkins stands probably first among American Universities, giving post-graduate courses, these are the highest academic honors that can be gained on this continent. Our readers will join with us in congratulations to the editor of the English Department of the JOURNAL.

IT would be a calamity, indeed, should anything like jealousy or bad-feeling of any kind be engendered between the public and high schools. Their work has, or should have, the same high ends in view, and their interests are identical. Inspector Reazin will pardon us for saying that in our opinion his able paper would have been more effective had it assumed throughout, as we think we may all fairly assume, that the Educational Authorities, the High School Inspectors and Masters, and the Public School Inspectors and Masters are all alike desirous of perfecting the educational system, so as to effect the greatest good of the greatest number, and that the only question is one of difference of opinion as to the best means of attaining the end. To our thinking it seems perfectly clear that the High Schools have quite as much to gain as the Public Schools from the extension and improvement of the work in the latter.

"MANY men of many minds." It must be confessed that the unanimity of opinion and method among those who favored us in the last two numbers of the JOURNAL, with notes upon the "whispering" problem, is not such as to throw any very clear light upon the subject for the benefit of the inexperienced inquirer. That is, however, but a sample of the perplexities which will meet the earnest man or woman at every turn of life. On a thousand questions which the young might suppose must have long since been definitely settled by wisdom and experience, the same diversity of opinion will be found to exist. On the whole it is better so. We should lose one of the best disciplines of life could we fall back upon fixed rules or authoritative decisions, to save us the trouble of thinking and acting for ourselves. This may seem like the kind of comfort Job's friend gave him. Nevertheless, it is the necessity of deciding for one's self, after of course getting all the light possible from every source—which develops the true strength of manhood and womanhood.

ONE thing, we confess, surprised us in connection with the discussion of the "whispering" question. We wonder why so many seem to rely upon the self-reporting system. We like to cherish the utmost possible faith in human nature, especially in child nature, compatible with facts of experience, but we are bound to express our conviction that the self-reporting plan is an unsafe, and in many cases a most harmful one. If all the pupils were carefully trained at home to be scrupulously truthful and conscientous, the case would be very different. But we have good reason for believing that the teachers who adopt this plan in the schools have often no idea of the amount of injustice and wrong to which it leads. The fact that the child's companions must know if he fails to report correctly will not prevent the evil, as there is a mistaken code of honor in schools which stamps it as "mean" for one pupil to "tell" of another's delinquincies. Our advice is not to use the self-reporting system with penalties attached, unless you are perfectly sure that you can trust the sense of honor of all your children, else you may be tempting them to be dishonest and helping them to form a habit of dishonesty.

THE changes advocated by Inspector Reazin, in respect to the classification of rural schools, etc., are worthy of serious consideration. It is certainly undesirable that teachers of ability and experience should be constantly liable to be underbidden and supplanted by the young and inexperienced. The proposal to have the schools graded by the inspectors, and to make only teachers possessing certain specified qualifications eligible to those of the second grade, has certainly much to recommend it at sight, though we would like to have it more thoroughly discussed before committing ourselves to a positive opinion in its favor. As we now see the matter it would seem to us a retrograde step to restrict third-class certificates to the counties in which they are given. We certainly do not think that it would be either wise or fair to exclude women from the principalship of schools of the first grade, or of any grade, for we are firmly of opinion that, other things being equal, women are, to say the least, not a whit inferior to men in their ability not only to teach but to manage schools of any grade. But we should be glad to see all these important questions thoroughly discussed by inspectors and others whose opinions are entitled to weight.

LIKE other editors we do not, of course, hold ourselves responsible for the opinions of our correspondents. Our aim is to give scope for free and vigorous discussion of living educational questions, especially such as have a practical bearing upon the educational system of our country and province. We are glad therefore to put before our readers in this number the substance of the paper read by Inspector Reazin before the Inspectors' Section of the Ontario Educational Association at its last meeting. The questions with which the address deals are of great practical importance. As indicated in a recent article which was written before we had seen Inspector Reazin's paper, we are of opinion that it is very desirable that the course in our public schools should be extended so as to embrace whenever practicable the work of the fifth form, at least. It is not disputed, we believe, that as things now are, the education of a vast majority of the school population ends with the fourth form in the public schools. No educator can deem this a satisfactory educational goal. It is, to say the least, unfortunate that so broad a chasm now exists between what is practically the end of the public school course and the high schools that but a small percentage of our boys and girls are able to cross it by the Entrance Examination bridge, and that still fewer attempt to do so.

Science.

Edited by W. H. Jenkins, B.A., Science Master, Owen Sound Collegiate Institute.

SIMPLE HYGROSCOPE.

BY GEO. M. HOPKINS.

IN THE sultry days of summer we hear a great deal about humidity. This means great discomfort to almost every one.

To be really comfortable on a hot summer's day we do not need shade, cooling drinks, and fans so much as dry air. When the air is dry, nature's method of cooling by spontaneous evaporation of moisture from the skin is carried on to the comfort and satisfaction of those who are compelled to spend the heated term in a warm climate; but when the air is overcharged with moisture nature's cooling process ceases and discomfort results.

To determine by observation how thermal and hygroscopic conditions are related to the enjoyment of existence in hot weather, it is necessary, in addition to a thermometer—which nearly every one possesses—to have a hygroscope or hygrometer of some kind that will either indicate the hygrometric state of the air or afford a means of actually measuring the percentage of moisture in the air.

The annexed engravings illustrate a hygroscope—which may be used for measuring the moisture in the air with tolerable accuracy, and which might therefore be called with equal propriety a hygrometer.

The instrument depends for its action on the expansion and contraction of a strip of cardboard (Bristol board), formed into a helix and rendered impervious to moisture on the outer surface. The helix is rigidly held at one end while the opposite end carries an index which moves over a graduated dial.

The simplest form of illustration is shown in Fig. 1. In this the upper end of the helix is glued to a cork which fits tightly on the wire projecting from the centre of the dial. The lower end of the helix is cemented to a paper index, which is perforated to receive the wire. To reduce friction, the hole in the index is blackleaded by twirling in it the point of a very soft lead pencil.

The form shown in Fig 2 (in which parts are broken away) is like that already described, except in the manner of supporting the helix and in the arrangement of the index. The index in this base is attached to a common needle or pin, which passes through a hole in the centre of the dial and is inserted in a cork in the end of the helix. In the end of the helix farthest from the dial is glued a cork, which is supported by an angled wire projecting from the back of the dial.

When the cardboard helix is as dry as it can be made, a zero mark is drawn opposite the point of the index, and on a very damp and sultry day the instrument is placed in a steamy

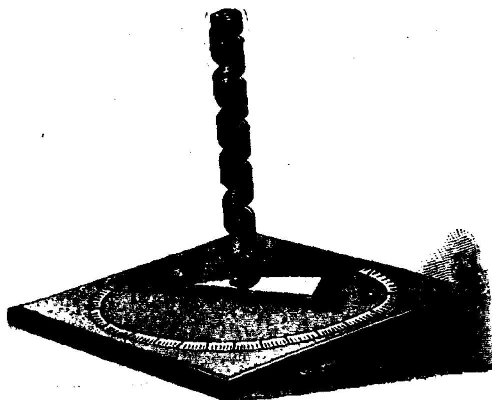

FIG. 1.—SIMPLE HYGROSCOPE.

atmosphere until the index has moved as far as it will go from the zero mark; the coil is then inserted in the mouth without bringing it in contact with the tongue or lips, when it is breathed upon until the index stops moving and a mark is made opposite the point of the index. This mark is numbered 100, as it is assumed that the atmosphere surrounding the helix at the time of making the 100 mark was saturated. The space between the 0 and 100 marks is now divided into 100 equal parts. The helix must be fixed so that it will not change its position relative to the scale, otherwise the adjustment may be lost.

The percentage of moisture in the air will be indicated by position of the index on the dial. If it points to 75, the air is within 25 per cent. of

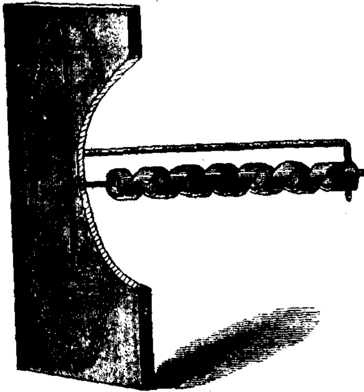

FIG. 2.—SENSITIVE HYGROSCOPE.

saturation. If 80, 20 per cent., and so on. The index makes something more than a half turn between 0 and 100

The important part of the instrument is the paper helix, but its preparation is very simple. A strip of thin Bristol board, ¼ inch wide and 6½ inches long, is wet on one side and wound on a lead pencil or similar object, with the dry side next the pencil. The ends are secured by winding a small rubber band several times around the pencil, as shown by Fig. 3.

When the paper helix thus formed is perfectly dry and before it is removed from the pencil the

FIG. 3.—FORMING THE HELIX.

outer surface only of the cardboard is covered with two coats of shellac varnish, the first coat being allowed to dry thoroughly before the second is applied.

The helix is now allowed to remain in a warm dry place for a week or more, to allow the varnish to become perfectly dry and hard. Neglect of this last precaution will insure failure, as the paper will not return to its original form after being expanded unless the varnish is hard.

PROBLEMS IN PHYSICS.

A correspondent asks for solutions of the following questions. As these questions are types the solutions are given here rather than in the correspondence column as they may be of use to general readers and experimenters.

1. Devise various arrangements of 30 cells in which

r=.8 ohm R=10 ohms and E.M.F. 1 volt.

(a). Connected in series

$$C=\frac{30\times 1}{(.8\times 30)+10}=.882 \text{ ampere.}$$

(b). Connected in 2 series of 15 cells each.

$$C=\frac{15}{\left(\frac{.8\times 15}{2}\right)+10}=.937 \text{ ampere.}$$

(c). 3 series of 10 cells each.

$$C=\frac{10}{\left(\frac{.8\times 10}{3}\right)+10}=.789 \text{ ampere.}$$

2. How many incandescent lamps requiring an E.M.F. of 60 volts and a current of 1.5 amperes each can be supplied by an engine giving 15 useful horsepowers, the loss of energy in the dynamo being 20 per cent.

Each lamp requires $1.5\times 60=90$ volt-amperes or watts.

80 per cent. of 15=12 horsepowers of current

1 horsepower current=746 watts

$$\therefore \text{No. of lamps}=\frac{12\times 746}{90}=\text{about 100 lamps.}$$

3. Why is a battery of 100 cells connected in series with no external resistance no better than 1 cell?

Ans. Consult textbook or answer to 1-a above.

EXCLUSIVE COMMUNITIES.

The number of ants dwelling together in a community, according to Sir John Lubbock, is sometimes as great as five hundred thousand. They are always friendly towards each other, no quarrels ever having been observed between two ants, members of the same community. They are, however, very exclusive, and regard an emigrant with horror. When an ant of the same species belonging to another nest appears among them, he is promptly taken by the leg or antenna and put out. It would naturally be surmised that this distinction was made by means of some communication. To test whether they could recognize each other without signs, attempts were made to render them insensible, first by chloroform and afterward by whiskey. "None of the ants would voluntarily degrade themselves by getting drunk." Finally fifty ants were taken, twenty-five from one community and twenty-five from another, and dipped into whisky until intoxicated. They were then appropriately marked with a spot of paint and placed on a table where the ants from one nest were feeding. The sober ones noticed the drunkards and seemed much perplexed. At length they took the interlopers to the edge of the moat surrounding the table and dropped each one into the water. Their comrades, however they carried home and placed in the nest, where they slept off the effects of the liquor.—*Popular Science Monthly.*

CORRESPONDENCE.

W.J.B., Priceville.—Question.—How to "describe accurately the plant submitted."

Ans.—Suppose the plant submitted were the white Trillium. The following description would answer:

Root.—Fibrous from a rootstock, primary.

Stem.—from 8 to 18 inches long, herbaceous, smooth, round, bearing a whorl of 3 leaves near the summit.

Leaf.—Three near the summit of the stem, sessile, broad, net-veined, entire, apex acute, base ovoid.

Flower.—Perianth of 3 outer green sepals and 3 inner white petals. Petals oborate, all polyphyllous. Stamens six opposite the petals and sepals, monandrous, anthers elongated, pistil compound 3 celled syncarpous styles 3. Superior-Perianth inferior. Flower solitary, regular, symmetrical.

Locality.—Rich woods in Spring.

R. J.—Question.—What are the "Laws of the Electro Magnet?"

Ans.—1. The resistance of the helix of an E.M. should be equal to that of the rest of the circuit.

2. The thickness of the helix should be equal to the diameter of the core.

3. The attractive force of an E.M. is proportional to the diameter of the core and to the square root of its length. It is also proportional to the square of the current strength for a like number of convolutions and to the square of the number of convolutions for like strength of current.

4. The attractive force is proportional to the square of the current strength multiplied by the square of the number of convolutions.

5. The maximum of saturation depends solely upon the mass of iron in the core.

HE who most prizes the science of education, and who most carefully studies the subjects which it embraces will likely do the best work. —*Bishop J. H. Vincent.*

School-Room Methods.

FRACTIONS.—The first step will be to show that fractions may have different forms; that $\frac{1}{2}=\frac{2}{4}=\frac{3}{6}$, etc. The same must be done with $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$, $\frac{1}{10}$. Let it be noted that this equivalence must be *shown*. Some teachers teach this solely by figures, they say $\frac{1}{2}=\frac{2}{4}$, etc. This throws the learning of the fact on the memory; it is a matter for the understanding. It makes little difference whether the boy is ten or fifteen years of age; give him a circle and let

him *show* you other equivalent forms for $\frac{1}{2}$. A pair of scissors, a pair of compasses, and some manilla paper in the hands of each pupil are absolutely necessary.

A boy who had been "through arithmetic," witnessed with curiosity the operation of cutting a circle so as to show the meaning of certain statements concerning fractions and then said: "Well, I never thought it meant that way before."

The teacher will say, show me what $\frac{1}{2}$ is equal to. ($\frac{2}{4}$). Show me another form it is equal to. ($\frac{3}{6}$). How about $\frac{2}{4}$ and $\frac{3}{6}$? "They are equal." Why? "Things equal to the same thing are equal to each other."

In a similar way $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, etc., will be treated.

In a similar way $\frac{2}{3}$, $\frac{2}{4}$, $\frac{2}{5}$, etc.

In a similar way, $\frac{3}{4}$, $\frac{3}{5}$, $\frac{3}{6}$, etc.

2. The second step is to show that "over-unit" fractions have another form. (This is the "improper fraction" of the books). Show me three halves; they are equal to what? "One and one-half." That is writen thus, $1\frac{1}{2}$, etc., etc. Numerous examples follow.

The ground is now clear for computation with fractions. All statements concerning fractions can be made visible. Let not the teacher think he is wasting time because he keeps the pupil in sight of the shore. He can make a show of knowledge by requiring him to memorize rules, but the thinking power is not cultivated; to educate is to train the pupil to think. A lady was lately met by a graduate of a noted public school who said: "I never can tell what three-quarters or two-thirds of anything costs; I never understood it." Yet she performed the examples! —*Wisconsin Journal of Education.*

A PROBLEM IN PERCENTAGE.

A man bought 84 shares of stock at $98\frac{1}{2}$ and sold it at $6\frac{1}{2}$ per cent advance; how much money did he make?

Pupil—I don't understand what stock is.

Teacher—When you and several other persons agree to go into business together, you all put into the business a certain amount of money. Suppose all put in $50,000. What will be the whole amount of the stock?

P.—Fifty thousand dollars, I should think.

T.—Yes. Now they divide that stock into one-hundred-dollar shares; how many shares will there be?

P.—Five hundred.

T.—Yes. And suppose you own one hundred of those shares, how much stock will you hold?

P.—Ten thousand dollars.

T.—Now suppose the business does not prove to be profitable enough to pay what the money would be worth if you put it out at interest; could you sell a share of your stock to some one else for one hundred dollars?

P.—I should think not.

T.—How would the stock be rated then? Above or below par?

P.—Below.

T.—Now suppose a man buys 84 of your shares at $98\frac{1}{2}$. How much would he pay for each dollar of the stock?

P.—Wouldn't it be ninety-eight and a half cents?

T.—Yes. How much would you lose on each dollar?

P.—One cent and a half.

T.—Now let us suppose that the business improves, and that the profits are greater than the interest that could be gotten for the money invested; how would the stock be rated now?

P.—Above par.

T.—Suppose, now, that this man sells his 84 shares at $6\frac{1}{2}$ per cent advance. How much will he get for each dollar of stock?

P.—One dollar and six and a half cents.

T.—And he paid how much for it?

P.—Ninety-eight and a half cents.

T.—How much did he make on each dollar of his stock?

P.—Eight cents.

T.—How much on one share?

P.—Eight dollars.

T.—And on 84 shares?

P.—Eighty-four times as much.

This is here carried out to the end, but in actual practice the pupil "caught on" before he got half through it, and then the teacher let go and he went alone the rest of the way.

There is nothing in percentage that cannot be made just as simple by a series of well directed questions. Our experience is that when the children do not see their way it is because they do not know the meaning of the term used, or else they are not yet mature enough to follow the chain in the reasoning. They get lost. When the latter is the case the problem is too difficult and should be dropped for something not so complex.—*Public School Journal.*

Examination Papers

EDUCATION DEPARTMENT, ONTARIO—ANNUAL EXAMINATIONS, 1892.

PUBLIC SCHOOL LEAVING.

ENGLISH COMPOSITION.

Examiners: { JOHN DEARNESS. A. B. DAVIDSON, B.A.

Value: 100.

Write an essay of about sixty lines on one, but only *one*, of the following subjects:

(*a*) A Liberal Education: Its Advantages to a Farmer.

(*b*) The Natural Resources of Canada.

(*c*) The Employment of Winter Evenings and other Leisure Hours in Rural Life.

(*d*) The Natural Scenery of the Highlands of Scotland as depicted in Waverley.

(*e*) The Education of Edward Waverley, Rose Bradwardine, and Flora MacIvor.

(*f*) The Battle of Preston.

ENGLISH POETICAL LITERATURE.

Examiners: { JOHN DEARNESS. CLARKE MOSES.

A.

"All are needed by each one—
Nothing is fair or good alone.

I thought the sparrow's note from heaven,
Singing at dawn on the alder bough;
I brought him home in his nest, at even, 5
He sings the song, but it pleases not now;
For I did not bring home the river and sky;
He sang to my ear—they sang to my eye.

The delicate shells lay on the shore;
The bubbles of the latest wave 10
Fresh pearls to their enamel gave,
And the bellowing of the savage sea
Greeted their safe escape to me.
I wiped away the weeds and foam—
I fetch'd my sea-born treasures home; 15
But the poor unsightly, noisome things
Had left their beauty on the shore,
With the sun and the sand, and the wild uproar.

The lover watch'd his graceful maid,
As 'mid the virgin train she stray'd: 20
Nor knew her beauty's best attire
Was woven still by the snow-white choir.
At last she came to his hermitage,
Like the bird from the woodlands to the cage;
The gay enchantment was undone— 25
A gentle wife, but fairy none.

Then I said, "I covet truth;
Beauty is unripe childhood's cheat—
I leave it behind with the games of youth."
As I spoke, beneath my feet 30
The ground-pine curled its pretty wreath,
Running over the club-moss burs;
I inhaled the violet's breath;
Around me stood the oaks and firs;
Pine-cones and acorns lay on the ground; 35
Over me soar'd the eternal sky,
Full of light and of deity;
Again I saw, again I heard,
The rolling river, the morning bird;
Beauty through my senses stole— 40
I yielded myself to the perfect whole.

1. Show fully how the statement in lines 1 and 2 is illustrated:

(*a*) in lines 3 to 8;

(*b*) in lines 9 to 18;

(*c*) in lines 19 to 26.

2. How does the poet show that Truth and Beauty are needed by each other?

3. (*a*) Upon what lines in the poem is the simile in line 24 based?

(*b*) Explain the application of the simile.

4. Write a simple prose narration of lines 19 to 26.

5. Explain the meaning of the following words and phrases as they are used in the above passage:

all, each one, line 1;
from heaven, line 3;
greeted their safe escape, line 13;
noisome, line 16;
unripe childhood's cheat, line 28;
wreath, line 31;
burs, line 32;
breath, line 33;
deity, line 37;
the perfect whole, line 41.

6. Distinguish the verb used in line 5 from that used in line 15, and give reasons for or against using the same one in both places.

7. Explain alliteration by reference to line 9 and quote another alliterative line from the poem.

Values—(12), (6), (2, 4), (8), (20), (3), (4).

B.

8. Give the title and subject of the poems from which the following stanzas are respectfully selected:

Explain the italicized portions:

(*a*) * * Heavenly *Muse* * * * *
Hast thou no verse, no hymn, or solemn strain,
To welcome *him* to this *new abode*,
Now while the heaven, by the Sun's *team* untrod,
Hath took no *print* of the approaching light,
And all the *spangled host* keep watch in squadrons bright?

(*b*) Must we *but* blush?—Our fathers bled,
Earth! render back from out thy breast
A *remnant of our Spartan dead!*
Of the three hundred grant but three
To make a *new Thermopylæ!*

(*c*) Methought, as I gazed through the darkness, that now
It saw—a hundred-limb'd creature—its *prey!*
And darted, devouring; I sprang from the bough
Of the *coral*, and *swept on the horrible way*

(*d*) Over the roofs of the white Algiers
Flashingly shadowing the bright, bazaar,
Flitted the shadows * * the thrushes
Broke out singing the old sweet tones
Singing the *bridal of sap and shoot.*

Values—(16), (12), (2, 3, 3), (4, 4), (4, 4).

C.

9. The Hanging of the Crane is a series of seven pictures. Briefly describe the subject of each picture and the poet's method of combining them into a series.

10. Quote from memory (from any poem):

(*a*) one or two stanzas selected for the beauty and music of the words;

(*b*) one or two stanzas selected for the nobility and loftiness of the sentiment.

Values—(21, 8), (10).

THE HIGH SCHOOL PRIMARY.

BOTANY.

Examiners: { G. CHAMBERS, B.A., M.B. J. J. MACKENZIE, B.A. A. C. MCKAY, B.A.

B.

1. Describe accurately the plant submitted.

2. Classify it, give its name and mention five allied Canadian plants.

3. Construct a floral diagram of the flower.

4. Point out in this plant the characters which you consider belong

(*a*) to the Genus,

(*b*) to the Family.

5. Compare the form and structure of the ovary in the family to which this plant belongs, with the ovary in the Leguminosæ and Cupuliferæ, illustrating your answer by diagrams.

6. Draw carefully the stamens of this plant. Compare them with the stamens in the Cruciferæ and Compositæ. Illustrate your comparison by diagrams.

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Editorials.

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INDUSTRIAL AND REFORMATORY SCHOOLS.

"WHEN a boy becomes an unmanageable scamp the Government pays $2.70 a week to provide him with board, education, and a trade at Mimico. There they receive so kind treatment and love their teachers so much that when they last were taken to see the Toronto Exhibition, not one was missing when the muster roll was called for return in the evening. A faithful and well-behaved boy has to stay at home and enjoy these privileges at his father's expense, if the latter can afford it. Such a system is a bonus on rascality."

Such were, in substance, according to a report sent us, the sentiments expressed by a teacher who gave an address at the last convention of the Carleton County Teachers' Institute. The name of the speaker is not given. We can but hope that the report does him injustice. It is well-nigh incredible that a teacher could in all seriousness present such views before a body of his fellow teachers. If such sentiments were really expressed, it is to be hoped that they were not left to pass unchallenged. If the one who could honestly utter them is an intelligent and reasonable man, one would like to ask what he would have done with boys of the class referred to. Their existence is a matter of fact. Their retention in the public schools—if indeed they have ever attended them, which is doubtful in the case of many of those who are sent to the industrial schools—is impracticable and undesirable, as every teacher must admit. What, then is to be done with them, or what is to become of them? Shall they be left to their own devices until they commit some deed which will bring them into the hands of the criminal authorities, to be sentenced to the prison or penitentiary, with the result that in the majority of cases they will become either utterly worthless and vicious members of the community, or spend the greater part of their days in prison, at the public expense.

"The whole need not a physician, but they that are sick." Those who have need to be sent to the industrial schools are, as a rule, either orphans, or worse still, the children of worthless or wicked parents, who are utterly unfit for the moral and physical training of children, and unworthy of the high responsibility which devolves upon parents. Their children, at the best, are to be pitied. No public institution, no foster-care of the State, no love even of noble and Christian teachers, can ever fully make up to such what they have lost in not knowing the blessedness of loving and judicious parental care and training.

Again, those who speak of untrained and wayward children of tender years as "scamps," and of their misdoings as "rascality," surely fail to consider to how small an extent boys and girls of the "unmanageable" or even of the prematurely vicious classes are really responsible for the characters they have developed. What has made them to differ from the well-behaved "good" children with whom they are contrasted? Is it not the simple, obvious truth that what they are they have become as the result either of traits which were born in them, or neglect and lack of proper training and influence in the plastic stages of infancy and childhood? For neither of these are they responsible. They are, therefore objects of pity, divine and human, rather than of blame. The parent who could look on his own well-trained, dutiful, happy family; compare their condition with that of the wretched waifs, and then grudge his small share of the cost of supplying in some measure to the latter the means of reformatory education, would be unworthy of his blessings. The hand of Christian charity is never outstretched in nobler benefaction than when it is doing what a love and patience not parental can do to rescue young children from vicious surroundings and train them for honesty and usefulness, for the service of God and humanity.

But to take much lower ground, it is, we hold, easily demonstrable that, as a matter of economy, the cheapest as well as the best thing that can be done with children of the classes in question is to take them in charge and put them in training for good citizenship. The cost of this preventive work will be in the end vastly less than that of detecting, arresting, trying and punishing them when they shall have developed into adult criminals, or of providing poor-houses and hospitals for their starving or diseased bodies when the baneful crop which they were permitted, in their ignorance and degradation, to sow before our eyes, shall have come to maturity. The Government or municipality which should suffer a human being to perish of hunger in the midst of plenty would be justly denounced as inhuman and barbarous. Can any intelligent man or woman, above all any *teacher*, who should understand even better than others what such neglect means, doubt that rightly viewed, it is even a worse crime to permit a human mind and soul to be starved, deformed and destroyed for all time, for want of the care and training during a few years which there is every reason to hope would in nine cases out of ten have saved it, body, soul and spirit.

COLLEGE MATCH GAMES.

WE are not aware that the base-ball, foot-ball, and similar crazes, which are so seriously affecting the work and quality of many institutions in the United States, are as yet doing much injury in Canadian schools and colleges. We hope that our teachers and students alike may long continue to be able to use good outdoor games and other means of exercise and recreation without abusing them. The following extracts from a letter written by a mother to the *North Carolina Teacher* conveys, there is reason to fear, but too true an idea of the mischief that is being wrought in many American colleges by excessive devotion to games under the stimulus of inter-collegiate matches:

"This is the third year that my son has been at college. He joined the ball team as soon as he entered, and I think his connection with the team has had great influence on his life in a very objectionable way. He was a studious boy before he went to college, and always had a fine record in his classes. He is now so entirely absorbed in some wild ball-match that he rarely talks or thinks about anything else. When he comes home occasionally he talks nothing but foot-ball slang, and will not read anything except records of games as published in the sporting papers. He speaks of his sisters as 'half-back,' 'centre-rush,' and other such outlandish things that we are frequently shocked.

When I asked him how he was getting along in his classes he said, 'Oh! it doesn't matter much about the recitations, the professors will help us through if we only defeat some rival college in the foot-ball game. You see, mother, it takes us about a month of hard work in training before we play a match game, and of course we

have to go easy on the studying business during that time, and when we whip out the other fellows and get back to college we don't talk much about anything else except how we cleaned 'em up.'

My son was always very fond of staying at home at night to enjoy the evening with the family—now he delights in loafing about the hotels and drug stores at night to 'talk foot-ball with the boys,' and we scarcely ever see him at home except at meal times."

Apart from the time occupied in training, and the dissipation of mental energy through the excitement, it has not perhaps been sufficiently considered whether the extreme exertion called for by devotion to physical sports, under the conditions indicated, is not really injurious rather than beneficial to health. So far as we are aware, athletics of any kind are not a long-lived class, but the opposite.

MILITARISM IN THE SCHOOLS.

WE were quietly working in our sanctum a few days ago when our attention was suddenly attracted by signs of an unusual commotion in the street. Stepping out on the balcony we saw a line of Toronto school boys, extending in either direction as far as we were able to see. They were ranged four abreast, marching with military precision, and carrying each an imitation in wood and metal of a soldier's rifle. As we soon learned, they were on their way, in company with bands of veteran volunteers, to Queen's Park, to decorate the monument of the volunteers who fell at Ridgeway.

A few weeks hence those who remain in the city during the hot season will, we presume, be treated to a similar mock-military display, on occasion of the closing of the public schools. The juvenile warriors will again, no doubt, march through the heat and dust of the city streets, to the sound of martial music, with the Inspector and other semi-military officials riding proudly at the head of the procession. Similar spectacles will, we presume, be seen in Hamilton, Guelph, and other cities. In fact, miniature displays of the same kind are of almost daily occurrence on the grounds of many of our public and high schools.

Has this kind of training, as a part of our school education, ever been deliberately approved and adopted by the thoughtful parents and other citizens of Ontario, or has it simply been foisted into the school system by a few military enthusiasts? The matter is certainly one of great importance in view both of the principles involved, and of the far-reaching effects upon the character of the future citizens, and through them of the nation.

Leaving aside other considerations of great weight, let us for a moment inquire into the nature and value of this infusion of the martial spirit into the schools, from the educational point of view. Parents support the schools and send their children to them to be educated. The education which the great majority would wish and approve is that which develops all that is noblest, manliest, best, in the children, physically, mentally and morally.

Physically the military drill is unquestionably good in some respects. It improves the figure, gait and carriage, and gives steadiness and precision to bodily movements. Whether it is on the whole as beneficial as a system which would afford more freedom to the individual, and call for greater variety, elasticity, suppleness, and animation, we shall not now attempt to decide.

That the drill is of any particular value intellectually will scarcely be claimed by its most enthusiastic advocates. The demand it makes upon the thinking powers is of the slightest. All educators are agreed that the ideal of mind-training is that which gives scope and stimulus to the development of individuality. The minds of no two boys are precisely alike, in their various capacities, or their modes of working. The best mind-trainer is he who can most successfully adapt his processes and methods so as to develop rather than suppress the individuality of the pupil as a thinker and worker. Need we add that the whole aim and tendency of the military drill is towards a dreary, mechanical uniformity. The ideal soldier is the one who responds like an automaton to the word of command. So is the ideal company, the ideal regiment, the ideal army. The perfection of military drill is attained when not only the whole vast living mass, but every atom in the mass, moves with the uniformity and precision of a machine. This undoubtedly makes it a fearful engine of destruction in the hands of a great general. But does it constitute a desirable education for human beings, endowed individually with heart, intellect and conscience?

The word "conscience" suggests our final query. What is the effect of military drill, and all that is implied in it upon the moral sentiment? Educators are now coming, happily, to see that the highest and most responsible part of the work of education is that which has to do with the moral nature. All will agree that it is of vastly more importance that our boys should be developed into high-souled, broad-minded, true-hearted men than even that they should be clever or learned. The essential elements of all right character are ability to discern and determination to do THE RIGHT, on all occasions, under all circumstances. To attain this end it is indispensable that moral thoughtfulness--the power of choosing between right and wrong, and the sense of personal responsibility for doing so—should be cultivated and developed into a fixed, unchangeable habit. Such a habit becomes the basis of the high moral character which alone truly fits one for society, for citizenship, for whatever is worth doing in life.

How does military training stand related to all this? Is it not of its very essence that the soldier learns to do simply what he is told, without hesitancy, without question either as to the wisdom of the thing, or the right and wrong of it. It is customary to praise the drill as one of the best means of disclipine. To our thinking it is anything but that. The ideal discipline is based upon moral motives. The child obeys because he believes it right to do the thing, or because he loves the one for whom it is to be done. The boy or girl who has received an ideal training will refuse as promptly to do what judgment and conscience condemn as it will respond to what they approve. But in military life what would be done with the soldier who should stop to think whether it is right for him to perform this service or shoot down that man at the command of his superior officer.

Let us not be misunderstood! We are not enquiring into the morality of modern warfare, or of military tactics. We are not denying that it is "sweet glorious to die for one's country" upon occasion. We are not disputing the desirability of having a small body of well-trained citizen soldiers, prepared to meet any band of marauders that might threaten us from within or without. We are merely questioning whether the military drill is the right kind of training for school children; whether military ideals are the best ideals to set up for the worship of the youthful imagination whether the motives, sentiments and impulses to which it appeals are those which it is desirable to foster in the breasts of our boys. Surely the subject is worthy of some serious thought.

IT is clear that in whatever it is our duty to act, those matters also it is our duty to study.—*Dr. Arnold.*

THE study of grammar is but a remote and indirect help in acquiring the art of speaking and writing correctly.—*T. M. Balliet.*

NO one can succeed as a teacher who is not himself a student. Close and constant study, not only of the subjects to be taught, but of others outside of and beyond these, is the price that every one must pay for real success in the school-room.—*Anon.*

Special Papers.

THE RESTRICTION OF INEXPERIENCED TEACHERS TO THE LOWEST GRADE OF PUBLIC SCHOOLS, AS CLASSIFIED BY THE INSPECTOR.

SUMMARY OF A PAPER READ BY MR. H. REAZIN, I.P.S., WEST VICTORIA, BEFORE THE INSPECTORS' SECTION OF THE ONTARIO EDUCATIONAL ASSOCIATION, AT TORONTO, APRIL 6TH, 1893.

DURING the last fifteen years the standard of Public School education in this Province has been lowered. Our Public School system has retrograded as to its curriculum. Our Public Schools have been shorn of their upper and most important class—the class that gave them stability and character—that gave them stamina and emulation and vim—the class that was the back-bone of the rural schools—the class that made the Public Schools attractive to the larger scholars—that made them attractive to the better class of teachers and to everybody. Our 5th class has been "lopped off" like a "mouldering branch." Our 5th book has been blotted out of existence; the upper and more important part of the 4th class has gone also (50% passes at the Entrance, which has virtually become the closing examination of the Public Schools). When we had a 5th class in the Public Schools, children remained at school until they were sixteen and seventeen years of age. Now they leave at eleven and twelve. About four per cent. of them leave to attend High School, whilst ninety-six per cent. leave for their homes, unable to read and spell well in the fourth reader—unable to write a letter in decent English. They leave school to remain the rest of their lives in ignorance of that Public School education that their parents have paid so much for, and must always go on paying for.

This "lopping off" business was the salvation of the High Schools, particularly of the Junior High Schools, but a calamity to the Public Schools. This is public opinion in Victoria County at any rate, and I think it is the public opinion of the Province. It was the County Council of Victoria County that first memorialized the Legislature for the establishment of the Public School Leaving Examination, with the avowed object of bringing back the fifth class to the Public Schools, and especially to the rural schools, hoping thereby to retain the ninety-six per cent., the bulk of whom are farmers' children, a year or two longer at Public School work.

I hold the opinion that the High Schools, in reaching up into the Universities after "forbidden fruit," did the Universities no good, and in reaching down into the Public Schools, did the latter untold injury. The Public Schools of the Province are fifty per cent. below what they should be. They are fifty per cent. below what they would now be but for this depleting process — this havoc worked by the Entrance Examination, which has virtually reduced them to primary schools. The primary classes may be as well taught as formerly—some of them perhaps better taught —but can the Entrance claim any of the credit? If so, then Inspection and Model School Training go for nothing. I would except from the above statement as to efficiency, the lowest class of the Public Schools, because I have no great faith in the present phonic fad. Phonics as a sole system of teaching reading and spelling is an absurdity, because English is not a phonic language. The system as now taught wastes the time of teacher and pupil, and is largely responsible for so much bad spelling.

As less than four per cent. of the children of the Province ever attend a High School, I think it is our duty as Public School Inspectors to conserve the interests of the ninety-six rather than the interests of the four. It is the duty of all Public School teachers to do so. It is the duty of County Councillors and of our Legislators as well. The interests of the four are pretty well provided for already. As an illustration of how much more liberally the High Schools are dealt with than the Public Schools are by the Government, and by the local authorities as well, allow me to mention the fact that in Victoria County the "Collegiate" alone receives a larger payment from the Legislature grant by $63.96 than all the Public Schools in the whole township of West Victoria put together. Then the County pays the Collegiate a larger sum than the Government by $610. Besides all this the pupils pay about $2,500, and the town $3,000 annually. (See Minister's Report, 1892). Of course for all this we have one of the best High Schools in the Province.

I quote these figures to show that we have no great need for anxiety about the interests of the four per cent. whose parents are able to send them to High School—their future education is pretty well assured. Still I affirm that it would be very much better for even these to remain a year or two longer in the Public Schools before going to the High Schools—better for the pupils themselves—better for the High Schools to which they afterwards go, and better for the pockets of their parents by at least $100 a year for each. And of another thing I feel perfectly confident: Could provision be made by which the ninety-six per cent. of Public School children who never go to a High School, could be induced to remain two years longer in the Public Schools, it would greatly increase the percentage of attendance at the High Schools, and it would increase the intelligence of the generations to come of this Province beyond man's computation.

There is nothing more evident than that it is our especial duty as Public School Inspectors, at the present crisis, to look well after the interests of the ninety-six; to examine closely, and to analyze carefully, the process by which our Public Schools have been thus depleted by means of the Entrance Examination, which has been sapping the life-blood out of them for 15 years, both as to pupils and as to teachers. It is our duty to enquire what has really taken place, and to consider seriously what remedy, if any, can be offered.

Certain facts are potent to all:—We have lost our fifth class; the upper and better part of the fourth class has gone with it; we have lost our male teachers, our experienced teachers, our 2nd class teachers; we have lost our large boys and girls; we have lost our winter pupils; teacher's salaries have been lowered, and these things have brought about the present instability of teaching as a profession. To discuss this latter subject, and to offer a partial remedy, is the principal object of this paper.

It is an alarming fact that nearly 1,500 experienced teachers annually retire from the profession. It is an alarming fact that nearly 1,500 modelites, mostly young women, come forth annually to supply their places, holding 3rd class provincial certificates, licensed to teach in any school in the Province, authorized and licensed to apply for any experienced teacher's position in the Province, male or female, no matter what the latter's success may have been, no matter what the class of certificate, and we all know that they are not at all backward in making such applications, nor in underbidding experienced teachers for a desirable situation. Many trustees have come to the conclusion that "any body can teach a Public School with only a fourth class in it," and as the inexperienced lady is always the cheapest teacher, this class has come to be sought after by trustees, frequently in preference to experienced teachers. And so experience goes for nothing, and inexperience is at a premium.

The questions we have to consider are:— "What can be done to remedy these evils?" "What can be done to increase the stability of Public School teaching as a profession?" "What can be done to retain our 2nd class teachers, to retain our experienced teachers, male and female?" "What can be done to bring back the fifth class to Rural Schools?" "What can be done to retain our large boys and girls who never go to High School?" "What can be done to bring back our winter pupils?" I am very strongly of opinion that modelites should not have the run of the Province; that they should not have the run of their own Counties; that they should be restricted in some way in their choice of schools; that this underbidding should cease; that Rural Schools should no longer be let by "Cheap Jack Auction"; that no modelite should be allowed to apply for a 2nd class teacher's position. How is this all to be brought about? I would restrict 3rd class certificates to the counties in which they are given. I would authorize and require Inspectors to divide their schools into three classes, each class to be presided over by teachers holding certain rank as to certificate and experience. I would place all graded schools in the first rank, and require that they be presided over by male teachers, holding at least 2nd class certificates. I would divide Rural Schools into two classes, to be called 2nd and 3rd class schools. I would have 2nd class schools presided over by experienced teachers of some kind, and I would leave the 3rd class schools without restriction as to the kind of teacher. This would restrict modelites for the first year to schools of the 3rd class. I think this arrangement would create emulation amongst teachers to work their way up to schools of higher rank and salary, instead of merely scrambling up as at present. It would create emulation amongst trustees to raise their schools to a higher grade. It would be likely to improve the equipment and general character of school premises. The Inspector would merely have to decide between 2nd and 3rd class schools. Several things would require to be taken into consideration as in the classification of High Schools. I would make a fifth class a *sine qua non* for the 2nd class school. Then the school accommodation, the character of the buildings, the equipment of the schools, the out-door premises, the salaries paid, are elements that might be taken into consideration. High School Inspectors are deemed competent to classify High Schools and Collegiate Institutes, and why not Public School Inspectors competent to classify Public Schools? If the changes herein suggested could be brought about; if we could always have a decent Leaving Examination, covering a little Algebra and Euclid, and if at the same time we could either get rid of the Entrance Examination, or come to use it chiefly as a promotion examination to the fifth class, there would be hope for the Public Schools.

In advocating Public School reforms, we have learned, I am sorry to say, to be very distrustful of High School influence. The impression is abroad, and it has sunk deep down in the minds of the people, that the atmosphere of the Education Department is too strongly impregnated with High School influence for the benefit of Public Schools. Allow me to offer the following as a few of the reasons that might be given in support of this contention:—

(1). An attempt was made through the Legislature to secure a fifth class examination for the Public Schools (the Public School Leaving). It passed through Parliament and became a part of the Public School Law, but it did not suit the High School party, and they succeeded, by means of "Departmental Regulations," in whittling it down to a purely 4th class examination, with a little Book-Keeping added. But this did not suffice, and so the "whittled down affair" was excluded from all Rural Schools. Still they saw danger in it, like the old lady who thought a gun was dangerous without either stock, lock, or barrel, and so a "recommendation" was added that there should be no fifth class in any town or village where a High School is situated. And as a *coup de grace* it was introduced into the world with a set of examination papers for Public School children about as difficult as the High School Primary papers. And now, fearing there may be some life in the thing still, (and very correctly too), they go on repeating the absurd statement that 3rd class teachers are incompetent to teach it. There is no 3rd class teacher of experience in my inspectorate who is not competent to teach a fifth class as it now stands. Who is not competent to teach it even if a 5th book and a little Algebra and Euclid were added, and competent to teach it without neglecting the other classes? If 3rd class teachers were not competent to teach a 5th class, then it would be a disgrace to the High Schools that prepared them, and the Model Schools that trained them.

(2). The Inspectors' Section of the Provincial Association have unanimously asked each year to have a little Algebra and Euclid subjects, as an attraction to larger pupils, placed on the Leaving Examination, but they have been side-tracked every time by High School influence.

(3). Which, may I ask, were most considered, Public School interests or High School interests, when the Entrance Examination was placed in the middle of the Public School programme? Whose interests were most considered when the 3rd class examination was taken from the County Boards and carried to Toronto? What Public School interest was considered when the 1st, 2nd, and 3rd class Teacher's Examinations were struck out of existence, and the three High School Examinations (the Primary, Junior and Senior Leaving) substituted in their stead? What Public School interests were considered when the most absurd options were placed on the 2nd and 3rd class teacher's examinations? What has Latin, or Greek, or French,

or German, to do with a Public School? Are Public or High School interests most considered when a teacher is plucked for being 5 marks short in Latin, or Greek, or French, or German, or Chemistry, or Botany, or Physics, all subjects that are not taught in the Public Schools, while at the same time candidates are passed who only half know English Grammar, or Geography, or History, or Composition, or Arithmetic, or Reading and Spelling, subjects that are taught in the Public Schools? The courage of High School men in plucking unfortunate candidates is sometimes extolled as a virtue, but couldn't any fool do this kind of plucking? In the whole domain of education where can anything else so absurd be found? And yet this is the kind of advice the Department seeks and obtains from High School Inspectors and Headmasters! How can there be "peace and harmony" in our educational system under such circumstances? How can three sleep in a bed comfortably when the middle one wants all the room to himself? Haven't we imported a small slice of Russia into our fair Province? Why should not reform commence at the fountain head? Why should we not have three Deputy Ministers instead of one Deputy Minister? Are not the present Minister and his Deputy working themselves to death, and obliged to leave important matters to irresponsible clerks, and to other irresponsible officers? Why should we not have a Deputy at the head of a Public School Department in charge of Public Schools and Training Schools for Public School Teachers—a strong man who would not always be ready to say "Yea, Nay and Amen" to any other strong man? Why should we not also have a Deputy in charge of the High Schools and the Schools of Pedagogy, and a third Deputy in charge of Colleges and Universities?

In conclusion I would say there seems but one course left for us to pursue. We must try a flank movement. We must appeal to our County Councils and to our Local Members, and discuss school matters with them. It will be a good day for the Public Schools, and for the High Schools as well, when High School men and their Inspectors are induced to give their whole attention to the High Schools, and leave Public School matters to those who know something about them; then perhaps they will not be compelled to pluck two-thirds of their candidates every year. Of one thing you may rest assured, that no Public School interest would suffer if they were in the future to ignore Public School Legislation, and if they should cease altogether from tinkering with Public School Regulations. Should this "overlapping" process be carried on much longer, Public School teachers may soon introduce the new song:—

"We have but little here below,
Nor shall we have that little long."

CORPORAL PUNISHMENT.

A PAPER READ BY MR. SPENCE, PRINCIPAL CLINTON ST. SCHOOL, BEFORE THE TORONTO PRINCIPALS' ASSOCIATION.

FROM earliest times until recently, strapping has been the chief means of controlling children, both in the family and in the school. Its necessity arose, probably, from two main causes; the more ungovernable and brutal natures of the human race when in the less civilized condition, joined to the domineering spirit of earlier times; and the lack of psychological understanding of child nature. Physical force was the most attractive quality to the mind and sense of the people of remote times, and was used almost entirely to gain power over human kind.

Having, as they thought, the sanction of "Holy Writ," parents and teachers felt perfectly justified in governing by strength of arm, and absolutely sure that they were following a plan devised by the all-wise and loving God, as given to the world through the wise Solomon. They believed that the rod was the most efficacious instrument they could use to drive out of children their natural and acquired evil tendencies and habits. The child was not considered as having any rights in the matter; its very inability to help itself against the greater age and strength of parent or teacher being no inducement to obtain for it kinder treatment, and rendering it an easy and generally submissive victim. Physical strength being the test of superiority, it is not strange that control was obtained and maintained by that power.

The right to beat and to be beaten was universally recognized, as long as the equality of mankind was not established or believed in. Those higher in authority or caste treated those under them like dogs, because they considered themselves infinitely better, and divinely made so. With the spread of knowledge and the development of civilization grew the idea that it was degrading to submit to personal chastisement, and the struggle for its abolition began. Among the higher classes, blows were considered the vilest kind of insult, and he who refused to resent such an affront was held to be the veriest coward and craven. This feeling carefully nurtured and developed among the wealthy and noble, became just as strong a principle in the mind of the plebeians as they, step by step, through education and civilization, rose from the condition of serfdom to that of free, independent manhood. Children rapidly and eagerly imbibed the feelings of their elders and superiors, and emotions of indignation and resentment began to be exhibited when they were treated as they believed only brute beasts should be used. It was and has been found utterly impossible to prevent or to destroy the growth of this sentiment. It made the elders think more carefully over the rights of children, and the justness of the child's feeling had to be acknowledged. The struggle has been long, constant, violent, and determined, but slowly and surely coercion has been driven back. One of the chief reasons for this change of practice and feeling has been the fact that many of those entrusted with the power to inflict corporal punishment have grossly abused the confidence placed in them. It is disgusting to read of the Suabian schoolmaster, who, in fifty-one years' experience, inflicted 911,500 canings, 121,000 floggings, 209,000 *custodes*, 136,000 tips with the ruler, and 10,200 boxes on the ear, in addition to making 700 boys stand barefooted on peas, 6,000 kneel on the sharp edge of a piece of wood, 5,000 wear the fool's cap, and 1,700 hold the rod. He thought this a record to boast of. It is the most notable case on record, but almost equally horrible pictures have been portrayed by Dickens and other authors; and even in our own day many cases of brutality have been aired in the magistrates' courts. Your experience will enable you to recall cases where the excessive use of the rod has brought to the teacher the unenviable notoriety of being summoned before a magistrate, reprimanded most severely, and fined. The fact that the right to inflict corporal punishment has been so grossly abused, is a sufficient reason for its being prohibited by law and relegated to some other person than the teacher, if not entirely forbidden.

Public sentiment and thought are now as much opposed to the practice of whipping as formerly they were in its favor. The brutalities inflicted upon children has been one of the most noted factors in producing the change. Another reason is the extension of the idea that submission to, and the infliction of, corporal punishment are alike degrading. Hence has arisen the demand for a different treatment of children, and parents and teachers have discovered that it is in every way better, if not easier, to govern children by appeals to their reason, and to the development of the moral nature, than through their fears of bodily suffering. It has been abundantly proved that personal chastisement is unnecessary, and restrictions and prohibitions have been promulgated and enforced by educational authorities in many countries. In France, no child may be struck by the teacher, and in many of the American cities the strap has been removed from the schools. It has been claimed that expulsion and suspension would be of much more frequent occurrence if whipping were not allowed. The following clipping from the report of the Superintendent of the Chicago Schools for 1874-75 will be found interesting:

"Suspensions for misconduct, the great bugbear of the apologists for the rod, have been far less frequent than in the years when corporal punishment was in vogue. The most favorable year under the old regime gave us one suspension for each 22,000 pupils in daily attendance; the past year shows but one suspension for each 48,888 pupils in daily attendance."

One of the best ways of preventing misconduct on the part of your pupils is to show that you hate giving punishments. Is it not likely that, if this mode of correction and government had been found beneficial, it would have retained the favor of the people, backed as it is by a supposed Biblical recommendation? The maxims of Solomon are held in the greatest respect, and Biblical authority is very properly considered to be sufficient proof of the propriety of any line of conduct. But even the maxims of the Bible lose their weight when the every-day experience of our lives teaches us that some of them are inapplicable to the present state of affairs. The circumstances have changed, and the change has necessitated a different treatment. Solomon is responsible for an enormous amount of whipping, and many are the boys ready to curse his name and memory, instead of to bless and revere them. I strongly believe that he has been misinterpreted, and that his wise and kind spirit has been grieved thousands of times by the cruelties practised upon children, ostensibly upon his authority, by pig-headed, ignorant and hard-hearted parents and teachers. There is in every son and daughter of Adam a self-asserting impulse that resents control, and prompts to resistance. If carefully analyzed, it is found to spring from the feeling of independence and manhood divinely implanted in the human race. Freedom to choose his own path, and to follow his own inclinations, is an hereditary instinct in man, and when a human being feels that this inalienable right is being restricted, his very manhood irresistibly impels him to opposition. Behind all acts of resistance to authority, whether in adult or child, there is, if every link in the chain of circumstances be closely scrutinized, the feeling in the heart of the rebel that his right as a freeborn, independent being, has been in some way assailed.

Another tendency of human nature must also be borne in mind, and then we shall have the two principal causes that produce the trouble. This tendency we have in widely different degrees, but in all it is operative to a greater or less extent. It is the desire to exercise power upon others and to make them subject to our will. These two feelings necessarily come from time to time into violent contact, and this contact and conflict are responsible for bodily chastisement. Might becomes right, and the stronger makes use of his superior strength or power to force the weaker into temporary or permanent subjection. The feelings aroused in the two persons are vastly different. The former becomes more inclined to oppression, his finer feelings become blunted, his ruling passion becomes intensified, and his latent malevolence, instead of being kept in wholesome check, is given freedom to develop. The latter feels humiliated, injured, abused, insulted, and degraded, and the worst passions of Beelzebub are aroused within him. Hatred being the chasm separating them, there is not much probability of good proceeding from either of them to the other. It is a pleasing fiction that the pupils stands to the teacher in the relation of child to parent, but it is an impossible because an unnatural relationship. Neither the one nor the other is actuated, or can be actuated or influenced, by the natural bond existing between parent and child. Even supposing it possible on the part of those teachers who are parents, it is impossible on the part of the great majority of our teachers, simply because they are not parents, and parental love and sympathy is a latent and undeveloped principle. The child cannot look upon the teacher as his parent. It is opposed to every natural instinct. It is not to be denied that the kind, wise parent makes the best teacher.

A great many parents govern their children

mainly by the rod; so do many teachers. But a constantly increasing number of parents and teachers never resort to it, and another large number very rarely. It is easy to say that these parents have children who are free from very vicious or rebellious tendencies, and hence are easily controlled by appeals to their moral natures, and to their sympathetic and loving dispositions. This is partly true no doubt, though I believe that some parents, by wisdom, kindness, and firmness, make of children naturally difficult to manage the most obedient and tractable of boys and girls. At any rate, it cannot be gainsaid that many a teacher manages the most intractable children without having recourse to whipping. She occupies exactly the same position as any other teacher. She has all sorts and conditions of children under her management, and yet order and harmony prevail. If it is once admitted that such a teacher can be found, what does it prove? Simply that children are unnecessarily whipped, and that we have not yet discovered the true art of governing them. It proves conclusively that the fault lies in us as teachers, and not in the children as pupils. We should face this fact bravely, even if it is mortifying to us, and bend our energies to discovering the secret by which the ideal teacher manages to avoid using the gad. Let us study more carefully than ever the idiosyncracies of our pupils, and follow carefully the tactics of our non-whipping teacher, and we shall eventually come off triumphant. We ought to feel that what others can do, we also can do. Is this power to govern without corporal punishment a power inherent in the few and not in the many? I have no doubt whatever that many who are teaching to-day cannot reach the standard of an ideal teacher, because nature has not bestowed the gift of understanding child-nature upon them. They ought to be drummed out of the profession, if found naturally unfit. It cannot be questioned, I think, that there is a natural adaption for the work of managing children; but I feel just as confident that most of the power of management is acquired through training in methods and the study of child-feeling. The study of Psychology has been a great means of enabling teachers to avoid flogging. I am firmly convinced that the worst case of juvenile humanity in Toronto or elsewhere can be transformed into a decent, obedient boy, without a blow being struck upon his unfortunate person, if placed under the charge of the proper teacher. I am sure that if you recall your experiences with bad boys, as we call them, you will be able to recollect some one or more whom you have been able to reform without using the strap to do it. If you can, it shows that you could have achieved the same success with the others, if you had thoroughly understood them. That you failed with these was simply because you did not adopt the right method. You used the strap and it failed to accomplish the end aimed at. At the risk of repeating ideas perfectly familiar to you, and which you, doubtless, have largely acted upon, let me suggest the line of treatment which may be used to advantage in training your boys.

Sympathy plainly shown and never failing is the most potent means that can be used. Without it there must be absolute failure. The greater the bond of sympathy, the less coercion of any kind becomes necessary. Have the most kindly and friendly interest in his concerns. A pleasant manner and gracious words are wonderful remedies for developing the moral nature. A harsh word or an irritable expression, contemptuous treatment or a domineering spirit, will arouse an antagonism that it will take weeks to efface. You must gain his good-will and affection before you can expect him to comply readily with all your demands; you must manifest a lively concern in all his attempts; you must rejoice in his successes; you must condole with him in his discouragements; you must encourage him to renewed attempts; you must praise and reward his improvements. Avoid as your deadliest enemies, ill-temper, angry words and blows, impatient looks and actions. Don't expect him to be perfect. Perfection doesn't belong to poor humanity. He will show many faults and commit many errors. Remember that faults and errors that appear like mountains to you, are not even as mole-hills in his sight. You have a reasoning and reasonable being to deal with; adopt reasonable and reasoning methods. Forgive his faults, not once, or seven times, but seventy-times seven. Your business is not to govern him, but to assist him in governing himself. His crime is against himself rather than against you. Can you imagine what kind of boy this mode of treatment will produce, if persisted in to the end? He will necessarily possess patience, gentleness, dignity and perseverance. His evil passions will not have been aroused by harsh treatment. His sympathies will have expanded in proportion to your expenditure. He will have grown somewhat like you in disposition.

(To be continued).

THE PROFESSIONAL VALUE OF PSYCHOLOGY.

BY MISS NELLIE ROSS, TORONTO.

Science is organized knowledge. In order to arrive at knowledge observation is necessary, one purpose being to obtain facts. The facts thus obtained are compared, examined or discriminated—their similarities and dissimilarities detected—the result being organized knowledge or science, which may be more fully defined as facts so arranged as to be readily acquired, easily remembered and advantageously applied. In science there are two departments, one mental, one physical, mind and matter. It is the former in its particular relation to the teacher that we have to consider.

Psychology, the science of the mind, is from two Greek words, *psyche*, the soul, that which thinks, feels and wills, and *logos*, an orderly account of. It is with this thinking, feeling, and willing faculty that the teacher has to deal; hence it seems only reasonable to expect from him a knowledge of its nature and its workings. Were the teacher only an imparter of facts, a knowledge of the receptacle of these would no doubt aid in their retention and reproduction; but his province is vastly greater, for he is actually a creator of mind and a builder of character. No one would expect an individual to build a material temple and give to it strength, convenience and proportion without first mastering the architectural art; yet we employ teachers to build the temple of the soul without asking from them any preliminary study. No one would submit his physical frame to a physician who had not studied physiology. Why entrust our minds to the preceptor who has not studied psychology?

Moreover, a true educator has to ask many questions, such as the following, which psychology alone can answer: (1). What is the true end of education? (2). In what order are the faculties to be developed? (3). Are the faculties independent of one another? (4). What are the means of education? (5). What is involved in the process of learning? (6). What are the powers to be developed? Upon our answer to the first question depends our method. Methods are ways of accomplishing something with an instrumentality. They are of two classes, empirical and rational. Empirical methods are arbitrary and either barren of good results or positively harmful. Rational methods stimulate powers, control men in their action and guide them in a certain way with certain materials to the highest development with least waste of power. A study of psychology is the foundation of rational methods.

Psychology, too, gives discipline; it trains to reflection, to self knowledge, to intellectual and to moral improvement, to knowledge of human nature and therefore of child nature. Psychology is, in fact, the interpreter of the science of human progress.

Educational Notes.

CARLETON COUNTY ASSOCIATION. A correspondent favors us with an account of the doings at the Association, from which we learn that the staff of teachers in Carleton County is about 130 strong. Considerable counsel was given as to the best way to teach Geography. In drawing some recommended the use of the scale and compass. Others would insist on drawing by free-hand every time. One speaker said he considered the possession of good models an important requisite. He remarked that in his school they had two excellent ones. One was an old broom with a broken handle; the other was a very dingy water pail. A paper on "The Teacher Out of School," gave some valuable hints as to teachers studying professional works, and reading to acquire general information. In the discussion that followed, one speaker regretted that the writer of the paper had not said something against the use of liquor and tobacco, and too much flirting and dancing, and the danger of neglecting physical exercise. A paper on Agriculture in Schools was presented, the writer of which was an enthusiast on the subject. He said he had apparatus, specimens, and models for elucidating it in all its details. A city teacher advocated shorter hours, and thought the forenoons of five days in the week sufficient for school-room work. Another was eloquent in advocacy of manual training in all grades.

AT the East Simcoe and Muskoka Teachers' Association, the President gave an address on the "Errors of our Government in Educational and Other Affairs, and How to Remedy Them." He would introduce the study of politics, but not partyism, into our schools. The Secretary, Robert G. Nesbitt, followed with a paper on School Helps. Some of the helps he mentioned were cheerfulness, an inviting school-room, singing, taking part in the plays of the children, a Friday afternoon entertainment, allowing the pupils freedom in judging right and wrong, taking them into partnership with you, marching, monitors, signals, keeping the pupils busy at something, a certain amount of home-work, becoming acquainted with the parents of the pupils, and the teacher's self-preparation. Mr. Hicks took up the subject of Composition. This valuable paper elicited favorable comment from several speakers, all of whom agreed that not enough time is given to this all-important subject. Rev. G. Grant gave a lengthy address on Discipline, which called forth much discussion. Mr. Sherin, M.A., Principal of the Gravenhurst High School, gave an address on Science in the Public School. Mr. McConachie, Science Master of the Orillia High School, argued that too much Grammar is taught in our Public School, too much Arithmetic, and not enough Composition and Literature. Miss M. Allen read an excellent paper on Reading in Junior Classes.

THE Haliburton Teachers' Association had an unusually large attendance, both of teachers and visitors. Mr. James Coyle Brown, P. S. I. Peterboro' county, was present, and created a great deal of interest and pleasure with his methods of teaching reading. He also gave some valuable suggestions on teaching elementary arithmetic and writing. Mr. Curry, P.S.I., Haliburton county, with "Notes from the Inspector's Note-book," threw out some useful hints. The President, Mr. J. A. McIntosh, called for more earnest discussion, especially among the younger teachers. Mr. E. W. Page read a paper on "Spelling," and Mr. A. J. Perkins, a paper on "Child Nature." An interesting object lesson on "Coal" was taught by Miss Maggie Ferguson. Mr. Thos. Buchanan took the subject of Decimal Fractions, and taught a class. Considerable discussion would have followed, had time permitted, in regard to the better way of reading decimal numbers. The Public School Arithmetic was denounced as reading decimals wrongly.

AT the semi-annual meeting of the South York Teachers' Institute, Inspector Fotheringham, in his opening address, referred to several proposed changes in the system of conducting uniform promotion examinations. One of them is to send the list of questions to the secretaries of the school boards instead of to the teachers as before. This was because in at least one instance in this district a teacher had opened the list and coached pupils in order to gain an undue advantage over a rival school.

For Friday Afternoon.

ONLY.

It was only a sunny smile,
And little it cost in the giving;
But it scattered the night
Like morning light,
And made the day worth living.
Through life's dull warp a woof it wove
In shining colors of hope and love;
And the angels smiled as they watched above.
Yet little it cost in the giving.

It was only a kindly word,
A word that was lightly spoken;
Yet not in vain,
For it stilled the pain
Of a heart that was nearly broken.
It strengthened a faith beset by fears
And groping blindly through mists of tears
For light to brighten the coming years,
Although it was lightly spoken.

It was only a helping hand,
And it seemed of little availing:
But its clasp was warm,
And it saved from harm
A brother whose strength was failing.
Its touch was tender as angel wings;
But it rolled the stone from the hidden springs,
And pointed the way to higher things.
Though it seemed of little availing.

A smile, a word, or a touch,
And each is easily given;
Yet either may win
A soul from sin,
Or smooth the way to heaven.
A smile may lighten the failing heart,
A word may soften pain's keenest smart,
A touch may lead us from sin apart,—
How easily either is given.

DO RIGHT—BE TRUE.

Children who read my lay,
This much I have to say:
Each day and every day,
Do what is right!
Right things in great and small;
Then though the sky should fall,
Sun, moon, stars and all,
You shall have light.

This further would I say:
Be tempted as you may,
Each day and every day,
Speak what is true!
True things in great and small,
Then, though the sky should fall
Sun, moon, stars and all,
Heaven would shine through.

—*Alice Cary.*

SQUIRREL CHAT.

Chip-chip-chip-churr-r-r?
Good morning, sir!
If you wish to see me,
Come up in this tree.
Here's my wife, sir! (she's shy;
Her name's Frisky, mine's Spry.)
Now, as I introduce
You, don't try any ruse;
Nor think of the stew
So nice we'd make you.
For, you see, we love life and liberty too.

Chip-chip-chip-chur-r-r!
Now, we'd much prefer
That that wicked gun
You'd aim at the sun,
Though it may be less fun
Than this rare sport to you;
But now—honest and true—
If a squirrel you were,
And I a hunter,
Do you think you'd enjoy
The gunning my boy?
Would there be so much fun in a shot or decoy?

But I meant to remark,
With my chattering bark,
That my wife, sir, and I
Were most happily
Taking breakfast, up high
On this wide-spreading bow,
Where we're picnicing now,
When you happened this way
In your ramble to stray;
For we're up with the sun,
And have had a good run
Over fences and tree-tops, for nuts and for fun.

And we just sit up—so!
(On our haunches, you know),
And hold with each paw
A nut with no flaw;
Then through it we gnaw;
And we drink the sweet dew
That the sunlight shines through;
Now, don't talk to me
Of your coffee and tea,
Or nice mutton chops,
Our nerves have no hops;
And dyspepsia never our junketing stops.

Chip-chip-chip-chur-r-r!
You admire squirrel fur?
Yes, we think it's fine;
Can't well part with mine,
For it's just in my line.
If you aim with that gun,
Whisk! to this side I'll run!
Now, just one more word:
Your Columbus sailed o'er
To this world in a ship.
We just take a chip,
And, spreading for sail
A fine bushy tail,
We set out to sea;
Your Columbus was no better sailor than we.

—*Our Dumb Animals.*

Book Notices, etc.

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

Essays on Tennyson's Idylls of the King, by H. Littledale, M.A.; pp. 308, 4/6. London: Macmillan & Co.; Toronto: Copp, Clark Co.

The need of some book of this kind has long been obvious. Readers of Tennyson have long needed light on the present from the past that they might better understand not only obscure or difficult passages, but also the relation of the *Idylls* to one another, and their relation as a whole to their sources, and to the multitude of Arthurian poems which have enriched the literature of every modern European tongue. The scholar will find the present volume in some respects, superficial. The chapter on the Arthurian legend is confessedly due to ten Brink. The sketch of literary history from Malory toTennyson even as a review is entirely inadequate. But from the chapter of Arthurian characters and localities the volume is more satisfactory. The author shows the poet's indebtedness to Malory, Geoffrey of Monmouth, and the Mabinogion; interprets characters such as the Lady of the Lake, Merlin, Vivien, and symbolic verses, as the songs of Lynette, and puts forward with true taste and insight the place and character of each of the *Idylls*. Without being a definitive work on the subject, the volume is interesting and helpful to the sudent of Tennyson.

Spencer, *The Faerie Queene*, Book I.; with Introduction and Notes by H. M. Percival, M.A.; pp. lxxi, 342. London: Macmillan Co.; Toronto: Copp, Clark Co.

In the introduction the editor treats of the evidence concerning the composition of the *Faerie Queene;* the influences that gave it its mingled characteristics, allegorical, romantic, personal, classical; the opinions held of it; the interpretation of the poem from the point of view of allegory and moral; the imitations of it in English poetry; and lastly its versification, vocabulary, grammar, pronunciation. The notes are remarkably full and accurate. The archaic words of the text are rendered clear by illustrations from a wide range of M. E. literature. The etymological notes, however, are usually too copious; references to Skeat would have obviated the necessity of most of these. This and an occasional false printing of A.S. *(cf. wae'd*, p. 152, for *wæ'd, ra'edan*, p. 154, for *ræ'dan*, etc.) are the only flaws in a useful and scholarly edition.

Special Course in Shorthand.—To cover the requirements of the Provincial Educational Department for specialists, certificates will be given at the Galt Business College and Shorthand Institute during the holidays. Term to commence July 10th. This will be a good opportunity for teachers and students who are preparing for advanced and professional work. For circulars address the Principal, Business College, Galt, Ont.

Literary Notes.

Rodolfo Lanciani's new paper, called "New Facts Concerning the Pantheon," which opens the June number of the *Atlantic Monthly*, tells so brightly and concisely what he has to tell, that one wishes discoveries in Rome were more frequent if they could be reported by so clever a writer. A paper which should be read in connection with this is Mr. J. Irving Menatt's "Reminiscences of Dr. Schliemann," and a paper by William Cranston Lawton, on "Womanhood in the Iliad," which abounds in those delightful rhymic translations with which Mr. Lawton is wont to illuminate the articles which he writes upon the classics. Justin Windsor, Librarian of Harvard University writes about "The Future of Local Libraries;" D. L. Kichle on "The Educational Trend of the Northwest;" Professor C. O. Whitman, of Chicago University, "A Marine Observatory the Prime Need of American Biology;" "The Pigmies of Africa," by Judge Caton, and "The Hayes Administration," by General Jacob Dolson Cox; "A National Vice," by H. C. Merwin, and "Ennui," by Agnes Repplier, and several other articles by well-known authors, make up a good number of this standard magazine. Houghton, Mifflin & Co., Boston.

Scribner's Magazine for June opens with the second article in the series on "Men's Occupations," which is to be a feature of the coming months, including among its contributors W. D. Howells, W. Clark Russell, Julian Ralph, and John Drew. The article in the present issue is "Life in a Logging Camp," by Arthur Hill, President of one of the great Michigan lumber companies. Among out-of-door papers, Ernest E. Thompson's contribution to this number, entitled "The Birds that We See," is noteworthy. Mr. Thompson is a skilful artist as well as an ornithologist, and his text is fully illustrated from his own drawings, which are very admirable representations of our common birds. The article will enable anyone to identify twenty or thirty of the species which prevail in the Northern and Middle States. In a similar line of natural history is a brief paper by Sidney Dickinson, entitled "The Haunt of the Platypus," which describes one of the strangest animals that is found in Australia, with two illustrations after sketches made from life. Among the elaborately illustrated articles in the number is Robert Blum's third and concluding paper giving his impressions of Japan. The fiction is abundant and unusually attractive. The number includes poems by H. C. Bunner, Edith M. Thomas, E. S. Martin, and others.

The *Expository Times* for June, contains in addition to the "Notes of Recent Exposition," with which it begins, and the "Short Expository Papers," with which it ends,—and these two departments are always worth more to the truth-seeker than the cost of the magazine—several lengthy articles which are the product of much learning and thought, among them "Cyrus and the Capture of Babylon," by Professor Whitehouse, of Cheshunt College;" "The Gospels and Modern Criticism," by Rev. J. J. Holcombe, Cambridge, and "Exposition of the First Epistle of St. John," by Professor Rothie, D.D. The "Great Text Commentary" is, as always a valuable feature.

Question Drawer.

C. D. D.—(1) The "Canadian Almanac," published by the Copp, Clark Co., Toronto (price 20 cents), contains the Canadian Tariff Customs. (2) "Royalty" is a term used to denote a per centage to be paid to parties having certain claims on the value of articles produced and sold, as e.g. the publisher often pays to the author a royalty of so much per cent. of the amount received for sales of his book. "Royalty" on the product of mines is a tribute of so much per ton, or so much per cent. of value paid to the Government, that is to the public treasury, on all minerals taken from the mines. It is charged on the principle that the mines belong to the whole people.

Primary Department.

CLOSING EXERCISES.

RHODA LEE.

At this time, in almost all schools, considerable time and attention are being given to closing day and its accompanying exercises. The children are looking forward to it with great pleasure as being a day especially their own in which to entertain their parents and friends. Parents are also viewing it with a degree of pleasure and pride. But the teacher's feelings had better not be analyzed too closely. That there is in her mind a shade of anxiety is certain. However, in the days of oral examinations there must have been much more worry and anxiety than now, when examinations, either written or oral, as a promotion test, are not the sole consideration, and when our closing day instead of being one prolonged torture is a time of especial delight and interest to the children.

Let us consider some of the ways and means of making the day a success in the primary classes. In the first place try and arrange for your concert or entertainment in the morning. The little folks are always so much brighter in the forenoon, especially at this time of the year.

I would also urge the substitution of *class* recitations for those given by single scholars, or by two or three in concert. I never encourage individual recitations among little ones, not even when, as sometimes happens, a child comes to me armed with a selection chosen for him at home. If suitable, I say, "We will all learn it," but if not it has to be discarded. The whole class is interested in the general recitation, and the best effort of every child is put forth to make it a success. In the other a very few self-confident ones are interested, and get an increased feeling of importance, while the majority—the timid, retiring children—have an idea that they are being left in the cold. There is really nothing prettier than a good selection, memorized by the class and recited with suitable motions. It is wonderfully effective and we are sure of the interest of all the parents; not as in former days, of a very few.

Songs in which motions can be introduced are also to be preferred and, if possible, the songs should be connected in thought with the recitation.

If the aisles are wide enough have some fancy marching and calisthenics. In the march allow the children to carry flags and the class banner, or to wear paper caps or something of that sort. Have music of some description to mark the time plainly. A mouth-organ, well played, is admirable, but if no instrument can be obtained singing answers the purpose nicely. The "Red, White and Blue" is a good air and admits of an effective waving of flags in the chorus.

See that the room is as bright and attractive as plants, flowers, ferns and flags can make it, and let the day in every respect be a particularly bright and happy one.

Just a word in closing as to exhibitions in work. The work of the session may very properly be arranged for the visitors to examine it if they so desire. Maps of various kinds, home-exercise writing and drawing books and sewing are among the best things to exhibit. It is encouraging to the children to have their progress noted, and it will be interesting to the visitors and parents to see the advancement of the class.

With the best wishes for closing day and trusting every primary teacher will be able to thoroughly enjoy the long holiday we are sure she needs, we close the Department for this term.

THE WASP AND THE BEE.

A wasp met a bee that was just passing by,
And he said, "Little cousin, can you tell me why
You are loved so much better by people than I?

"My back shines as bright and as yellow as gold
And my shape is most elegant too, to behold,
Yet nobody likes me, for that I am told."

"Ah cousin," the bee said, "'tis all very true
But if I were half as much mischief to do,
Indeed they would love me no better than you.

"You have a fine shape and a delicate wing,
They own you are handsome, but then there's one thing
They cannot put up with, and that is—your sting.

"My coat is quite homely and plain as you see,
Yet nobody ever is angry with me,
Because I'm a harmless and diligent bee."

From this little lesson let people beware,
Because, like the wasp, if ill-natured they are,
They will never be loved, if they're ever so fair.

RAIN DROPS.

Some little drops of water
Whose home was in the sea,
To go upon a journey
Once happened to agree.

A cloud they had for carriage,
They drove a playful breeze,
And over town and country
They rode along with ease.

But these were so many,
At last the carriage broke;
And to the ground came tumbling
These frightened little folk.

Through the moss and grasses,
They were compelled to roam,
Until a brooklet found them,
And carried them all home.

SCIENCE IN PRIMARY GRADES.

BY ABBIE L. SHEPARD.

Every day Uncle Harry talked on some interesting topic, and then Jack wrote what he had learned. Here are two lessons as Jack wrote them:

AIR.

Air is all around us. It is what we breathe. Good, pure air makes us healthy and strong. Bad air makes us sleepy and ill. We must have good air in the school-room. Then we can study and work.

Plants make the air pure. They breathe the bad air and send it out pure. We breathe the pure air and send it out impure. So plants are useful in the school-room.

When people fall in the water, the water shuts off the air from them and they smother. If they are not soon taken out they will drown. Some animals can live in the water; but they cannot live in the air. God made us to live in the air and the fish to live in the water.

WIND.

Air is always moving. Hot air always rises. It is lighter than cold air.

Down cellar there is a hot fire in the furnace. Cold air comes into the fire through pipes. When the cold air gets hot it comes up through the pipes and more cold air comes in to take its place.

Out doors the sun heats the air. The hot air rises and cold air comes to take its place. Then we say "the wind blows." When the cold air comes in gently, we say, "What a fine breeze!" When it rushes in we say, "My, what a gale!" When it moves by fits and starts, we call it a gust of wind. When the air moves in a whirl and not straight along, we call it a whirlwind.—*American Teacher.*

Hints and Helps.

THE PLAYHOUR IN A COUNTRY SCHOOL.

FRED. BROWNSCOMBE, PETROLIA.

VIII. OUTDOOR GAMES.

Games of Tag.—In all of these, one of the players, who is the "tagger" or "it," strives to touch any of the others, who are, however, in some games allowed certain privileges which occasionally exempt them from pursuit. In ordinary *Tag* there are no exemptions, the "tagger" endeavoring to touch any other player, who then becomes "it" in the first player's place. In *Cross Tag* a player who is being chased can be relieved from pursuit by another person crossing between him and the tagger, who must then chase the person thus crossing his path. The person touched must announce before starting whom he will pursue. *Touchwood* requires three or four goals. The players run about or from goal to goal, but may not be tagged while on a goal. In *Squat Tag* the players may exempt themselves from pursuit by falling upon their knees or crouching close to the ground, but the number of "squats" allowed each player is usually fixed, ranging from two to ten during one person's term as tagger. Another form is *King's Land.* A certain space is known as the king's land and the king, who is the tagger, is only allowed to touch the players when they venture within his territory, which fact they usually announce by calling out, "I'm in the king's land! King can't see," or making some similar declaration. The players run in and out on all sides and endeavor to confuse the king. *Gorilla* is a variety of tag in which the tagger is called the gorilla. All the players, except the gorilla make any kind of howl or noise, the gorilla keeping perfectly silent. Should he speak the others try to strike him with their caps while he runs to a specified base. To arrange for playing *Fox* a space of about six feet square is marked off, usually in a corner, as the fox's den, and a space of ten yards or so square as the bounds beyond which the other players may not go. The Fox hops out of his den towards the others. They hit at him with their handkerchiefs or caps and he hits at them. If he can touch anyone with his cap, that boy becomes the fox and runs "home" while others punish him with their caps till he gets there; and if the fox puts down both feet he must run home and be treated in the same way.

Wolf and Lamb.—To commence this game two persons are chosen who are called the "wolf" and the "lamb." All the rest of the players join hands to form a ring, which is called the sheepfold. The lamb stands inside the ring and the wolf outside; and the wolf attempts to enter through the line and catch the lamb. If he seems likely to succeed the sheepfold opens at the opposite side and lets the lamb out as the wolf enters. The wolf is

now imprisoned, but he tries to escape by breaking the line or dodging under some players' arms, and, as he does so, the lamb is again admitted. When the wolf catches the lamb he joins the circle and chooses some other player to be the wolf. Or, if you choose, both may join the circle, naming two other players to take their places.

SNAKE'S TAIL.—One of the players is chosen to act as catcher, and the rest of the party stand in single file, each player placing her hands upon the shoulders of the one in front. The file represents the snake, and the last player in it is known as the snake's tail. The catcher stands some yards from the head of the file, with her face toward the players, and, at a given signal she tries to catch the snake's tail without pushing any player in the file. The snake defends its tail by moving in any direction deemed necessary, but the tail is considered caught if the line breaks. When the tail is caught she becomes catcher and the former catcher takes a place at the head of the line. The leader or head of the snake may stretch out her arms to keep off the catcher, but the latter must not be pushed. Sometimes the catcher calls out the name of a player whom she wishes to catch, and all the file try to protect the individual thus named. When this person is caught the catcher changes place with her. My present pupils call this game OLD WITCH. The leader of the line represents a hen and those behind are her flock of chickens, the catcher being the old witch, The witch begins by picking up chips, when the following dialogue takes place:

Hen.—"What are you doing?"
Witch.—"Picking chips."
H.—"What are they for?"
W.—"To boil the pot."
H.—"What are you going to boil in it?"
W.—"Chickens."
H.—"Where will you get them?"
W.—"From the flock."

At this last the witch tries to catch any of the chickens, who move so as to keep the hen between them and the witch. When she catches one the witch asks her which she would prefer, to be boiled, fried or roasted. The chicken elects one of these, stands aside and is supposed to make a noise resembling the chosen mode of cookery till the end of the game, which occurs when about half have been caught.

LEAPFROG.—Occasionally a game of leapfrog will be enjoyed by the small, and even by the larger boys. The players stand in a row at intervals of three or four yards with hands on knees, bodies doubled and heads bent down. The last player then takes a short run, places his hands on the back of the player preceding him, leaps over him, then over the second, and in like manner over all the players, one after another, and when he has done so he places himself in proper position at the head of the line. The first over whom he jumped rises immediately he has passed and follows him, stooping at the head of the line. The others follow in succession, keeping up the game until they are tired.

FOOT AND A HALF.—Make a line on the ground; on this line one of the players must place himself as in leapfrog, while the others leap over him, the last one as he flies over calling out, "Foot it." If he should fail to give this notice he must take the other boy's place at the mark; the boy, immediately the word is given rises and places his right heel close to the middle of the left foot; he next moves the left forwards and places that heel close to the toes of his right foot, and bends down as before. This movement is called a "step" and is repeated three times. The other players should jump from the mark each time a step is made, and the last player should invariably call out "Foot it" as he leaps over. After making the three steps, the player giving the back takes a short run, and *from* the spot to which he made his last step, jumps as far forwards as he possibly can, and bends down again; the others jump from the mark and then fly over. Should any of the players be unable to jump easily over the one giving the back, but rather slide down upon or ride him, the player so failing must take the other's place at the first mark and the game is begun again. A hop, step and jump may replace the jump taken after the third step. More simply played, the person giving the back stands at the mark and the leader marks when he struck the ground after leaping over the stooping player. Each succeeding player must go as far as or beyond this mark. The first one failing has after all have had a trial, to be "it" for a new game. If all reach the mark the leader next time goes further, and so on till some one fails.

SPANISH FLY is a kind of follow-my-leader game and is capable of being varied to any extent by an ingenious boy. One boy sets a back as in foot-and-a-half or leapfrog and another is appointed leader. The game is commenced by the leader leaping over the stooping player and the others follow in succession; the leader then leaps back and the others follow; then they all go in a cross direction and return. The leader next throws his hat straight ahead between the first player's legs and leaps over; each follower does likewise and anyone who steps on a cap after leaping has, after all have had a trial, to be "it." Other tricks are as follows, each to be done when flying over the stooping player: throw caps backward between legs of bent player; strike him with the hand behind; clap hands in front; clap hands behind; strike feet together before alighting; drop caps on bent player's back (anyone whose cap falls off is "it"), drop hats held in mouth; touch feet with hands; rest clenched hands on bent player's back; take cap off with both hands, etc. These are but a few of the numerous variations possible. The first player failing in any trick, has, after all have tried it, to take the first player's place.

BUCK is a simple game for a few boys, One player stoops as in leapfrog, with hands against the fence or other support, and another leaping upon his back, holds up several fingers of one hand. The first player now guesses the number held up. If wrong, the second dismounts and a third leaps up, followed by the others till "buck" guesses the fingers correctly. The player whose number has been guessed correctly relieves the stooping player by taking his place.

PUSS IN THE CORNER may be played in the woodshed or lobby on rainy days when few are present. One player stands in the centre; the others occupy the corners. They change corners frequently, the out player endeavouring to secure one when the changes are being made, thus leaving some other player out.

THE MESSAGE is played by two parties, one of whom stand in the centre of the playground and capture the others as they run across, and intercept the "message" which is represented by a coin or other small article. When the first party obtain possession of the message, they become the carriers and the others take the centre. The message must be carried in the hand and a person caught must open his hand on demand. He is then released and his captor may, if he have time, help to catch others. If the carrier of the message gets across safely, all his side gather in a circle and the captain assigns the message to the same or some other player as he pleases, after which they cross again.

(To be continued.)

NERVOUS CHILDREN.

I WANT to say a word about nervous children. Never scold or make fun of them. They suffer enough without your threats or sarcasm. Don't let them know you see their awkwardness when in company, nor their grimaces when alone. A case was reported by the *Boston Globe* of a boy ten years old, who, on being vexed, and often without any apparent provocation, will clench his hands and make the most frightful contortions of the muscles of his face and head, till his poor mother fears he is idiotic. By no means. He is the brightest boy in his class at school, fond of reading and of natural history, but he is of a highly nervous temperament, and has not been taught to control the little wires, so to speak, on which he is strung. This is no single case. There are thousands of children who give way to their nerves in similar fashion. Never whip them, but talk to them about these curious little strings that should be made their servants, not their masters. A prominent physician in this city says the man or woman who whips a nervous child should for every blow given, receive five, and is on a level with brutes that have no reason. It is our duty to encourage and help them. Be patient with them. They are the making of our future successful men and women, for they will work hard at whatever they undertake. Brace up your own nerves first, and then be indulgent towards the capers of your over-nervous children.—*Christian Union.*

OBSERVATION QUESTIONS.

What do hens eat?

What use do they make of their feet?

How many front toes has the hen? Hind toes?

How does she hold on to a roost?

How many upper teeth has a hen? Lower?

Does she chew her food?

Of what use are her feathers?

Does the hen fly?

What is the greatest use she makes of her wings?

How is a duck's foot unlike the hens?

How do the bodies of the hen and duck differ?

How does the beak of a hen differ from the bill of a duck?

Name the things that a cat will eat. That a dog will eat. That each will eat that the other will not.

How many claws has a cat on her forefoot? Hind foot? With which feet does she catch a mouse? Which feet bear the most of the weight in climbing a tree? Which feet have the longer and sharper claws? Why are the claws so sharp? What is there over each claw? Can the cat draw its claw back into the sheath? For what is the sheath? Does the cat need it in walking? Why? Does the cat make any noise in walking? Why not?

Are the cat's teeth for chewing or for tearing?

What is the shape of the cat's eye—the pupil, in daylight? In the night?

For what are the long hairy feelers of the cat?

Is the cat's fur oily?

Does the cat like the wet? If not, why not?
—*Am. Teacher.*

Correspondence.

CLARKSBURG, June 6th, 1893.

To the Editor of the EDUCATIONAL JOURNAL:

SIR,—At the recent meeting of East Grey Teachers' Institute, the following resolutions were passed unanimously and the secretary was directed to send copies to you with the request that they be published in the JOURNAL:

1. Resolved that the English History required for the Entrance Examination be limited to the period beginning with the reign of Henry VII. and extending to the present time.

2. That the standard of the Entrance Exam. be not raised.

3. That Drawing Book No. 6 of the Public School Course be considered sufficient bookwork for Entrance candidates.

Yours resp.,
H. A. YENVEY,
Sec'y E. G. T. Inst.

ONE becomes truly a man only through the power to express his thought clearly and correctly.—*Campayre.*

English.

Edited by Fred. H. Sykes, M.A., Educational Journal, Toronto, to whom communications respecting this department should be addressed.

THIRD READER LITERATURE.

MISS ISABELLA DUFF, LAKEFIELD, ONT.

"THE ROAD TO THE TRENCHES."

I. The teacher endeavors to interest his class by telling them that the piece they are about to study deals with an incident in the Crimean war.

In the year 1854 England allied herself with Napoleon, Emperor of France, to resist the attempts of Russia to force on Turkey a treaty. The allied armies besieged Sebastopol, and were in turn besieged. A Russian winter proved more terrible to the British than the Russian sword. Hunger and disease preyed upon the brave men. Henry Lushington, an English politician and writer, gives in this poem a pen-sketch of one brave soldier, and in picturing him pictured the bravery of the whole army.

In the writer's school pictures of Tennyson, Browning, Whittier, Longfellow and others, framed—crudely it may be—by the children, ornament the walls, and are found helpful not only to arouse interest in the author, but to strengthen the memory. No danger of the children forgetting the nationality of any author whose picture is in the room. "Things seen are mightier than things heard." Some of these pictures were contributed by the children; others the teacher cut from "Great Thoughts." All were framed by the children.

Unfortunately it is not always possible to obtain pictures of all. When we have them, we may here point out the picture and associate him with his work.

II. [The teacher then questions and suggests until the following word-picture is secured].

We take our position upon a hill. To the right we see a number of weary-looking yet watchful men, carefully guarding what appears to us a desirable position, for other men just as watchful are ready to take advantage of any carelessness on the part of those on duty. To the left we see a number of men struggling bravely through the deep snow which is still falling thickly upon them. They are advancing to the trenches to relieve their comrades who have been long on duty. Look carefully and you will see one poor man staggering slowly along. Now he falls. This brings the whole party to a stand-still. One, who by his manner and dress we suppose is an officer, steps up, takes off his own coat, wraps it round the fallen man, tries to comfort him with the promise he will be cared for, then the company march on. Alas! when the relieved party marched homeward the brave soldier was beyond their care. God had called him home.

III. The teacher goes over the quotations seeing that the pupils apply them to the proper speakers, and distinguish between the comments of the author and the words of the soldiers.

IV. [The teacher takes up the analysis of words and phrases].

"Leave me." The soldier can go no farther, because he is dying of cold and starvation.

"No, sir." This is addressed to the officer in command who wished to leave some of his men to take care of him.

"Duty." What we ought to do.

"Those whose guard you take." The soldiers seem to be marching up a hill to relieve other soldiers who are in the trenches there. These latter, the soldier says, will find him when they come back from the trenches.

"Men." The officer tells them not one can be spared to stay with the sufferer.

"Wrap, etc." The officer takes off his coat and wraps it round the soldier.

"Mark." The officer tells the men to mark the spot near the "stunted larch" where the soldier lies, so that the others (the men they are to relieve) may find him.

"Calms the wrench of pain." His sufferings cease.

"Close faint eyes." His dying eyes close in the sleep of death.

"Pass cruel skies." The skies that have been cruelly cold and severe pass from his thought.

"With far soft sound the stillness teems." The dying man is insensible to all around him, and thinks he is in England, and hears the bells of his native village and the voices of his loved ones; so that although everything is silent about him the air seems filled (teems) with glad noises.

"Neither now." That is the "softer tongue" of the voices of his dreams, and the "voices strong" of the soldiers cannot reach him; he is dead.

Where so many go." To the grave.

"Starving." The winter of 1855-6 was a terrible one for the British soldiers. They were dying from hunger and cold, while food in plenty was in the ships a few miles away.

"All endured." All refers to "battle, famine, snow."

"Nameless." Why nameless?

Looking for the "mark." What mark?

V. [The teacher endeavors to have the pupils realize the lesson or application of the story].

(1). From the soldier's point of view. Our duty—not our pleasure or our wishes—should be our first consideration. Every man, every woman, every boy, every girl, owes a duty to his or her country. That duty we should be willing, even eager, to do, without counting the hardships we may personally suffer. God and country first, self last. We need not look for duty. It comes to us in the home, in the schoolroom. (2). On the officer's part to be kind and humane always, but especially show kindness to those in need. To be considerate of those under our command, and be ready to make sacrifice for the sake of those we have in charge. What biblical character does the officer resemble? What biblical injunction did he fulfil?

VI. [Reproduction]. This reproduction should be (1). Complete, point by point. (2). Exact, as only an exact statement is real education. (3). In the scholars' own words, to test whether it is mere memory or real thought. This reproduction may be given step by step, by several scholars, or it may be given by one, the others correcting and supplying omissions.

VII. The pupils should now be called upon to read, care being taken that they properly represent the feelings of the men who are brought forward in the poem, and that they give due attention to accent, emphasis, and inflection. The writer's pupils are not allowed to read in succession, but each one of the class is expected to remember his number, and to be prepared to read when the number is called. This secures the attention of all.

STORIES FOR REPRODUCTION.

(FOR JUNIOR CLASSES.)

I.

ADVENTURE WITH A SHARK.

Once I was in very unpleasant proximity to a shark. I was in the habit of bathing every morning soon after sunrise, and had arranged a long plank on piles, as a sort of spring-board. Having started along this plank as usual and reached nearly the end, I had already lost my balance, when casting my eyes down I saw there beneath me, not five feet under the water, a shark double my own length. With that instinct which comes to all of us in times of danger, I at once felt that the safest plan was to jump at the shark rather than try to avoid him, and thus I directed my plunge at him. I had to swim some fifty yards to regain the shore, and this was indeed trying work; but the shark, evidently as much frightened as myself, had made off, and I lived to tell the tale. (After Dreyson).

II.

AN AXE TO GRIND.

When I was a little boy I remember one cold winter's morning I was accosted by a smiling man with an axe on his shoulder. "My pretty boy," said he, "has your father a grindstone?" "Yes, sir," said I. "You are a fine little fellow," said he, "will you let me grind my axe on it?" Pleased with the compliment of "fine little fellow," "O, yes, sir," I answered, "it is down in the shop." And will you, my little man," said he, patting me on the head, "get me a little hot water?" How could I refuse? I ran and soon brought a kettle full. "How old are you, and what's your name?" continued he without waiting for a reply; "I am sure you are one of the finest lads that I have ever seen; will you just turn a few minutes for me?"

Tickled with the flattery, like a little fool I went to work, and bitterly did I rue the day. It was a new axe, and I toiled and tugged till I was almost tired to death. The school-bell rang, and I could not get away; my hands were blistered and the axe was not half ground. At length, however, it was sharpened; and the man turned to me with, "now, you little rascal, you've played truant; scud to your school or you'll rue it." "Alas!" thought I, "it was hard enough to turn a grindstone this cold day; but now to be called a little rascal, is too much." (Benjamin Franklin.)

III.

TOM BROWN AND ARTHUR.

Within a few moments of their entry, all the boys who slept in dormitory No. 4 had come up. The little fellows went quietly to their own beds and began undressing and talking to one another in whispers; while the elders, amongst whom was Tom, sat chatting about on one another's beds with their jackets and waistcoats off. Poor little Arthur was overwhelmed with the novelty of his position. The idea of sleeping in a room with strange boys had clearly never crossed his mind before, and was as painful as it was strange to him. He could hardly bear to take his jacket off; however, presently, with an effort, off it came, and then he paused and looked at Tom, who was sitting at the bottom of the bed talking and laughing.

"Please, Brown," he whispered, "may I wash my hands?"

"Of course, if you like," said Tom, staring, "that's your washstand under the window. You'll have to go down for more water in the morning if you use it all." And on he went with his talk, while Arthur stole timidly from between the beds out to his washstand and began his ablutions, thereby drawing for a moment on himself the attention of the room.

On went the talk and laughter. Arthur finished his washing and undressing and put on his nightgown. He then looked around more nervously than ever. Two or three little boys were already in bed, sitting up with their chins on their knees. The light burned clear, the noise went on. It was a trying moment for the poor little lonely boy; however, this time he didn't ask Tom what he might or might not do, but dropped on his knees by his bed-side as he had done every day from his childhood, to open his heart to Him who heareth the cry and beareth the sorrows of the tender child, and the agony of the strong man.

Tom was sitting at the bottom of his bed unlacing his boots, so that his back was towards Arthur, and he didn't see what had happened, and looked up in wonder at the sudden silence. Then two or three boys laughed and sneered, and a big, brutal fellow who was standing in the middle of the room picked up a slipper and shied it at the kneeling boy, calling him a snivelling young shaver. Then Tom saw the whole, and the next moment the boot he had just pulled off flew straight at the head of the bully, who had just time to throw up his arm and catch it on his elbow.

"Confound you, Brown, what's that for?" roared he, stamping with pain.

"Never mind what I mean," said Tom, stepping on to the floor, every drop of blood in his body tingling, "if any fellow wants the other boot he knows how to get it!" (Hughes).

CORRESPONDENCE.

R. N. M.—

"Therefore on every morning are we wreathing
A flowery band to bind us to this earth."

"Bind" is the infinitive, as "to" here indicates purpose or object "to bind" is the gerundial infinitive; it depends on "are wreathing," which it modifies adverbially.

Reader.—The phrase "Allah illa Allah" or better la' ila'h illa' 'lla'h is the opening phrase of the Mohammedan's statement of belief, and means "There is no God but one God." In this sense it is used in Edwin Arnold's poem, "After Death in Arabia," (IV R).

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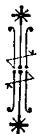

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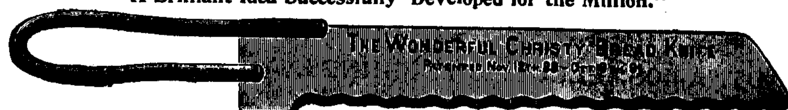

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